

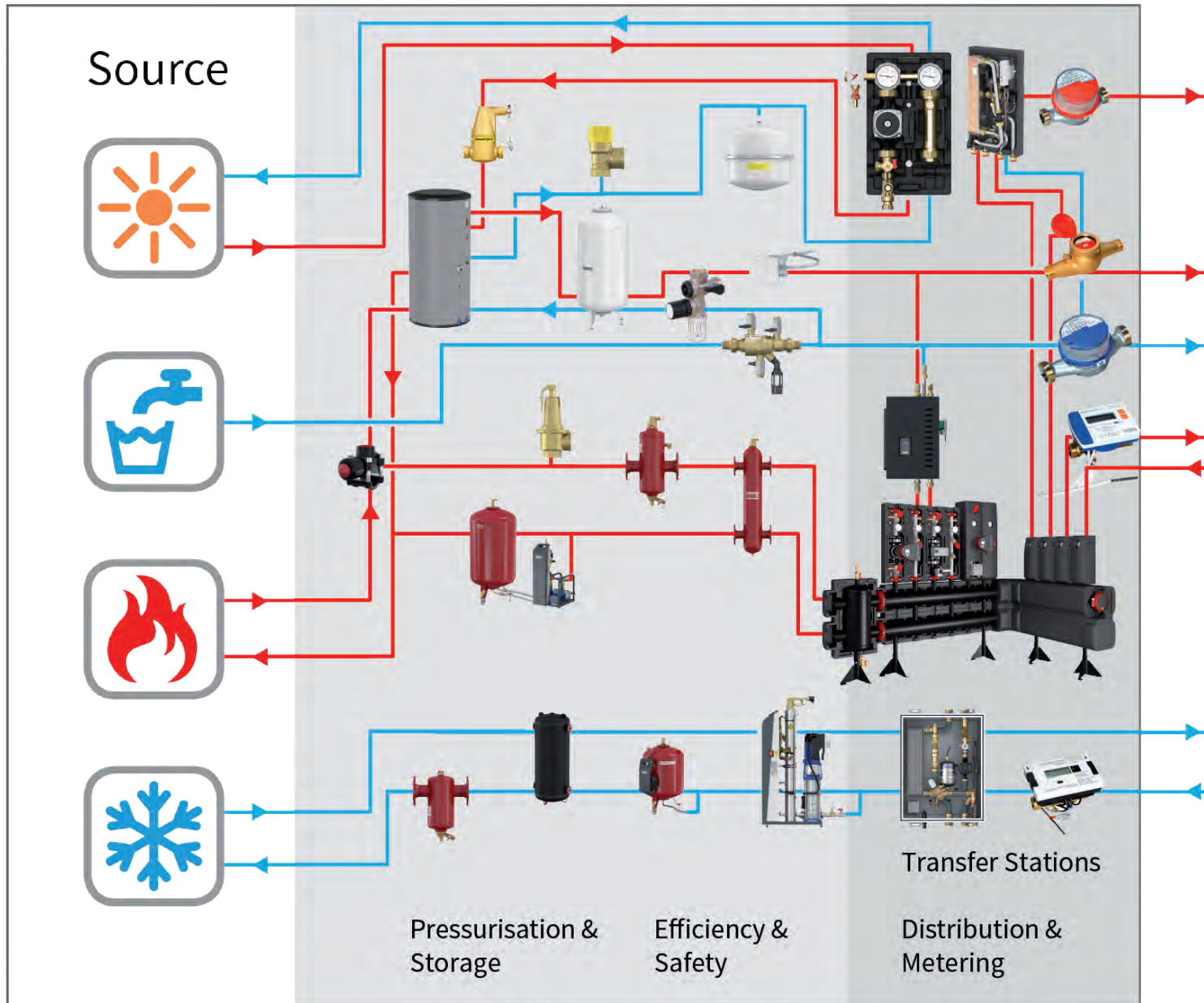


Hydronic Solutions for Heating and Cooling Systems



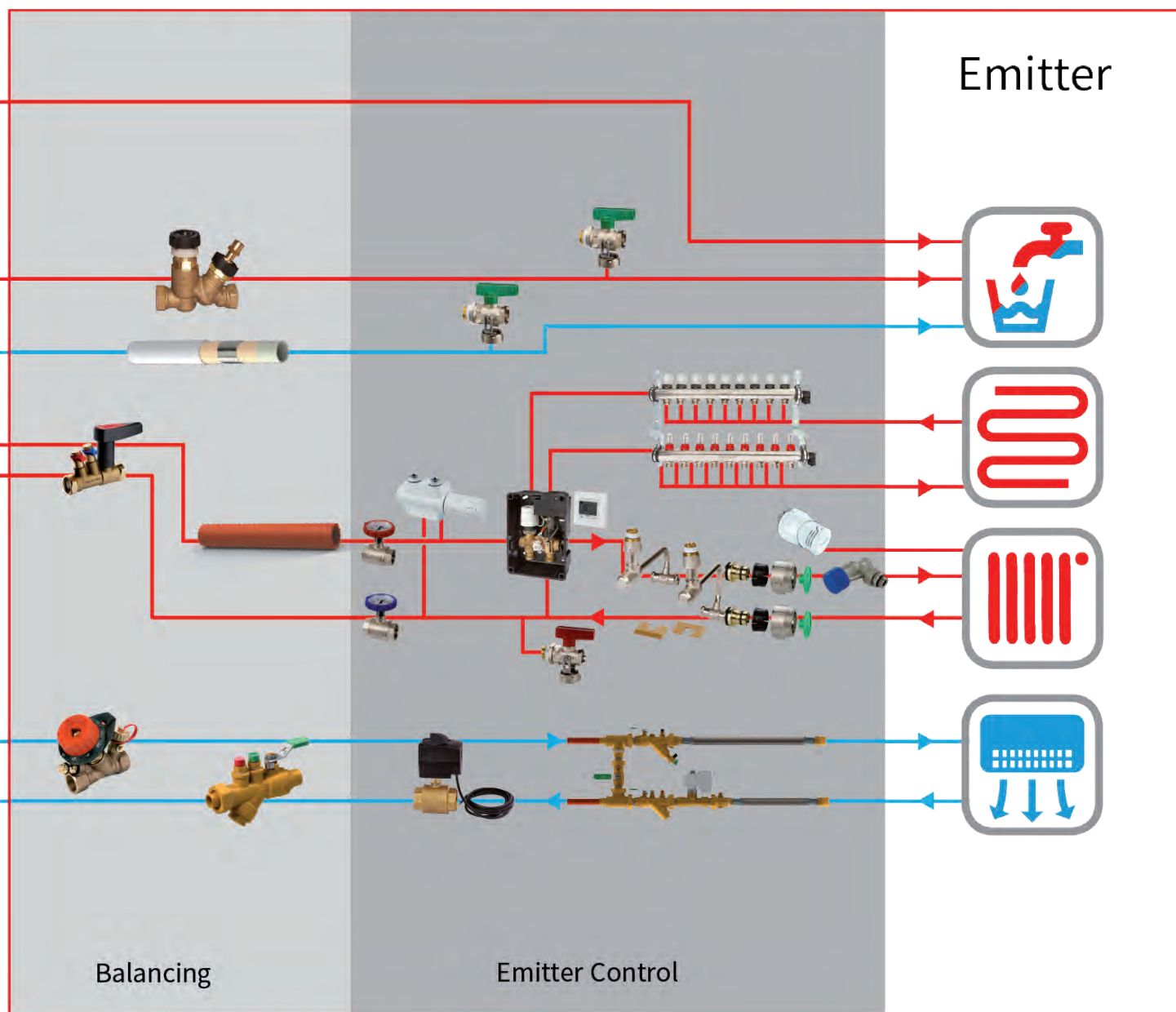
Hydronic Flow Control –

Boiler Room Technology



From Source to Emitter

Heating and Cooling Distribution



COMAP

Highlights

Flexcon Premium

- 15 years of guarantee
- Recyclable membrane (12 - 35 l)
- Low Carbon Footprint



Secos - Simplex Energy Control System

- Dynamic and fully automatic hydraulic balancing with energy saving effects
- Digital flow rate and temperature measurement in every heating circuit
- Suitable for all common heating surface systems
- BMS interface and smart home options
- Fast installation and simple maintenance

Flamcomat G4

- Automatic leakage detection
- Automatic filling of vessel and system
- Scalable thanks to Master-Slave option
- Easy commissioning and remote maintenance via our portal
- Efficient operation and low power consumption



Remote Service

- Real-time insight in system performance, available via online portal
- Automatic fault reports, prepare yourself for the maintenance visit
- Collected data makes preventive maintenance possible
- Service from your desk





Metering Portal

- The solution for measuring heat and water consumption in buildings

Flamco XStream

- Unique ECO/MAX setting
- Easy to install to 360° rotatable without preferred flow direction
- Extended magnet function (Flamco XStream Clean)
- Integrated service display
- Integrated insulation for minimal heat loss



LogoMatic G2

- High efficient DHW preparation at all 3 different performance level (S-Line, M-Line & L-Line)
- Energy saving up to 10% by avoiding heat losses
- Time & cost savings through a simple commissioning via the Flamconnect APP
- More gained room space through less installation depth (>110 mm)
- Project based solution based on one product series with over 36,000 possible product combinations
- Different operation control functions for room temperature controlling, DHW circulation, etc.

MeiFlow Top S

- Pump group for heating and cooling applications
- Exchangeable mixer valve (left/right)
- Immersion sleeve in flow ball valve as standard
- Wide variety of actuators and pumps
- High quality and innovative design concept



reddot winner 2020

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Expansion Vessels



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Expansion Vessels for Potable Water



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Accessories for Expansion Vessels



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Expansion Systems

1



Flamco carries a wide range of expansion vessels, equipped with innovative technology. Both the steel shell and the membrane are of top quality and guarantee a long service life. In addition to expansion vessels, Flamco produces an extensive range of automat expansion machines with compressor control (Flexcon M-K series) or with pump control (Flamcomat), all characterized by optimum technical performance and equipped with an easy-to-use display. These automat machines keep the pressure in the installation balanced and constant, regardless of the temperature of the water. Due to their high volume efficiency, they are more space-saving than normal expansion vessels. Flamco also has a wide range of topup equipment as an addition to the automat products or traditional expansion vessels.

SELECTION FLEXCON EXPANSION VESSELS ACCORDING TO EN12828

Specified values have been calculated for a flow temperature of 90 °C.

Opening pressure of the safety valve: 3 bar.

Closed water-based heating systems according to EN 12828.

Water reserve: 0.5% of the installation volume with a minimum of 3 liters*.

* Flamco recommends to use a 6-liter minimum.

Selection Table

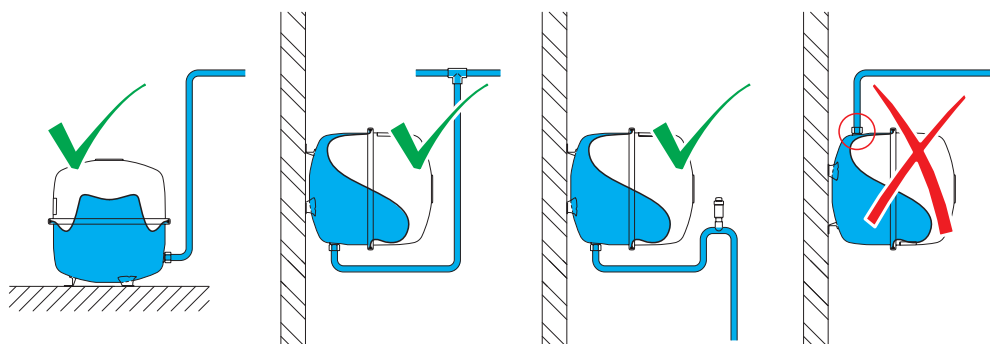
Expansion vessel		Static height [mWS]	Heating capacity installed		
Volume [l]	Precharge [bar]		Radiators (8,8 dm³) [kW]	Air Treatment (6,9 dm³/kW) [kW]	Low Temperature Heating (<50 °C) (15 dm³/kW) [kW]
8	0.5	3	6	8	8
12	0.5	3	15	19	21
18	0.5	3	29	37	40
25	0.5	3	45	58	56
35	0.5	3	68	87	78
50	0.5	3	97	124	112
80	0.5	3	156	199	180
110	0.5	3	215	274	247
140	0.5	3	273	349	315
200	0.5	3	391	498	450
300	0.5	3	586	748	676
425	0.5	3	831	1060	958
600	0.5	3	1173	1496	1352
800	0.5	3	1564	1995	1803
1000	0.5	3	1955	2494	2254
12	1	8	8	11	12
18	1	8	18	24	26
25	1	8	31	39	42
35	1	8	48	61	59
50	1	8	73	93	84
80	1	8	117	149	135
110	1	8	161	205	185
140	1	8	205	261	236
200	1	8	293	374	338
300	1	8	440	561	507
425	1	8	623	795	718
600	1	8	880	1122	1014
800	1	8	1173	1496	1352
1000	1	8	1466	1870	1690
18	1.5	13	8	11	12
25	1.5	13	16	21	23
35	1.5	13	28	35	39
50	1.5	13	45	58	56
80	1.5	13	78	99	90
110	1.5	13	107	137	123
140	1.5	13	136	174	157
200	1.5	13	195	249	225
300	1.5	13	293	374	338
425	1.5	13	415	530	479
600	1.5	13	586	748	676
800	1.5	13	782	997	901
1000	1.5	13	977	1247	1127

FLEXCON PREMIUM

For sealed heating installations (acc. to EN12828) and chilled water (cooling) installations.

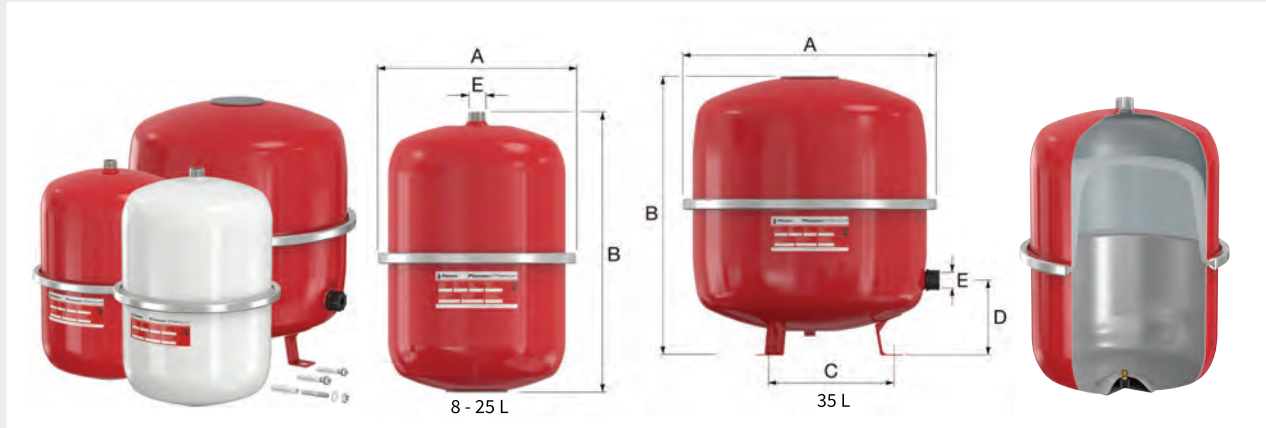
Expansion vessels keep the pressure of the installation stable by temporarily absorbing the extra water volume that is generated by heating or cooling installations.


- Sustainable expansion vessels thanks to innovative technology.
- The Flexcon Premium expansion vessels have a plastic membrane (12 - 35 litres) made of thermoplastic polyolefin (TPO). The new membrane has a high flexibility and low permeability. The environmental performance of the new membrane is much better and TPO can be burned cleaner or recycled into products more effectively.
- The plastic membrane is much lighter because it requires up to 50% less material. This saves raw materials, energy (production) and fuel (transport) and results in a large reduction of CO₂ emissions.
- The box is made from FSC certified cardboard and the version with the lowest available CO₂ footprint has been selected. The manual is printed on FSC certified paper.
- A long service life is guaranteed with a 15-year warranty and therefore also saves on maintenance.
- Extremely low permeability of the diaphragm ensures that pre-charge pressure is maintained for longer.
- The flexible diaphragms, with rolling action, are preformed and, in contrast to a bag type bladder, prevent stretching so that their properties are preserved over the long term.
- The two halves of the vessel are coated prior to assembly, not afterwards. Therefore there is no risk of corrosion on the clamp ring and the diaphragm does not have a service life-reducing thermal shock during production.
- The unique zinc plated steel clench ring construction clamps the diaphragm between the two deep drawn steel vessel halves. This not only ensures a perfect seal but also prevents mechanical damage of the diaphragm during use (load distribution over the entire clamping area and not at 1 central suspension point).
- The gas side is filled with nitrogen, and not with air, so that corrosion is prevented and the pressure loss is even more limited.
- The nitrogen air valve is countersunk on the vessel to protect it from damage, it is in turn further protected by a cover plate from recycled plastic.
- The profile on the diaphragm prevents it from sticking to the inside wall of the vessel and ensures inflow of expansion water at the earliest increase in pressure.
- The uncoated taper water connection thread ensures easy and water tight installation.
- Finished with a gleaming epoxy-powder coating.
- Each vessel is functionally tested before it leaves the factory.
- Vessels in accordance with EN13831.
- Suitable for systems with a maximum system temperature of 120 °C.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- In accordance with Pressure Equipment Directive 2014/68/EU.



Flexcon Premium 8 - 35 / 3 bar

- Maximum working pressure: 3.0.
- Min./ max. temperature diaphragm: -10 / 70 °C.
- Red (RAL 3002) epoxy powder coating (18 and 25 litres also available in white).
- Flexcon Premium 35: With feet and including mounting kit.

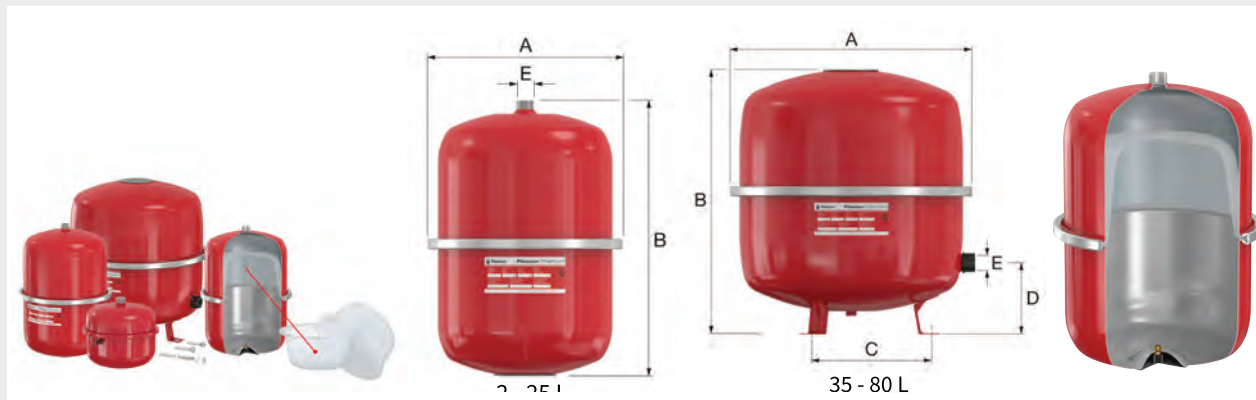


Type	Capacity [l]	Pre-charge [bar]	A [mm]	B [mm]	Ø C [mm]	D [mm]	Diaphragm	Syst. conn. (E)	Weight [kg]		Order Code
Flexcon Premium 8 - 0.5 bar	8	0.5	245	277	-	-	Butyl	R 3/4"	2.2	77	16913
Flexcon Premium 12 - 0.5 bar	12	0.5	286	309	-	-	TPO	R 3/4"	2.7	60	16914
Flexcon Premium 12 - 1.0 bar	12	1.0	286	309	-	-	TPO	R 3/4"	2.7	60	16915
Flexcon Premium 18 - 0.5 bar	18	0.5	286	405	-	-	TPO	R 3/4"	3.4	48	16916
Flexcon Premium 18 - 1.0 bar	18	1.0	286	405	-	-	TPO	R 3/4"	3.4	48	16917
Flexcon Premium 18 - 1.5 bar	18	1.5	286	405	-	-	TPO	R 3/4"	3.4	48	16918
Flexcon Premium 18 white - 0.5 bar	18	0.5	286	405	-	-	TPO	R 3/4"	3.4	48	16919
Flexcon Premium 18 white - 1.0 bar	18	1.0	286	405	-	-	TPO	R 3/4"	3.4	48	16920
Flexcon Premium 25 - 0.5 bar	25	0.5	328	421	-	-	TPO	R 3/4"	4.3	25	16922
Flexcon Premium 25 - 1.0 bar	25	1.0	328	421	-	-	TPO	R 3/4"	4.3	25	16923
Flexcon Premium 25 - 1.5 bar	25	1.5	328	421	-	-	TPO	R 3/4"	4.3	25	16924
Flexcon Premium 25 white - 1.0 bar	25	1.0	328	421	-	-	TPO	R 3/4"	4.3	25	16926
Flexcon Premium 35 - 0.5 bar	35	0.5	396	435	263	118	TPO	R 3/4"	5.3	18	16928
Flexcon Premium 35 - 1.0 bar	35	1.0	396	435	263	118	TPO	R 3/4"	5.3	18	16929
Flexcon Premium 35 - 1.5 bar	35	1.5	396	435	263	118	TPO	R 3/4"	5.3	18	16930



Flexcon Premium 2 - 80 / 6 bar

- Maximum working pressure: 6.0 bar.
- Min./max. temperature diaphragm: -10 / 90 °C.
- Red (RAL 3002) epoxy powder coating.
- Flexcon Premium 35 - 80: With feet and including mounting kit.



Type	Capacity [l]	Pre-charge [bar]	Dimensions				Diaphragm	Syst. conn. (E)	Weight [kg]		Order Code
			A [mm]	B [mm]	Ø C [mm]	D [mm]					
Flexcon Premium 2 - 0.5 bar	2	0.5	216	144	-	-	Butyl	G 3/4" M	1.7	120	16937
Flexcon Premium 2 - 2.5 bar	2	2.5	216	144	-	-	Butyl	G 3/4" M	1.7	120	16938
Flexcon Premium 4 - 0.5 bar	4	0.5	216	192	-	-	Butyl	G 3/4" M	2.1	90	16939
Flexcon Premium 4 - 2.5 bar	4	2.5	216	192	-	-	Butyl	G 3/4" M	2.1	90	16940
Flexcon Premium 8 - 0.5 bar	8	0.5	245	277	-	-	Butyl	R 3/4"	3.2	50	16941
Flexcon Premium 8 - 2.5 bar	8	2.5	245	277	-	-	Butyl	R 3/4"	3.2	50	16942
Flexcon Premium 8 - specify	8	*	245	277	-	-	Butyl	R 3/4"	3.2	50	16943
Flexcon Premium 12 - 0.5 bar	12	0.5	286	309	-	-	TPO	R 3/4"	4.5	36	16944
Flexcon Premium 12 - 2.5 bar	12	2.5	286	309	-	-	TPO	R 3/4"	4.5	36	16945
Flexcon Premium 12 - specify	12	*	286	309	-	-	TPO	R 3/4"	4.5	36	16946
Flexcon Premium 18 - 0.5 bar	18	0.5	286	405	-	-	TPO	R 3/4"	4.7	48	16947
Flexcon Premium 18 - 2.5 bar	18	2.5	286	405	-	-	TPO	R 3/4"	4.7	48	16948
Flexcon Premium 18 - specify	18	*	286	405	-	-	TPO	R 3/4"	4.7	48	16949
Flexcon Premium 25 - 0.5 bar	25	0.5	328	421	-	-	TPO	R 3/4"	5.8	25	16950
Flexcon Premium 25 - 2.5 bar	25	2.5	328	421	-	-	TPO	R 3/4"	5.8	25	16952
Flexcon Premium 25 - specify	25	*	328	421	-	-	TPO	R 3/4"	5.8	25	16953
Flexcon Premium 35 - 0.5 bar	35	0.5	396	435	263	118	TPO	R 3/4"	8.1	18	16954
Flexcon Premium 35 - 2.5 bar	35	2.5	396	435	263	118	TPO	R 3/4"	8.1	18	16956
Flexcon Premium 35 - specify	35	*	396	435	263	118	TPO	R 3/4"	8.1	18	16957
Flexcon Premium 50 - 0.5 bar	50	0.5	437	493	263	134	Butyl	R 3/4"	11.4	12	16958
Flexcon Premium 50 - 1.0 bar	50	1.0	437	493	263	134	Butyl	R 3/4"	11.4	12	16932
Flexcon Premium 50 - 1.5 bar	50	1.5	437	493	263	134	Butyl	R 3/4"	11.4	12	16959
Flexcon Premium 50 - 2.5 bar	50	2.5	437	493	263	134	Butyl	R 3/4"	11.4	12	16960
Flexcon Premium 50 - specify	50	*	437	493	263	134	Butyl	R 3/4"	11.4	12	16961
Flexcon Premium 80 - 0.5 bar	80	0.5	519	534	360	140	Butyl	R 1"	15.0	12	16962
Flexcon Premium 80 - 1.0 bar	80	1.0	519	534	360	140	Butyl	R 1"	15.0	12	16935
Flexcon Premium 80 - 1.5 bar	80	1.5	519	534	360	140	Butyl	R 1"	15.0	12	16963
Flexcon Premium 80 - 2.5 bar	80	2.5	519	534	360	140	Butyl	R 1"	15.0	12	16964
Flexcon Premium 80 - specify	80	*	519	534	360	140	Butyl	R 1"	15.0	12	16965

* Specify pre-charge pressure when ordering.



FLEXCON

For sealed heating installations (acc. to EN12828) and chilled water (cooling) installations.

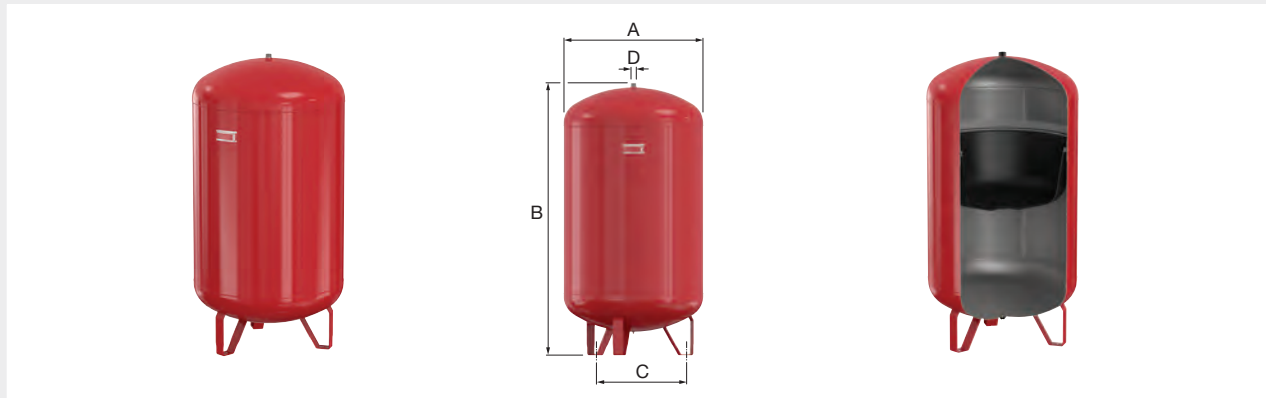
Flexcon advantages


- Flexible diaphragms with rolling action.
- The unique clench ring construction clamps the diaphragm between the two vessel halves.
- Nitrogen gas filling for longer maintenance of pre-pressure.
- The ribbed profile on the diaphragm prevents it from sticking to the inside wall of the vessel and ensures inflow of expansion water at the slightest increase in pressure.
- Uncoated water connection thread ensures easy and water tight installation.
- Top quality steel.
- Finished with a gleaming epoxy-powder coating.
- Each vessel is factory tested.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Vessels in accordance with EN13831.
- Suitable for systems with a maximum system temperature of 120 °C.
- Min. / max. temperature diaphragm: -10 / 70 °C.
- In accordance with Pressure Equipment Directive 2014/68/EU.




Flexcon 110 - 1000

- All welded construction.
- Maximum working pressure: 6.0 bar.
- Red (RAL 3002) epoxy powder coating.
- Flexcon 110 - 300: including mounting kit.



Type	Capacity [l]	Pre-charge [bar]	Dimensions			Syst. conn. (D)	Weight [kg]		Order Code
			A [mm]	B [mm]	Ø C [mm]				
Flexcon 110 - 0.5 bar	110	0.5	484	784	360	R 1"	19.1	8	16115
Flexcon 110 - 1.0 bar	110	1.0	484	784	360	R 1"	19.1	8	16116
Flexcon 110 - 1.5 bar	110	1.5	484	784	360	R 1"	19.1	8	16117
Flexcon 110 - 2.0 bar	110	2.0	484	784	360	R 1"	19.1	8	16119
Flexcon 110 - 2.5 bar	110	2.5	484	784	360	R 1"	19.1	8	16120
Flexcon 110 - 3.0 bar	110	3.0	484	784	360	R 1"	19.1	8	16110

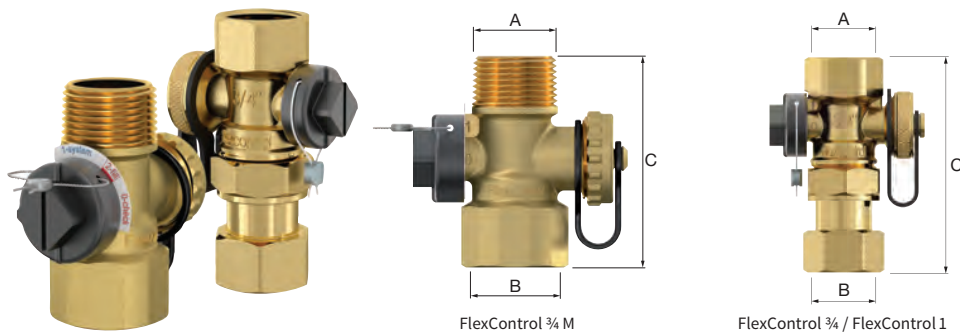
Type	Capacity [l]	Pre-charge [bar]	Dimensions			Syst. conn. (D)	Weight [kg]		Order Code
			A [mm]	B [mm]	Ø C [mm]				
Flexcon 140 - 0.5 bar	140	0.5	484	950	360	R 1"	20.1	8	16145
Flexcon 140 - 1.0 bar	140	1.0	484	950	360	R 1"	20.1	8	16146
Flexcon 140 - 1.5 bar	140	1.5	484	950	360	R 1"	20.1	8	16147
Flexcon 140 - 2.0 bar	140	2.0	484	950	360	R 1"	20.1	8	16141
Flexcon 140 - 2.5 bar	140	2.5	484	950	360	R 1"	20.1	8	16142
Flexcon 140 - 3.0 bar	140	3.0	484	950	360	R 1"	20.1	8	16143
Flexcon 200 - 0.5 bar	200	0.5	484	1300	450	R 1"	27.6	8	16205
Flexcon 200 - 1.0 bar	200	1.0	484	1300	450	R 1"	27.6	8	16206
Flexcon 200 - 1.5 bar	200	1.5	484	1300	450	R 1"	27.6	8	16207
Flexcon 200 - 2.0 bar	200	2.0	484	1300	450	R 1"	27.6	8	16208
Flexcon 200 - 2.5 bar	200	2.5	484	1300	450	R 1"	27.6	8	16209
Flexcon 200 - 3.0 bar	200	3.0	484	1300	450	R 1"	27.6	8	16210
Flexcon 300 - 0.5 bar	300	0.5	600	1330	450	R 1"	44.1	6	16301
Flexcon 300 - 1.0 bar	300	1.0	600	1330	450	R 1"	44.1	6	16302
Flexcon 300 - 1.5 bar	300	1.5	600	1330	450	R 1"	44.1	6	16303
Flexcon 300 - 2.0 bar	300	2.0	600	1330	450	R 1"	44.1	6	16304
Flexcon 300 - 2.5 bar	300	2.5	600	1330	450	R 1"	44.1	6	16305
Flexcon 300 - 3.0 bar	300	3.0	600	1330	450	R 1"	44.1	6	16306
Flexcon 425 - 0.5 bar	425	0.5	790	1180	610	R 1"	57.4	1	16421
Flexcon 425 - 1.0 bar	425	1.0	790	1180	610	R 1"	57.4	1	16422
Flexcon 425 - 1.5 bar	425	1.5	790	1180	610	R 1"	57.4	1	16423
Flexcon 425 - 2.0 bar	425	2.0	790	1180	610	R 1"	57.4	1	16424
Flexcon 425 - 2.5 bar	425	2.5	790	1180	610	R 1"	57.4	1	16425
Flexcon 425 - 3.0 bar	425	3.0	790	1180	610	R 1"	57.4	1	16426
Flexcon 600 - 0.5 bar	600	0.5	790	1540	610	R 1"	70.1	1	16601
Flexcon 600 - 1.0 bar	600	1.0	790	1540	610	R 1"	70.1	1	16602
Flexcon 600 - 1.5 bar	600	1.5	790	1540	610	R 1"	70.1	1	16603
Flexcon 600 - 2.0 bar	600	2.0	790	1540	610	R 1"	70.1	1	16604
Flexcon 600 - 2.5 bar	600	2.5	790	1540	610	R 1"	70.1	1	16605
Flexcon 600 - 3.0 bar	600	3.0	790	1540	610	R 1"	70.1	1	16606
Flexcon 800 - 0.5 bar	800	0.5	790	1888	610	R 1"	88.0	1	16801
Flexcon 800 - 1.0 bar	800	1.0	790	1888	610	R 1"	88.0	1	16802
Flexcon 800 - 1.5 bar	800	1.5	790	1888	610	R 1"	88.0	1	16803
Flexcon 800 - 2.0 bar	800	2.0	790	1888	610	R 1"	88.0	1	16804
Flexcon 800 - 2.5 bar	800	2.5	790	1888	610	R 1"	88.0	1	16805
Flexcon 800 - 3.0 bar	800	3.0	790	1888	610	R 1"	88.0	1	16806
Flexcon 1000 - 0.5 bar	1000	0.5	790	2268	610	R 1"	101.4	1	16901
Flexcon 1000 - 1.0 bar	1000	1.0	790	2268	610	R 1"	101.4	1	16902
Flexcon 1000 - 1.5 bar	1000	1.5	790	2268	610	R 1"	101.4	1	16903
Flexcon 1000 - 2.0 bar	1000	2.0	790	2268	610	R 1"	101.4	1	16904
Flexcon 1000 - 2.5 bar	1000	2.5	790	2268	610	R 1"	101.4	1	16905
Flexcon 1000 - 3.0 bar	1000	3.0	790	2268	610	R 1"	101.4	1	16906




FlexControl

This isolating union connects the expansion vessel to the central heating system and enables verification of the vessel's gas charge or, alternatively, allows you to replace it without draining the entire system.

- Saves a considerable amount of time when servicing a Flexcon vessel.
- Enables you to check the pre-charge pressure without having to disconnect the vessel.
- Enables you to change the vessel or check the pre-charge pressure without having to release the system pressure or drain the system.
- With integrated ball valve and hose connection.
- Flexcontrol 3/4" F / 1" F: With swivel nut connection for easy mounting of the expansion vessel.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Maximum working pressure: 10 bar.
- Maximum working temperature (design): 130 °C.



Type	Connection		Dimension C [mm]	Weight [kg]		Order Code
	A	B				
FlexControl 3/4 M	R 3/4"	Rp 3/4"	60	0.24	1	28925
FlexControl 3/4	Rp 3/4"	G 3/4" F	92	0.31	1	28920
FlexControl 1	Rp 1"	G 1" F	100	0.36	1	22390

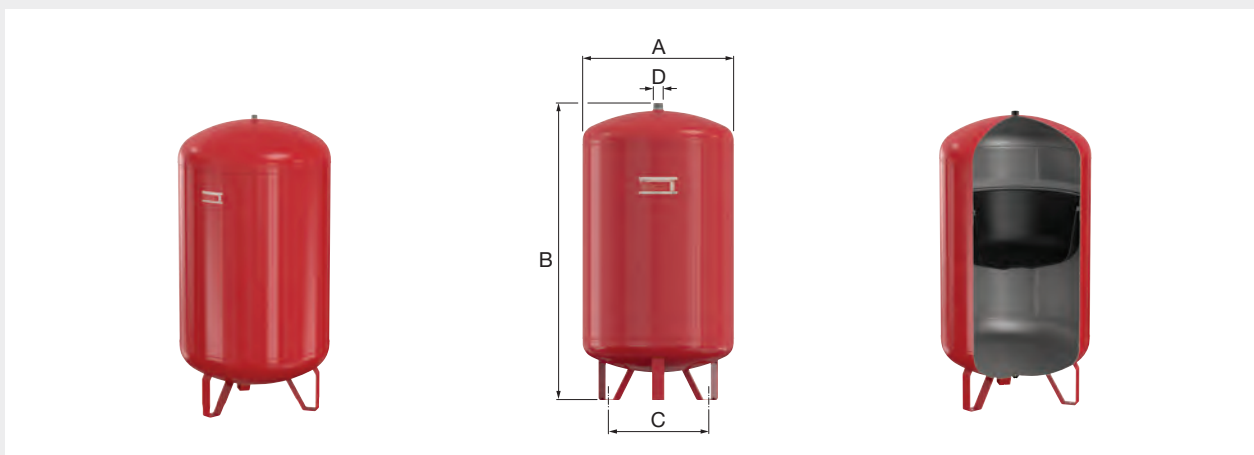
FLEXCON TOP


High pressure alternative for use in sealed heating installations (acc. to EN12828) and chilled water (cooling) installations.


- Diaphragm: butyl rubber.

Flexcon Top 110 - 1000

- All welded construction.
- Maximum working pressure: 10.0 bar.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Vessels in accordance with EN13831.
- Suitable for systems with a maximum system temperature of 120 °C.
- Minimum/maximum temperature diaphragm: -10 / 90 °C.
- In accordance with Pressure Equipment Directive 2014/68/EU.
- Red (RAL 3002) epoxy powder coating.
- Flexcon Top 110 - 300: including mounting kit.



Type	Capacity [l]	Pre-charge [bar]	Dimensions			Syst. conn. (D)	Weight [kg]		Order Code
			A [mm]	B [mm]	Ø C [mm]				
Flexcon Top 110 - 1.5 bar	110	1.5	484	784	360	R 1"	27.3	8	16103
Flexcon Top 110 - 3.0 bar	110	3.0	484	784	360	R 1"	27.3	8	16106
Flexcon Top 110 - 3.5 bar	110	3.5	484	784	360	R 1"	27.3	8	16090
Flexcon Top 110 - specify	110	*	484	784	360	R 1"	27.3	8	16100
Flexcon Top 140 - 1.5 bar	140	1.5	484	950	360	R 1"	31.6	8	16133
Flexcon Top 140 - 3.0 bar	140	3.0	484	950	360	R 1"	31.6	8	16136
Flexcon Top 140 - 3.5 bar	140	3.5	484	950	360	R 1"	31.6	8	16091
Flexcon Top 140 - specify	140	*	484	950	360	R 1"	31.6	8	16130
Flexcon Top 200 - 1.5 bar	200	1.5	600	960	450	R 1"	35.4	8	16193
Flexcon Top 200 - 3.0 bar	200	3.0	600	960	450	R 1"	35.4	8	16196
Flexcon Top 200 - 3.5 bar	200	3.5	600	960	450	R 1"	35.4	8	16092
Flexcon Top 200 - specify	200	*	600	960	450	R 1"	35.4	8	16190
Flexcon Top 300 - 1.5 bar	300	1.5	600	1330	450	R 1"	57.1	6	16293
Flexcon Top 300 - 3.0 bar	300	3.0	600	1330	450	R 1"	57.1	6	16296
Flexcon Top 300 - 3.5 bar	300	3.5	600	1330	450	R 1"	57.1	6	16093
Flexcon Top 300 - specify	300	*	600	1330	450	R 1"	57.1	6	16290
Flexcon Top 425 - 1.5 bar	425	1.5	790	1180	610	R 1"	84.9	1	16413
Flexcon Top 425 - 3.0 bar	425	3.0	790	1180	610	R 1"	84.9	1	16416
Flexcon Top 425 - 3.5 bar	425	3.5	790	1180	610	R 1"	84.9	1	16094
Flexcon Top 425 - specify	425	*	790	1180	610	R 1"	84.9	1	16410
Flexcon Top 600 - 1.5 bar	600	1.5	790	1540	610	R 1"	105.8	1	16593
Flexcon Top 600 - 3.0 bar	600	3.0	790	1540	610	R 1"	105.8	1	16596
Flexcon Top 600 - 3.5 bar	600	3.5	790	1540	610	R 1"	105.8	1	16096
Flexcon Top 600 - specify	600	*	790	1540	610	R 1"	105.8	1	16590

Type	Capacity [l]	Pre-charge [bar]	Dimensions			Syst. conn. (D)	Weight [kg]		Order Code
			A [mm]	B [mm]	Ø C [mm]				
Flexcon Top 800 - 1.5 bar	800	1.5	790	1888	610	R 1"	133.7	1	16793
Flexcon Top 800 - 3.0 bar	800	3.0	790	1888	610	R 1"	133.7	1	16796
Flexcon Top 800 - 3.5 bar	800	3.5	790	1888	610	R 1"	133.7	1	16098
Flexcon Top 800 - specify	800	*	790	1888	610	R 1"	133.7	1	16790
Flexcon Top 1000 - 1.5 bar	1000	1.5	790	2268	610	R 1"	155.1	1	16893
Flexcon Top 1000 - 3.0 bar	1000	3.0	790	2268	610	R 1"	155.1	1	16896
Flexcon Top 1000 - 3.5 bar	1000	3.5	790	2268	610	R 1"	155.1	1	16099
Flexcon Top 1000 - specify	1000	*	790	2268	610	R 1"	155.1	1	17294

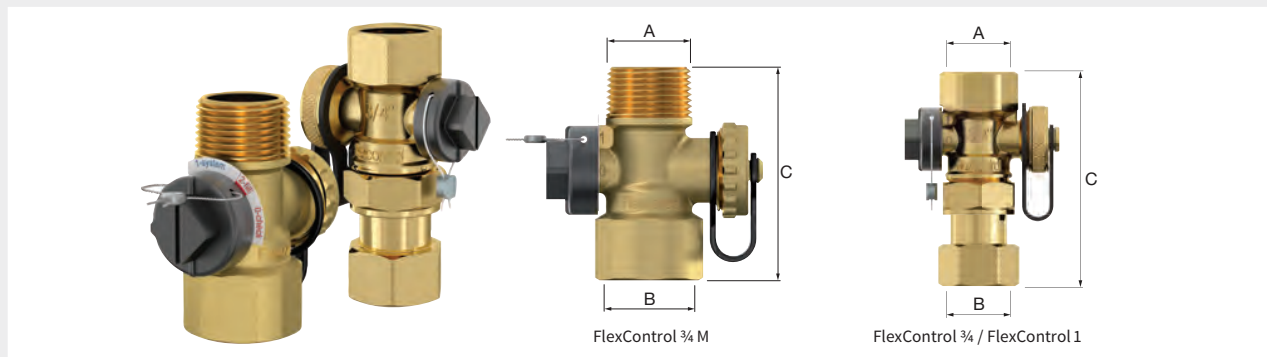
* Specify pre-charge pressure when ordering.




FlexControl

This isolating union connects the expansion vessel to the central heating system and enables verification of the vessel's gas charge or, alternatively, allows you to replace it without draining the entire system.

- Saves a considerable amount of time when servicing a Flexcon vessel.
- Enables you to check the pre-charge pressure without having to disconnect the vessel.
- Enables you to change the vessel or check the pre-charge pressure without having to release the system pressure or drain the system.
- With integrated ball valve and hose connection.
- Flexcontrol ¾" F / 1" F: With swivel nut connection for easy mounting of the expansion vessel.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Maximum working pressure: 10 bar.
- Maximum working temperature (design): 130 °C.

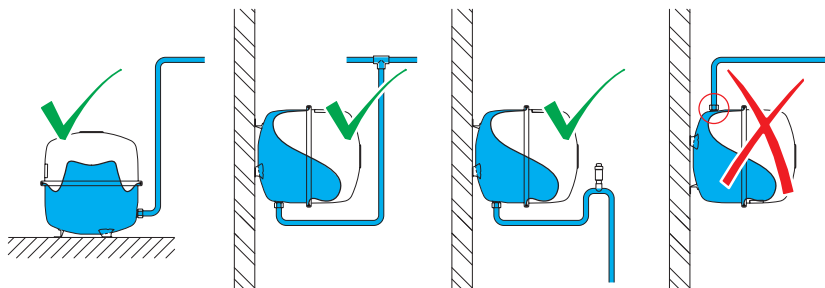


Type	Connection		Dimension C [mm]	Weight [kg]		Order Code
	A	B				
FlexControl ¾ M	R ¾"	Rp ¾"	60	0.24	1	28925
FlexControl ¾ F	Rp ¾"	G ¾" F	92	0.31	1	28920
FlexControl 1	Rp 1"	G 1" F	100	0.36	1	22390

FLEXCON SOLAR

Expansion vessels specially designed for solar installations (acc. to EN12828).


- Diaphragm: butyl rubber.



Flexcon Solar 8 - 80

- Deep drawn steel vessel halves with zinc plated steel clench ring.
- Maximum working pressure: 8.0 bar.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Vessels in accordance with EN13831.
- Suitable for systems with a maximum system temperature of 120 °C.
- Maximum temperature diaphragm: 110 °C.
- In accordance with Pressure Equipment Directive 2014/68/EU.
- White (RAL 9010) epoxy powder coating.
- Flexcon Solar 35 - 80: With feet and including mounting kit.

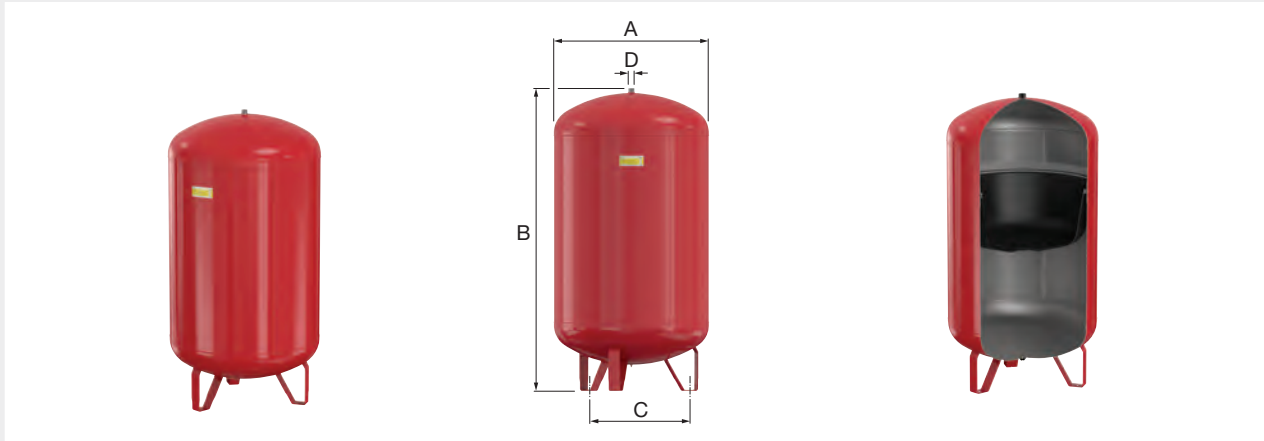



Type	Capacity [l]	Pre-charge [bar]	Dimensions				Syst. conn. (E)	Weight [kg]		Order Code
			A [mm]	B [mm]	Ø C [mm]	D [mm]				
Flexcon Solar 8 - 2.5 bar	8	2.5	245	277	-	-	R 3/4"	3.2	50	16060
Flexcon Solar 12 - 2.5 bar	12	2.5	286	309	-	-	R 3/4"	4.5	36	16061
Flexcon Solar 18 - 2.5 bar	18	2.5	328	323	-	-	R 3/4"	5.7	24	16062
Flexcon Solar 25 - 2.5 bar	25	2.5	358	356	-	-	R 3/4"	7.3	18	16063
Flexcon Solar 35 - 2.5 bar	35	2.5	396	435	263	118	R 3/4"	8.1	18	16064
Flexcon Solar 50 - 2.5 bar	50	2.5	437	493	263	134	R 3/4"	11.4	12	16065
Flexcon Solar 80 - 2.5 bar	80	2.5	519	534	360	140	R 1"	15.0	12	16066



Flexcon Solar 110 - 1000

- All welded construction.
- Maximum working pressure: 10.0 bar.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Vessels in accordance with EN13831.
- Suitable for systems with a maximum system temperature of 120 °C.
- Maximum temperature diaphragm: 110 °C.
- In accordance with Pressure Equipment Directive 2014/68/EU.
- Red (RAL 3002) epoxy powder coating.
- Flexcon Solar 110 - 300: including mounting kit.



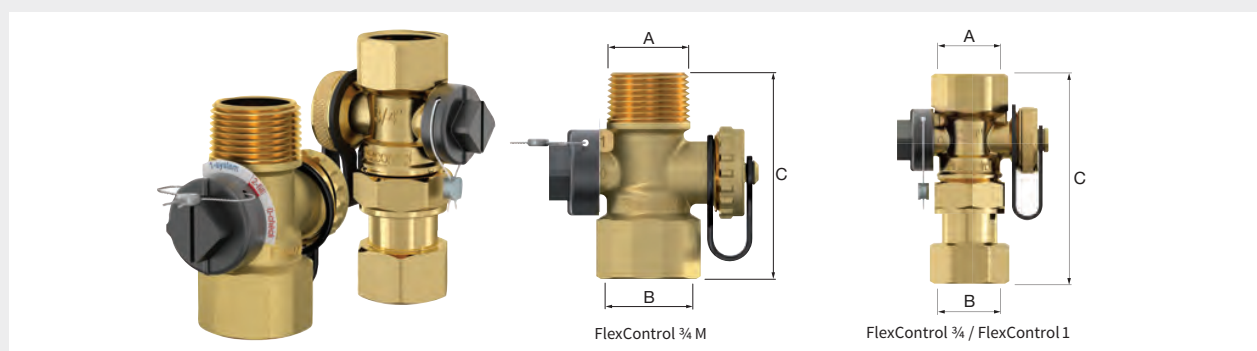
Type	Capacity [l]	Pre-charge [bar]	Dimensions			Syst. conn. (D)	Weight [kg]		Order Code
			A [mm]	B [mm]	Ø C [mm]				
Flexcon Solar 110 - 3.0 bar	110	3.0	484	784	360	R 1"	27.3	8	16067
Flexcon Solar 140 - 3.0 bar	140	3.0	484	950	360	R 1"	31.6	8	16068
Flexcon Solar 200 - 3.0 bar	200	3.0	600	960	450	R 1"	35.4	8	16069
Flexcon Solar 300 - 3.0 bar	300	3.0	600	1330	450	R 1"	57.1	6	16070
Flexcon Solar 425 - 3.0 bar	425	3.0	790	1180	610	R 1"	84.9	1	16071
Flexcon Solar 600 - 3.0 bar	600	3.0	790	1540	610	R 1"	105.8	1	16072
Flexcon Solar 800 - 3.0 bar	800	3.0	790	1888	610	R 1"	133.7	1	16073
Flexcon Solar 1000 - 3.0 bar	1000	3.0	790	2268	610	R 1"	155.1	1	16074




FlexControl

This isolating union connects the expansion vessel to the central heating system and enables verification of the vessel's gas charge or, alternatively, allows you to replace it without draining the entire system.

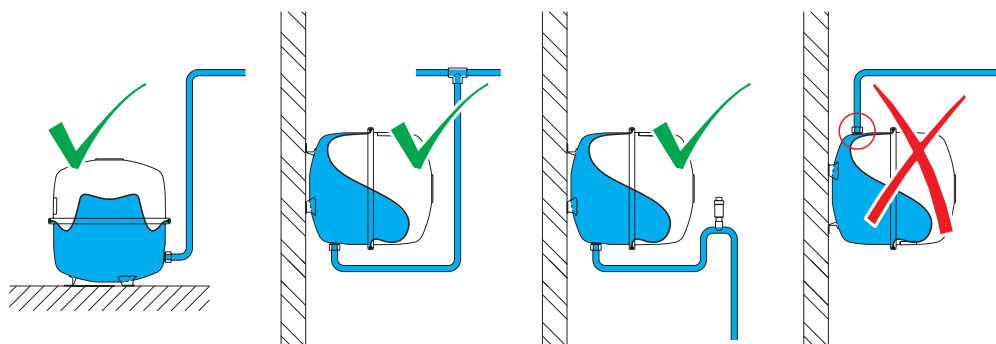
- Saves a considerable amount of time when servicing a Flexcon vessel.
- Enables you to check the pre-charge pressure without having to disconnect the vessel.
- Enables you to change the vessel or check the pre-charge pressure without having to release the system pressure or drain the system.
- With integrated ball valve and hose connection.
- Flexcontrol $\frac{3}{4}$ " F / 1" F: With swivel nut connection for easy mounting of the expansion vessel.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Maximum working pressure: 10 bar.
- Maximum working temperature (design): 130 °C.



Type	Connection		Dimension C [mm]	Weight [kg]		Order Code
	A	B				
FlexControl $\frac{3}{4}$ M	R $\frac{3}{4}$ "	Rp $\frac{3}{4}$ "	60	0.24	1	28925
FlexControl $\frac{3}{4}$	Rp $\frac{3}{4}$ "	G $\frac{3}{4}$ " F	92	0.31	1	28920
FlexControl 1	Rp 1"	G 1" F	100	0.36	1	22390

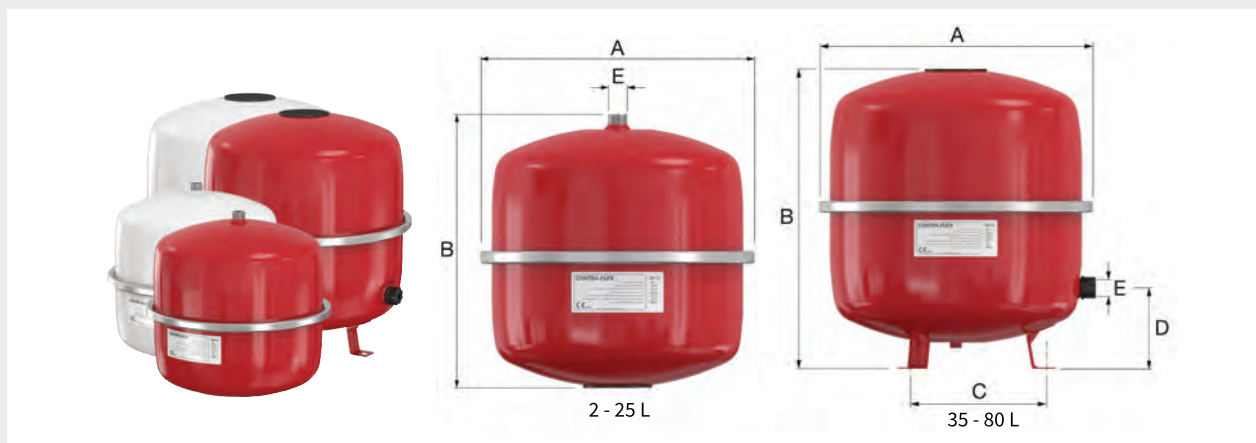
CONTRA-FLEX

For sealed heating installations (acc. to EN12828) and chilled water (cooling) installations.



Contra-Flex 2 - 80

- Deep drawn steel vessel halves with zinc plated steel clench ring.
- Maximum working pressure: 3.0 or 6.0 bar.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Vessels in accordance with EN13831.
- Suitable for systems with a maximum system temperature of 120 °C.
- Maximum temperature diaphragm: 70 °C.
- In accordance with Pressure Equipment Directive 2014/68/EU.
- Red (RAL 3002) or white (RAL 9010) epoxy powder coating. **(Contra-Flex white: Not available on stock in the U.K.)**
- Contra-Flex 35 - 80: With feet.

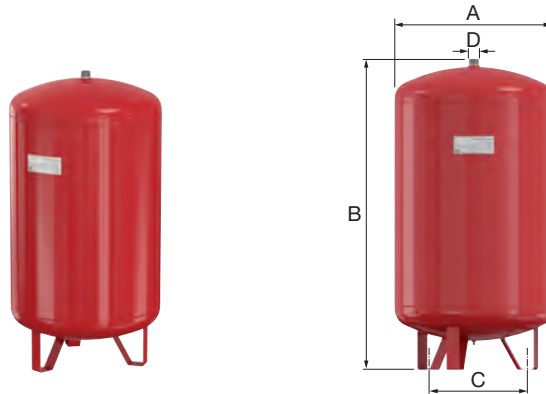



Type	Capacity [l]	Pre-charge [bar]	Max. working pressure [bar]	Dimensions				Syst. conn. (E)	Weight [kg]		Order Code
				A [mm]	B [mm]	Ø C [mm]	D [mm]				
Contra-Flex 2 - 0.5 bar	2	0.5	3.0	216	144	-	-	G 3/4" M	1.5	120	13211
Contra-Flex 2 - 1.5 bar	2	1.5	3.0	216	144	-	-	G 3/4" M	1.5	120	13213
Contra-Flex 4 - 0.5 bar	4	0.5	3.0	216	192	-	-	G 3/4" M	1.8	90	13411
Contra-Flex 4 - 1.5 bar	4	1.5	3.0	216	192	-	-	G 3/4" M	1.8	90	13413
Contra-Flex 8 - 0.5 bar	8	0.5	3.0	245	277	-	-	R 3/4"	2.2	50	26074
Contra-Flex 8 - 1.5 bar	8	1.5	3.0	245	277	-	-	R 3/4"	2.2	50	26073
Contra-Flex 8 white - 1.5 bar	8	1.5	3.0	245	277	-	-	R 3/4"	2.2	50	26063
Contra-Flex 12 - 0.5 bar	12	0.5	3.0	286	309	-	-	R 3/4"	2.7	36	26136
Contra-Flex 12 - 1.5 bar	12	1.5	3.0	286	309	-	-	R 3/4"	2.7	36	26133
Contra-Flex 12 white - 1.5 bar	12	1.5	3.0	286	309	-	-	R 3/4"	2.7	36	26153
Contra-Flex 18 - 1.0 bar	17	1.0	3.0	286	365	-	-	R 3/4"	3.3	48	26192
Contra-Flex 18 white - 1.0 bar	17	1.0	3.0	286	365	-	-	R 3/4"	3.3	48	26193
Contra-Flex 18 - 0.5 bar	18	0.5	3.0	328	323	-	-	R 3/4"	3.7	24	26171
Contra-Flex 18 - 1.0 bar	18	1.0	3.0	328	323	-	-	R 3/4"	3.7	24	26172
Contra-Flex 18 - 1.5 bar	18	1.5	3.0	328	323	-	-	R 3/4"	3.7	24	26173
Contra-Flex 18 white - 1.0 bar	18	1.0	3.0	328	323	-	-	R 3/4"	3.7	24	26162
Contra-Flex 18 white - 1.5 bar	18	1.5	3.0	328	323	-	-	R 3/4"	3.7	24	26163
Contra-Flex 25 - 1.0 bar	23	1.0	3.0	328	374	-	-	R 3/4"	3.7	18	26194
Contra-Flex 25 white - 1.0 bar	23	1.0	3.0	328	374	-	-	R 3/4"	3.7	18	26195
Contra-Flex 25 - 0.5 bar	25	0.5	3.0	358	356	-	-	R 3/4"	4.5	18	26241
Contra-Flex 25 - 1.5 bar	25	1.5	3.0	358	356	-	-	R 3/4"	4.5	18	26243
Contra-Flex 25 white - 1.5 bar	25	1.5	3.0	358	356	-	-	R 3/4"	4.5	18	26233
Contra-Flex 35 - 0.5 bar	35	0.5	3.0	396	435	263	118	R 3/4"	5.6	18	26341
Contra-Flex 35 - 1.5 bar	35	1.5	3.0	396	435	263	118	R 3/4"	5.6	18	26343
Contra-Flex 35 white - 1.5 bar	35	1.5	3.0	396	435	263	118	R 3/4"	5.6	18	26333
Contra-Flex 50 - 0.5 bar	50	0.5	6.0	437	493	263	134	R 3/4"	11.4	12	26491
Contra-Flex 50 - 1.5 bar	50	1.5	6.0	437	493	263	134	R 3/4"	11.4	12	26493
Contra-Flex 50 white - 1.5 bar	50	1.5	6.0	437	493	263	134	R 3/4"	11.4	12	26483
Contra-Flex 80 - 0.5 bar	80	0.5	6.0	519	534	360	140	R 1"	15.0	12	26791
Contra-Flex 80 - 1.5 bar	80	1.5	6.0	519	534	360	140	R 1"	15.0	12	26793
Contra-Flex 80 white - 1.5 bar	80	1.5	6.0	519	534	360	140	R 1"	15.0	12	26783




Contra-Flex 100 - 1000

- All welded construction.
- Maximum working pressure: 6.0 bar.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Vessels in accordance with EN13831.
- Suitable for systems with a maximum system temperature of 120 °C.
- Min./ max. temperature diaphragm: -10 / 70 °C.
- In accordance with Pressure Equipment Directive 2014/68/EU.
- Red (RAL 3002) epoxy powder coating.



Type	Capacity [l]	Pre-charge [bar]	Dimensions			Syst. conn. (D)	Weight [kg]		Order Code
			A [mm]	B [mm]	Ø C [mm]				
Contra-Flex 100 - 1.5 bar	100	1.5	484	774	360	R 1"	19.0	8	26103
Contra-Flex 100 - 2.5 bar	100	2.5	484	774	360	R 1"	19.0	8	26105
Contra-Flex 100 white - 2.5 bar	100	2.5	484	774	360	R 1"	19.0	8	16350
Contra-Flex 100 - 3.0 bar	100	3.0	484	774	360	R 1"	19.0	8	17114
Contra-Flex 150 - 1.5 bar	150	1.5	484	1014	360	R 1"	23.6	8	16153
Contra-Flex 150 - 2.5 bar	150	2.5	484	1014	360	R 1"	23.6	8	26155
Contra-Flex 150 white - 2.5 bar	150	2.5	484	1014	360	R 1"	23.6	8	16351
Contra-Flex 150 - 3.0 bar	150	3.0	484	1014	360	R 1"	23.6	8	17119
Contra-Flex 200 - 1.5 bar	200	1.5	484	1290	360	R 1"	27.5	8	26213
Contra-Flex 200 - 2.5 bar	200	2.5	484	1290	360	R 1"	27.5	8	26215
Contra-Flex 200 white - 2.5 bar	200	2.5	484	1290	360	R 1"	27.5	8	16352
Contra-Flex 200 - 3.0 bar	200	3.0	484	1290	360	R 1"	27.5	8	17124
Contra-Flex 250 - 1.5 bar	250	1.5	600	1138	450	R 1"	39.9	6	16253
Contra-Flex 250 - 2.5 bar	250	2.5	600	1138	450	R 1"	39.9	6	26225
Contra-Flex 250 white - 2.5 bar	250	2.5	600	1138	450	R 1"	39.9	6	16353
Contra-Flex 300 - 1.5 bar	300	1.5	600	1315	450	R 1"	43.9	6	26303
Contra-Flex 300 - 2.5 bar	300	2.5	600	1315	450	R 1"	43.9	6	26305
Contra-Flex 300 white - 2.5 bar	300	2.5	600	1315	450	R 1"	43.9	6	16354
Contra-Flex 300 - 3.0 bar	300	3.0	600	1315	450	R 1"	43.9	6	17134
Contra-Flex 400 - 1.5 bar	400	1.5	790	1160	610	R 1"	57.1	1	26413
Contra-Flex 400 - 2.5 bar	400	2.5	790	1160	610	R 1"	57.1	1	26415
Contra-Flex 400 white - 2.5 bar	400	2.5	790	1160	610	R 1"	57.1	1	16355
Contra-Flex 400 - 3.0 bar	400	3.0	790	1160	610	R 1"	57.1	1	17144
Contra-Flex 500 - 1.5 bar	500	1.5	790	1310	610	R 1"	62.9	1	26523
Contra-Flex 500 - 2.5 bar	500	2.5	790	1310	610	R 1"	62.9	1	26525
Contra-Flex 500 white - 2.5 bar	500	2.5	790	1310	610	R 1"	62.9	1	16356
Contra-Flex 600 - 1.5 bar	600	1.5	790	1518	610	R 1"	69.7	1	17162
Contra-Flex 600 - 2.5 bar	600	2.5	790	1518	610	R 1"	69.7	1	26625
Contra-Flex 600 white - 2.5 bar	600	2.5	790	1518	610	R 1"	69.7	1	16357
Contra-Flex 600 - 3.0 bar	600	3.0	790	1518	610	R 1"	69.7	1	17164

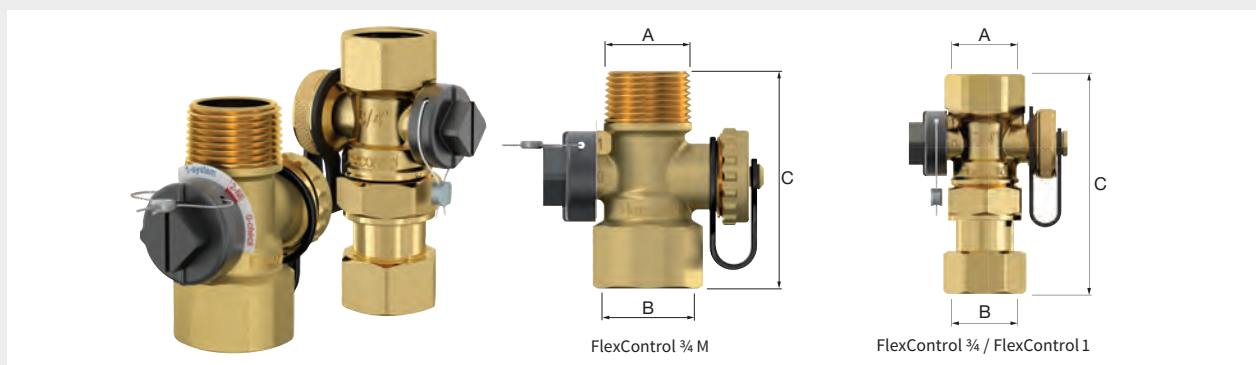
Type	Capacity [l]	Pre-charge [bar]	Dimensions			Syst. conn. (D)	Weight [kg]		Order Code
			A [mm]	B [mm]	Ø C [mm]				
Contra-Flex 800 - 1.5 bar	800	1.5	790	1868	610	R 1"	87.5	1	17181
Contra-Flex 800 - 2.5 bar	800	2.5	790	1868	610	R 1"	87.5	1	26825
Contra-Flex 800 white - 2.5 bar	800	2.5	790	1868	610	R 1"	87.5	1	16358
Contra-Flex 800 - 3.0 bar	800	3.0	790	1868	610	R 1"	87.5	1	17184
Contra-Flex 1000 - 1.5 bar	1000	1.5	790	2248	610	R 1"	100.9	1	17190
Contra-Flex 1000 - 2.5 bar	1000	2.5	790	2248	610	R 1"	100.9	1	26925
Contra-Flex 1000 white - 2.5 bar	1000	2.5	790	2248	610	R 1"	100.9	1	16359
Contra-Flex 1000 - 3.0 bar	1000	3.0	790	2248	610	R 1"	100.9	1	17194




FlexControl

This isolating union connects the expansion vessel to the central heating system and enables verification of the vessel's gas charge or, alternatively, allows you to replace it without draining the entire system.

- Saves a considerable amount of time when servicing a Flexcon vessel.
- Enables you to check the pre-charge pressure without having to disconnect the vessel.
- Enables you to change the vessel or check the pre-charge pressure without having to release the system pressure or drain the system.
- With integrated ball valve and hose connection.
- Flexcontrol 3/4" F / 1" F: With swivel nut connection for easy mounting of the expansion vessel.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Maximum working pressure: 10 bar.
- Maximum working temperature (design): 130 °C.



Type	Connection		Dimension C [mm]	Weight [kg]		Order Code
	A	B				
FlexControl 3/4 M	R 3/4"	Rp 3/4"	60	0.24	1	28925
FlexControl 3/4	Rp 3/4"	G 3/4" F	92	0.31	1	28920
FlexControl 1	Rp 1"	G 1" F	100	0.36	1	22390

FLEXCON P

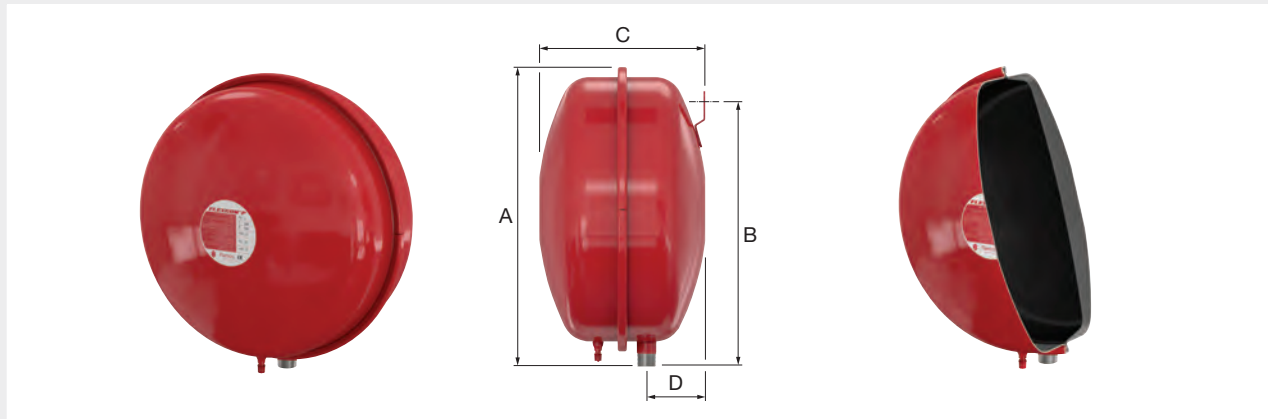
Oval shaped expansion vessels with reduced height and suspension eye. For use in sealed heating installations (acc. to EN12828) and chilled water (cooling) installations.


- Space-saving alternative for small installations.
- The oval shape combined with the practical suspension eye enables quick and easy mounting, optimising the use of space.
- Thanks to the design no stagnant water remains in the vessel.
- Flexcon P 18 - 50: deep drawn steel vessel halves with zinc plated steel clench ring (with red epoxy powder coating).
- Flexcon P 80 - 100: all welded construction.

Not available on stock in the U.K.

Flexcon P 18 - 100

- Maximum working pressure: 3.0 bar.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Vessels in accordance with EN13831.
- Suitable for systems with a maximum system temperature of 120 °C.
- Maximum temperature diaphragm: 90 °C.
- In accordance with Pressure Equipment Directive 2014/68/EU.
- Red epoxy powder coating.



Type	Capacity [l]	Pre-charge [bar]	Dimensions				Syst. conn.	Diaphragm	Weight [kg]		Order Code
			A [mm]	B [mm]	C [mm]	D [mm]					
Flexcon P 18 - 1.0 bar	18	1.0	387	365	226	80	G 3/4" M	Butyl	5.7	30	13316
Flexcon P 25 - 1.0 bar	25	1.0	435	415	256	90	G 3/4" M	Butyl	7.7	20	13326
Flexcon P 35 - 1.0 bar	35	1.0	435	450	333	110	G 3/4" M	Butyl	8.9	16	13336
Flexcon P 50 - 1.5 bar	50	1.5	515	505	344	125	G 3/4" M	Butyl	11.8	12	13357



FLEXCON M

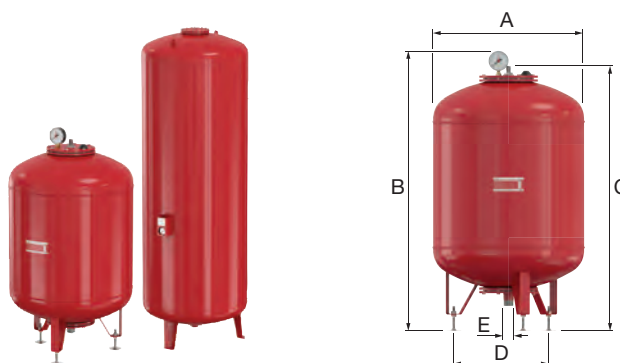
Expansion vessels with a replaceable bladder for use in sealed heating installations (acc. to EN12828) and chilled water (cooling) installations.


Particular benefits of use are achieved in installations with large variations between static pressure and pre-set pressure of the safety valve.


- Replaceable bladder.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Suitable for systems with a max. system temperature of 120 °C.
- Maximum temperature bladder: 70 °C.
- In accordance with Pressure Equipment Directive 2014/68/EU.
- Red (RAL 3002) epoxy powder coating.

Flexcon M

- Maximum working pressure: 6.0 or 10.0 bar (other working pressures available on request).
- Standard pre-charge: 3.0, 4.0 or 6.0 bar.
- Vessels 100 - 1000 litres: in accordance with EN13831 / 1200 - 8000 litres: in accordance with AD2000.
- Delivered with pressure gauge and height adjustable feet (except 1200 - 2000 litres).
- Equipped with an inspection flange.
- The Flexcon M 1200 - 8000 can be fitted with a Flexvent Super.
- Bladder:
Vessels 100 - 1000 liter: EPDM.
Vessels 1200 - 8000 liter: butyl rubber.



Type	Capacity [l]	Pre-charge [bar]	Max. working pressure [bar]	Dimensions				Syst. conn. (E)	Weight [kg]		Order Code
				A [mm]	B [mm]	C [mm]	Ø D [mm]				
Flexcon M 100 - 3.0 bar	100	3.0	6.0	484	958	928	360	G 1 1/4" M	23	1	22000
Flexcon M 100 - 6.0 bar	100	6.0	10.0	484	958	928	360	G 1 1/4" M	33	1	22010
Flexcon M 200 - 3.0 bar	200	3.0	6.0	484	1500	1470	360	G 1 1/4" M	30	1	22001
Flexcon M 200 - 6.0 bar	200	6.0	10.0	600	1132	1106	360	G 1 1/4" M	46	1	22011
Flexcon M 300 - 3.0 bar	300	3.0	6.0	600	1505	1475	450	G 1 1/4" M	41	1	22002
Flexcon M 300 - 6.0 bar	300	6.0	10.0	600	1505	1475	450	G 1 1/4" M	60	1	22012
Flexcon M 400 - 3.0 bar	400	3.0	6.0	790	1348	1318	610	G 1 1/4" M	55	1	22003
Flexcon M 400 - 6.0 bar	400	6.0	10.0	790	1348	1318	610	G 1 1/4" M	84	1	22013
Flexcon M 500 - 3.0 bar	500	3.0	6.0	790	1498	1468	610	G 1 1/4" M	61	1	22004
Flexcon M 600 - 3.0 bar	600	3.0	6.0	790	1708	1678	610	G 1 1/4" M	68	1	22005
Flexcon M 600 - 6.0 bar	600	6.0	10.0	790	1708	1678	610	G 1 1/4" M	106	1	22014
Flexcon M 800 - 3.0 bar	800	3.0	6.0	790	2055	2025	610	G 1 1/4" M	93	1	22006
Flexcon M 800 - 6.0 bar	800	6.0	10.0	790	2055	2025	610	G 1 1/4" M	145	1	22015
Flexcon M 1000 - 3.0 bar	1000	3.0	6.0	790	2404	2374	610	G 1 1/4" M	105	1	22007
Flexcon M 1000 - 6.0 bar	1000	6.0	10.0	790	2404	2374	610	G 1 1/4" M	167	1	22016
Flexcon M 1200 - 4.0 bar	1200	4.0	6.0	1000	-	1940	850	Rp 1 1/2" *	285	1	22108

Type	Capacity [l]	Pre-charge [bar]	Max. working pressure [bar]	Dimensions				Syst. conn. (E)	Weight [kg]		Order Code
				A [mm]	B [mm]	C [mm]	Ø D [mm]				
Flexcon M 1200 - 6.0 bar	1200	6.0	10.0	1000	-	1940	850	Rp 1 1/2" *	410	1	22148
Flexcon M 1600 - 4.0 bar	1600	4.0	6.0	1000	-	2440	850	Rp 1 1/2" *	340	1	22109
Flexcon M 1600 - 6.0 bar	1600	6.0	10.0	1000	-	2440	850	Rp 1 1/2" *	485	1	22149
Flexcon M 2000 - 4.0 bar	2000	4.0	6.0	1200	-	2180	1050	Rp 2" *	425	1	22110
Flexcon M 2000 - 6.0 bar	2000	6.0	10.0	1200	-	2180	1050	Rp 2" *	600	1	22150
Flexcon M 2800 - 4.0 bar	2800	4.0	6.0	1200	-	2780	1050	Rp 2 1/2" *	510	1	22118
Flexcon M 2800 - 6.0 bar	2800	6.0	10.0	1200	-	2780	1050	Rp 2 1/2" *	725	1	22158
Flexcon M 3500 - 4.0 bar	3500	4.0	6.0	1200	-	3580	1050	Rp 2 1/2" *	620	1	22111
Flexcon M 3500 - 6.0 bar	3500	6.0	10.0	1200	-	3580	1050	Rp 2 1/2" *	900	1	22151
Flexcon M 5200 - 6.0 bar	5200	6.0	10.0	1500	-	3600	1142	Rp 2 1/2" *	1330	1	22152
Flexcon M 6700 - 6.0 bar	6700	6.0	10.0	1500	-	4480	1142	DN 100 **	1690	1	22153
Flexcon M 8000 - 6.0 bar	8000	6.0	10.0	1500	-	5090	1142	DN 100 **	2140	1	22154

* Adapter with flange connection PN 16 available (see Flexcon M-K).


** Flanges as per EN 1092-1 PN 16.



Flexcon M - 16 bar

- Maximum working pressure: 16.0 bar.
- Vessels in accordance with AD2000.
- Delivered with pressure gauge and is equipped with an inspection flange.
- Flexcon M 2800 litres delivered with height adjustable feet.
- The Flexcon M can be fitted with a Flexvent Super.



Type	Capacity [l]	Dimensions		Syst. conn.	Weight [kg]		Order Code
		Ø [mm]	H. [mm]				
Flexcon M 80	80	450	770	R 1"	40	1	22201
Flexcon M 120	120	450	1280	R 1 1/2"	65	1	22202
Flexcon M 400	400	750	1335	Rp 1 1/4"	220	1	22205
Flexcon M 600	600	750	1755	Rp 1 1/4"	270	1	22206
Flexcon M 800	800	750	2155	Rp 1 1/4"	310	1	22207
Flexcon M 1000	1000	750	2710	Rp 1 1/2"	370	1	22208
Flexcon M 1200	1200	1000	1940	Rp 1 1/2"	519	1	22209
Flexcon M 1600	1600	1000	2440	Rp 1 1/2"	653	1	22210
Flexcon M 2000	2000	1200	2180	Rp 2"	784	1	22211
Flexcon M 2800	2800	1200	2780	Rp 2 1/2"	964	1	22212



FLEXCON-CE FLAT


For sealed heating and chilled water (cooling) installations according to EN12828.

When the temperature in the installation rises, the system water will expand. The 'expansion water' is stored temporarily in the expansion vessel to keep the pressure in the installation at the correct level. Each vessel is factory tested.

- Nitrogen gas filling for longer retention of pre-pressure.
- Diaphragm: Flexible rubber with rolling action.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Maximum temperature diaphragm: 70 °C.
- Maximum temperature vessel according to EN13831: 110 °C.

Flexcon-CE Flat



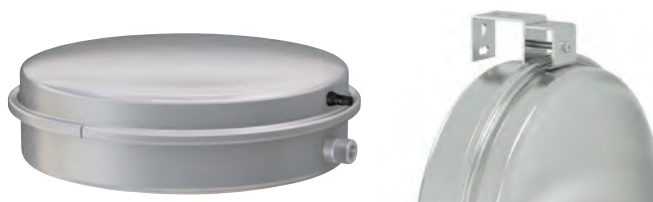
Type	Capacity [l]	Initial pressure [bar]	Dimensions			Syst. conn.		Order Code
			Length [mm]	Width / Ø [mm]	Height [mm]			
Flexcon 12 - 0.8 bar	12	0.8	493	210	169	G 3/8" M	45	13020


CUBEX R

Flat expansion vessels for use in sealed heating installations (acc. to EN12828) and chilled water (cooling) installations.

Cubex R 12 - 18

- Maximum working pressure: 3.0 bar.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Vessels in accordance with EN13831.
- Suitable for systems with a maximum system temperature of 120 °C.
- Maximum temperature diaphragm: 70 °C.
- In accordance with Pressure Equipment Directive 2014/68/EU.



Type	Capacity [l]	Pre-charge [bar]	Dimensions		Syst. conn.	Weight [kg]		Order Code
			Ø [mm]	H. [mm]				
Cubex R 12 - 0.5 bar	12	0.5	387	133	G 3/4" M	5.1	48	13212
Cubex R 14 - 0.5 bar	14	0.5	387	153	G 3/4" M	5.3	48	13214
Cubex R 18 - 0.5 bar	18	0.5	387	183	G 3/4" M	6.4	48	13218




INSTALLATION PACKAGES

Cubexpak Type A - 3.0 bar



A most convenient package ensuring all the correct fittings are supplied with a Cubex expansion vessel. This results in a compact and neat assembly for a domestic sealed system. Cubexpaks are sized in the same way as standard expansion vessels.

- Fixed diaphragm.
- Maximum working pressure: 3.0 bar.
- Maximum temperature diaphragm: 70 °C.
- Cubexpak A includes:
 - Cubex expansion vessel.
 - Vessel manifold.
 - Prescomano combined safety valve and pressure gauge.
 - Double check valve with test point.
 - Flexible braided hose with quick fit connections and 'O' ring seal.
 - Stop valve for connection to water mains.
 - Isolation valve.
 - MB2 vessel mounting bracket with wall plugs and screws.
 - End caps for fitting on the exposed ends of the flexible hose when it is removed.
- Larger Cubexpaks available on request, not including MB2 mounting bracket e.g. 35, 50 and 80 litre.
- Gas charge must be stated on order, e.g. Cubex 8/05 = 8 litre vessel with 0.5 bar(g) gas charge.
- Gas charge will determine the maximum working pressure. Other gas charges supplied to suit.

Type	Out-put [l]	Pre-charge [bar]	Dimensions		Syst. conn. (M)	Weight [kg]		Order Code
			Ø [mm]	H. [mm]				
Cubexpak A 8	8	0.5	245	412	15	3.4	1	16497
Cubexpak A 12	12	0.5	286	444	15	3.8	1	16499
Cubexpak A 18	18	0.5	328	436	15	4.9	1	16501
Cubexpak A 25	25	0.5	358	485	15	5.7	1	16503

Vesselpak Type A - 6.0 bar



A convenient package ensuring all the correct fittings are supplied with a Flexcon expansion vessel. This results in a compact and neat assembly for a domestic sealed system. Vesselpaks are sized in the same way as standard expansion vessels.

- Fixed diaphragm.
- Maximum working pressure: 6.0 bar.
- Maximum temperature diaphragm: 70 °C.
- Vesselpak A includes:
 - Flexcon expansion vessel.
 - Vessel manifold.
 - Prescomano combined safety valve and pressure gauge.
 - Double check valve with test point.
 - Flexible braided hose with quick fit connections and 'O' ring seal.
 - Stop valve for connection to water mains.
 - Isolation valve.
 - MB2 vessel mounting bracket with wall plugs and screws.
 - End caps for fitting on the exposed ends of the flexible hose when it is removed.
- Larger Vesselpaks available on request, not including MB2 mounting bracket e.g. 35 and 50 litre.
- Gas charge must be stated on order, e.g. Flexcon 2/05 = 2 litre vessel with 0.5 bar gas charge. Gas charge will determine the maximum working pressure. Other gas charges supplied to suit.

Type	Out-put [l]	Pre-charge [bar]	Dimensions		Syst. conn. (M)	Weight [kg]		Order Code
			Ø [mm]	Height [mm]				
Vesselpak A 8	8	0.5	245	388	15	4.4	1	16688
Vesselpak A 12	12	0.5	286	421	15	4.4	1	16690
Vesselpak A 18	18	0.5	328	414	15	6.9	1	16692
Vesselpak A 25	25	0.5	358	467	15	8.5	1	16694

Vesselpak Type B - 6.0 bar



Similar to the Vesselpak Type A, but with the safety valve separately to allow for remote installation.

Type	Out-put [l]	Pre-charge [bar]	Dimensions		Syst. conn. (M)	Weight [kg]		Order Code
			Ø [mm]	Height [mm]				
Vesselpak B 8	8	0.5	245	340	15	4.4	1	16689
Vesselpak B 12	12	0.5	286	373	15	5.5	1	16691
Vesselpak B 18	18	0.5	328	366	15	6.9	1	16693

Vesselpak Component Sets




Type	System connection		Order Code
Vesselpak A component set	15	1	16697
Vesselpak B component set	15	1	27982

Combi Repair Kit - 6.0 bar



An installation kit for the instant fitting of an expansion vessel to a central heating system. Consists of Flexcon expansion vessel, mounting bracket with fixings, vessel adaptor for hose, flexible hose and T-Plus coupling.

- Maximum working pressure: 6.0 bar.

Type	Out-put [l]	Gas Charge [bar]	Sys-tem Con-nection	Dimensions Ø [mm]	Height [mm]	Dry weight [kg]		Order Code
Combi Repair Kit 8	8	0.5	15	245	280	4.9	1	16513
Combi Repair Kit 8	8	0.5	22	245	280	4.9	1	16514

FLEXCON INTERMEDIATE VESSELS

Vessels to protect Flexcon expansion vessels on elevated temperature systems.

The vessels are fitted in between the expansion vessel and the system return.


System water flows from the installation into the top of the vessel. From the bottom of the vessel, significantly cooler water is fed into the expansion vessel.

- Suitable for addition of glycol-based anti-freeze up to 50%.
- Red (RAL 3002) epoxy powder coating.

Flexcon VSV - 6.0 bar



- Maximum working pressure: 6.0 bar.
- Maximum working temperature: 110 °C.
- This vessel is manufactured in accordance with sound engineering practice and satisfies the essential design requirements of the member state.

Type	Capa-city [l]	Dimensions Ø [mm]	H. [mm]	Connection to Vessel	System	Weight [kg]		Order Code
Flexcon VSV 100	100	484	794	Rp 1 1/2"	Rp 1 1/2"	26.5	1	23386
Flexcon VSV 200	200	484	1304	Rp 1 1/2"	Rp 1 1/2"	28.8	1	23380
Flexcon VSV 350	350	484	2124	Rp 1 1/2"	Rp 1 1/2"	55.0	1	23381
Flexcon VSV 500	500	600	2025	Rp 2"	Rp 2"	64.0	1	23382
Flexcon VSV 750	750	790	1904	Rp 2"	Rp 2"	96.0	1	23383
Flexcon VSV 1000	1000	790	2255	Rp 2"	Rp 2"	114.0	1	23384

Flexcon VSV - 10.0 bar



- Maximum working pressure: 10.0 bar.
- Maximum working temperature: 110 °C.
- This vessel is manufactured in accordance with sound engineering practice and satisfies the essential design requirements of the member state.

Type	Capacity [l]	Dimensions		Connection to		Weight [kg]		Order Code
		Ø [mm]	H. [mm]	Vessel	System			
Flexcon VSV 100	100	484	794	Rp 1 1/2"	Rp 1 1/2"	31	1	23306
Flexcon VSV 200	200	484	1304	Rp 1 1/2"	Rp 1 1/2"	51	1	23300
Flexcon VSV 350	350	484	2124	Rp 1 1/2"	Rp 1 1/2"	80	1	23301
Flexcon VSV 500	500	600	2025	Rp 2"	Rp 2"	96	1	23302
Flexcon VSV 750	750	790	1904	Rp 2"	Rp 2"	142	1	23303
Flexcon VSV 1000	1000	790	2255	Rp 2"	Rp 2"	172	1	23304

Flexcon V-B - 10.0 bar



- Maximum working pressure: 10.0 bar.
- Maximum working temperature (design): 160 °C.
- In accordance with Pressure Equipment Directive 2014/68/EU.

Type	Capacity [l]	Dimensions		Connection		Weight [kg]		Order Code
		Ø [mm]	H. [mm]	Vessel	System			
V-B 50	50	450	640	G 1 1/4" F	R 1 1/4"	62	1	22730
V-B 180	180	550	1235	G 1 1/4" F	R 1 1/4"	133	1	22731
V-B 300	300	550	1735	G 1 1/4" F	R 1 1/4"	182	1	22729
V-B 400	400	750	1470	G 1 1/4" F	R 1 1/4"	255	1	22732
V-B 600	600	750	1860	G 1 1/4" F	R 1 1/4"	293	1	22733
V-B 800	800	750	2250	G 1 1/4" F	R 1 1/4"	344	1	22734
V-B 1000	1000	750	2750	G 1 1/2" F	R 1 1/2"	409	1	22735
V-B 1200	1200	1000	2200	G 1 1/2" F	R 1 1/2"	520	1	22736
V-B 1600	1600	1000	2700	G 1 1/2" F	R 1 1/2"	605	1	22737
V-B 2000	2000	1200	2435	G 2" F	R 2"	675	1	22738

AIRFIX A/D

For use in potable water or fresh water installations.

The Airfix A and D expansion vessels operate in such a way that the water flows right through and they are continuously flushed with fresh water from the mains. This prevents tepid, stagnant water from collecting in the vessel in which bacterial growth could occur. Therefore, users can be assured of high quality potable water.

Applying an Airfix A / D expansion vessel to a water heater prevents the opening of the safety group or safety valve each time the potable water is heated. As a result, not only the life of the safety group or safety valve is significantly prolonged (damage or calcification of seat is avoided) but also the risk of permanent leakage (with high water loss as a consequence). An Airfix vessel is also a perfect solution in basement applications where the drain is higher than the safety valve.

Benefits of using Airfix expansion vessels

- No waste of valuable potable water.
- With special flow through construction.
- Continuous flow through prevents bacterial growth.
- Special butyl rubber diaphragm does not add any colour, odour or taste to the water.
- Corrosion-resistant coating inside, not only on the water side but also on the nitrogen side.
- Internationally approved and certified.
- The clench ring construction allows coating before assembly.
- Nitrogen gas filling for longer retention of pre-charge.
- Colour: White RAL9010.
- Maximum working pressure: 8/10 bar.
- Suitable for systems with a maximum system temperature of 120 °C.
- Minimum / Maximum temperature diaphragm: 1 / 70 °C.
- Vessels in accordance with EN13831.
- Approvals: **DVGW-W270**
WRAS
ACS
PZH
KIWA approved execution available on request.
Approved for potable water applications according to CE 2002/16/EC.
- In accordance with Pressure Equipment Directive 2014/68/EU.
- Airfix A/D 35 - 80: With suspension eye. Connection to the underside of the vessel.

Airfix Selection Table

Selection table for pressure expansion vessels for boiler applications.

- Cold water temperature: 10 °C.
- Hot water temperature: 60 °C.


Boiler Capacity [l]	Initial pressure [bar]	Set pressure safety valve			
		6 bar	7 bar	8 bar	10 bar
100	3	Airfix 8/3	Airfix 8/3	Airfix 8/3	Airfix 8/3
100	4	Airfix 12/4	Airfix 8/4	Airfix 8/4	Airfix 8/4
120	3	Airfix 8/3	Airfix 8/3	Airfix 8/3	Airfix 8/3
120	4	Airfix 18/4	Airfix 12/4	Airfix 8/4	Airfix 8/4
150	3	Airfix 12/3	Airfix 8/3	Airfix 8/3	Airfix 8/3
150	4	Airfix 18/4	Airfix 12/4	Airfix 12/4	Airfix 8/4
200	3	Airfix 18/3	Airfix 12/3	Airfix 12/3	Airfix 8/3
200	4	Airfix 25/4	Airfix 18/4	Airfix 12/4	Airfix 12/4
250	3	Airfix 18/3	Airfix 18/3	Airfix 12/3	Airfix 12/3
250	4	Airfix 35/4	Airfix 25/4	Airfix 18/4	Airfix 12/4
300	3	Airfix 25/3	Airfix 18/3	Airfix 18/3	Airfix 12/3
300	4	Airfix 35/4	Airfix 25/4	Airfix 18/4	Airfix 18/4
400	3	Airfix 35/3	Airfix 25/3	Airfix 18/3	Airfix 18/3
400	4	Airfix 80/4	Airfix 35/4	Airfix 25/4	Airfix 18/4
500	3	Airfix 35/3	Airfix 25/3	Airfix 25/3	Airfix 18/3
500	4	Airfix 50/4 (2x)	Airfix 50/4	Airfix 35/4	Airfix 25/4

Airfix D 8 - 35

The Airfix D is fitted with a synthetic flow through construction and a special T-piece which eliminates the formation of unwanted bacteria.

- Including special brass flow dividing T-piece ($\frac{3}{4}$ "") and internal synthetic flow through construction.
- Quality Vignette DIN-DVGW: NW-9481 AU2096.
- Complete connector set including shut-off and drain (AirfixControl).



Type	Precharge [bar]	Max. working pressure [bar]	Dimensions		Connection	Weight [kg]		Order Code
			Ø [mm]	H. [mm]				
Airfix D 8 - 4.0 bar	4	10	245	277	R $\frac{3}{4}$ "	3.2	50	14259
Airfix D 12 - 4.0 bar	4	10	286	309	R $\frac{3}{4}$ "	4.3	36	14349
Airfix D 18 - 4.0 bar	4	10	328	323	R $\frac{3}{4}$ "	4.9	24	14459
Airfix D 25 - 4.0 bar	4	10	358	356	R $\frac{3}{4}$ "	6.6	18	14559
Airfix D 35 - 4.0 bar	4	8	396	416	R $\frac{3}{4}$ "	8.1	18	14659




Airfix A 8 - 80

The Airfix A is fitted with a synthetic flow through device in a standard T-piece (not included) which eliminates the formation of unwanted bacteria.

- Including synthetic flow divider.
- Quality Vignette DIN-DVGW: 04-0359-W M 003/04.
- Complete connector set including shut-off and drain (AirfixControl).



Type	Pre-charge [bar]	Max. working pressure [bar]	Dimensions		Connection	Weight [kg]		Order Code
			Ø [mm]	H. [mm]				
Airfix A 8 - 4.0 bar	4	10	245	277	R 3/4"	3.2	50	24259
Airfix A 12 - 3.0 bar	3	10	286	309	R 3/4"	4.3	36	24348
Airfix A 12 - 0.5 bar	0.5	10	286	309	R 3/4"	4.3	36	24347
Airfix A 12 - 4.0 bar	4	10	286	309	R 3/4"	4.3	36	24349
Airfix A 18 - 3.0 bar	3	10	328	323	R 3/4"	4.9	24	24458
Airfix A 18 - 4.0 bar	4	10	328	323	R 3/4"	4.9	24	24459
Airfix A 25 - 3.0 bar	3	10	358	356	R 3/4"	6.6	18	24558
Airfix A 25 - 4.0 bar	4	10	358	356	R 3/4"	6.6	18	24559
Airfix A 35 - 4.0 bar	4	8	396	416	R 3/4"	8.1	18	24659
Airfix A 50 - 4.0 bar	4	8	437	472	R 3/4"	11.2	12	24749
Airfix A 80 - 4.0 bar	4	8	519	526	R 3/4"	15.0	12	24809



AIRFIX 2 - 4

Small vessels for use in oxygen rich water installations (the vessels are not flow through and therefore not suitable for potable water).

- Nitrogen gas filling for longer retention of pre-charge.
- Minimum / maximum working temperature (diaphragm): 1 / 70 °C.
- Colour: White, RAL 9010.
- In accordance with Pressure Equipment Directive 2014/68/EU.

Airfix 2 - 4



- Maximum working pressure: 6.0 bar.

Type	Pre-charge [bar]	Dimensions		Connection	Weight [kg]		Order Code
		Ø [mm]	H. [mm]				
Airfix 2 - 4.0 bar	4	216	144	G 3/4" M	1.7	120	24001
Airfix 2 - specify	*	216	144	G 3/4" M	1.7	120	24002
Airfix 4 - 4.0 bar	4	216	194	G 3/4" M	2.1	90	24101
Airfix 4 - specify	*	216	194	G 3/4" M	2.1	90	24102

* Gas charge must be stated on order.

AIRFIX P

Potable water expansion vessels for use in domestic and commercial sealed chilled and hot water systems.

- Nitrogen gas filling for longer retention of pre-charge.
- Designed to incorporate a unique contoured, replaceable bladder.
- With single threaded steel connection and plastic insert (no flow through function).
- Suitable for addition of glycol-based anti-freeze up to 50%.
- In accordance with Pressure Equipment Directive 2014/68/EU.

Sizing chart for potable water expansion vessels


Cold Feed Pressure 3 bar. Sized using 3 bar mains supply, 6 bar expansion relief valve setting and a maximum temperature of 60° C

Potable vessel size [l]	System volume [l]
2	
3	
5	
8	
12	200
16	270
18	300
24	400
32	590
50	840
60	1.000
80	1.350
100	1.680
150	2.530
200	3.370
300	5.050
500	8.430
750	12.650
1.000	16.850

Airfix P 2 - 300

- Maximum working pressure: 10.0 bar.
- Min./ max. working temperature (bladder): -10 / 100 °C.
- Colour: Coated aluminium (RAL 9006).
- Airfix P 50 - 300: With feet.



Type	Capacity [l]	Pre-charge [bar]	Dimensions		Conne- ction	Bladder	Weight [kg]		Order Code
			Ø [mm]	H. [mm]					
Airfix P - UK 2 - 2.7 bar	2	2.7	120	235	G 1/2" M	Butyl	4.6*	336	24900
Airfix P 2 - 3.5 bar	2	3.5	120	235	G 1/2" M	Butyl	4.6*	336	24850
Airfix P - UK 3 - 2.7 bar	3	2.7	170	240	G 3/4" M	Butyl	1.5	168	24901
Airfix P 3 - 3.5 bar	3	3.5	170	240	G 3/4" M	Butyl	1.5	168	24851
Airfix P - UK 5 - 2.7 bar	5	2.7	170	275	G 3/4" M	Butyl	1.7	144	24902
Airfix P 5 - 3.5 bar	5	3.5	170	275	G 3/4" M	Butyl	1.7	144	24852
Airfix P - UK 8 - 2.7 bar	8	2.7	220	305	G 3/4" M	Butyl	2.2	90	24903
Airfix P 8 - 3.5 bar	8	3.5	220	305	G 3/4" M	Butyl	2.2	90	24853
Airfix P - UK 12 - 2.7 bar	12	2.7	260	310	G 3/4" M	Butyl	2.9	72	24904
Airfix P 12 - 3.5 bar	12	3.5	260	310	G 3/4" M	Butyl	2.9	72	24854
Airfix P - UK 16 - 2.7 bar	16	2.7	260	345	G 3/4" M	EPDM	3.4	60	24905
Airfix P 16 - 3.5 bar	16	3.5	260	345	G 3/4" M	EPDM	3.4	60	24855
Airfix P - UK 18 - 2.7 bar	18	2.7	260	375	G 3/4" M	EPDM	3.5	60	24906
Airfix P 18 - 3.5 bar	18	3.5	260	375	G 3/4" M	EPDM	3.5	60	24856
Airfix P - UK 24 - 2.7 bar	24	2.7	260	485	G 3/4" M	EPDM	4.3	56	24907
Airfix P 24 - 3.5 bar	24	3.5	260	485	G 3/4" M	EPDM	4.3	56	24857
Airfix P - UK 35 - 2.7 bar	35	2.7	380	470	G 1" M	EPDM	8.0	24	24910
Airfix P 35 - 3.5 bar	35	3.5	380	470	G 1" M	EPDM	8.0	24	24858
Airfix P - UK 50 - 2.7 bar	50	2.7	380	720	G 1" M	EPDM	9.9	15	24911
Airfix P 50 - 3.5 bar	50	3.5	380	720	G 1" M	EPDM	9.9	15	24859
Airfix P - UK 60 - 2.7 bar	60	2.7	380	830	G 1" M	EPDM	12.1	15	24913
Airfix P 60 - 3.5 bar	60	3.5	380	830	G 1" M	EPDM	12.1	15	24860
Airfix P - UK 80 - 2.7 bar	80	2.7	460	760	G 1" M	EPDM	14.0	10	24915
Airfix P 80 - 3.5 bar	80	3.5	460	760	G 1" M	EPDM	14.0	10	24861
Airfix P - UK 100 - 2.7 bar	100	2.7	460	880	G 1" M	EPDM	16.0	10	24917
Airfix P 100 - 3.5 bar	100	3.5	460	880	G 1" M	EPDM	16.0	10	24862
Airfix P - UK 150 - 2.7 bar	150	2.7	510	1030	G 1" M	EPDM	25.5	8	24920
Airfix P 150 - 3.5 bar	150	3.5	510	1030	G 1" M	EPDM	25.5	8	24863
Airfix P - UK 200 - 2.7 bar	200	2.7	590	1070	G 1 1/4" M	EPDM	37.5	8	24922
Airfix P 200 - 3.5 bar	200	3.5	590	1070	G 1 1/4" M	EPDM	37.5	8	24864
Airfix P - UK 300 - 2.7 bar	300	2.7	650	1250	G 1 1/4" M	EPDM	50.5	3	24924
Airfix P 300 - 3.5 bar	300	3.5	650	1250	G 1 1/4" M	EPDM	50.5	3	24865


* Per set of four in one box.



Airfix P 500 - 1000

- Min./ max. working temperature (bladder): -10 / 100 °C.
- Colour: Coated aluminium (RAL 9006).
- With feet.




Type	Capacity [l]	Pre-charge [bar]	Max. working pressure [bar]	Dimensions		Connec- tion	Bladder	Weight [kg]		Order Code
				Ø [mm]	H. [mm]					
Airfix P - UK 500 - 2.7 bar	500	2.7	10	750	1600	G 1 1/4" M	EPDM	86	1	24926
Airfix P - UK 750 - 2.7 bar	750	2.7	8	800	1820	R 2"	EPDM	153	1	24928
Airfix P - UK 1000 - 2.7 bar	1000	2.7	10	800	2130	R 2 1/2"	EPDM	183	1	24929

**Airfix P 400 - 5000**

- Maximum working pressure: 10.0 bar.
- Minimum / maximum working temperature (bladder): 1 / 70 °C.
- Colour: white epoxy powder coating (RAL 9010).
- Airfix P 400 - 1000: With height adjustable feet.
- Airfix P 1500 - 5000: With manometer, feet (not adjustable).

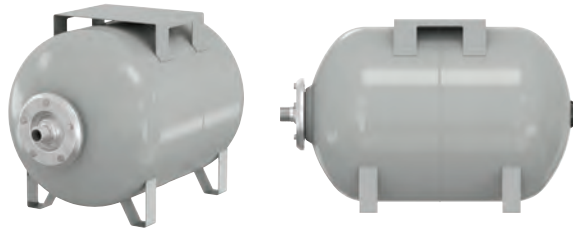



Type	Capacity [l]	Pre-charge [bar]	Dimensions		Connec- tion	Bladder	Weight [kg]		Order Code
			Ø [mm]	H [mm]					
Airfix P 400 - 3.5 bar	400	3.5	790	1287	G 1 1/4" M	EPDM	84	3	24933
Airfix P 600 - 3.5 bar	600	3.5	790	1647	G 1 1/4" M	EPDM	106	1	24934
Airfix P 800 - 3.5 bar	800	3.5	790	1994	G 1 1/4" M	EPDM	145	1	24935
Airfix P 1000 - 3.5 bar	1000	3.5	790	2345	G 1 1/4" M	EPDM	167	1	24936
Airfix P 1500 - 3.5 bar	1500	3.5	1000	2510	Rp 2 1/2"	Butyl	423	1	24869
Airfix P 2000 - 3.5 bar	2000	3.5	1100	2745	Rp 2 1/2"	Butyl	483	1	24870
Airfix P 2500 - 3.5 bar	2500	3.5	1200	3295	Rp 2 1/2"	Butyl	537	1	24871
Airfix P 3000 - 3.5 bar	3000	3.5	1200	3425	Rp 2 1/2"	Butyl	766	1	24872
Airfix P 5000 - 3.5 bar	5000	3.5	1500	3615	Rp 2 1/2"	Butyl	1620	1	24873



Airfix P Horizontal

- Maximum working pressure: 10.0 bar (Airfix P 24-H: 8.0 bar).
- Min./ max. working temperature (bladder): -10 / 100 °C.
- Colour: Coated aluminium (RAL 9006).



Type	Capacity [l]	Pre-charge [bar]	Dimensions			Connec- tion	Bladder	Weight [kg]		Order Code
			Ø [mm]	L. [mm]	H. [mm]					
Airfix P - UK 24-H - 2.7 bar	24	2.7	260	485	280	G 3/4" M	EPDM	4.7	56	24909
Airfix P 24-H - 3.5 bar	24	3.5	260	485	280	G 3/4" M	EPDM	4.7	56	24880
Airfix P - UK 50-H - 2.7 bar	50	2.7	380	595	408	G 1" M	EPDM	8.1	20	24912
Airfix P 50-H - 3.5 bar	50	3.5	380	595	408	G 1" M	EPDM	8.1	20	24890
Airfix P - UK 60-H - 2.7 bar	60	2.7	380	720	408	G 1" M	EPDM	10.4	15	24914
Airfix P 60-H - 3.5 bar	60	3.5	380	720	408	G 1" M	EPDM	10.4	15	24881
Airfix P - UK 80-H - 2.7 bar	80	2.7	460	660	485	G 1" M	EPDM	12.3	12	24916
Airfix P 80-H - 3.5 bar	80	3.5	460	660	485	G 1" M	EPDM	12.3	12	24882
Airfix P - UK 100-H - 2.7 bar	100	2.7	460	780	485	G 1" M	EPDM	14.0	12	24919
Airfix P 100-H - 3.5 bar	100	3.5	460	780	485	G 1" M	EPDM	14.0	12	24883
Airfix P - UK 150-H - 2.7 bar	150	2.7	510	950	545	G 1" M	EPDM	23.5	6	24921
Airfix P 150-H - 3.5 bar	150	3.5	510	950	545	G 1" M	EPDM	23.5	6	24884
Airfix P - UK 200-H - 2.7 bar	200	2.7	590	940	635	G 1 1/4" M	EPDM	34.2	6	24923
Airfix P 200-H - 3.5 bar	200	3.5	590	940	635	G 1 1/4" M	EPDM	34.2	6	24885
Airfix P - UK 300-H - 2.7 bar	300	2.7	650	1150	700	G 1 1/4" M	EPDM	44.0	6	24925
Airfix P 300-H - 3.5 bar	300	3.5	650	1150	700	G 1 1/4" M	EPDM	44.0	6	24886
Airfix P - UK 500-H - 2.7 bar	500	2.7	750	1420	820	G 1 1/4" M	EPDM	58.0	6	24927



AIRFIX D-E

High quality pressure expansion vessels for use in all (potable) water installations.

Its special flow through construction eliminates the formation of unwanted bacteria. The composition of the bladders has been made for this range in such a way that there will be no variation in smell, colour or taste. The inside of the Airfix connection flange has a special coating which prevents oxidation.

- Coated, two-way system connection for complete vessel flow through.
- Low pressure drop.
- Nitrogen gas filling for longer retention of pre-charge.
- Replaceable butyl rubber bladder according to DIN4807/5.
- Easy to install with long service life.
- Pressure gauge with blow back protection.
- Quality Vignette DIN-DVGW: NW-0411 BQ 0340.
- Colour: White, RAL 9010.
- Standard pre-charge: 6 bar.
- Suitable for systems with a maximum system temperature of 120 °C.
- Minimum / maximum temperature bladder: 1 / 70 °C.
- In accordance with Pressure Equipment Directive 2014/68/EU.

Airfix D-E - 10.0 bar

- Maximum working pressure: 10 bar.


Airfix D-E 100 - 1000:

- In accordance with EN13831.
- Delivered with pressure gauge, sight-glass, threaded flow through connection and height adjustable feet.

Airfix D-E 1600 - 3000:

- In accordance with AD2000.
- With electronic diaphragm rupture sensor and flanged connections.
- The diaphragm rupture sensor may be configured for remote read-out.



Type	Capacity [l]	Dimensions		System connection (2x)	Flanges * (2x)	Weight [kg]		Order Code
		Ø [mm]	H. [mm]					
Airfix D-E 100	100	484	897	G 1 1/2" M	-	38	1	14750
Airfix D-E 200	200	600	1075	G 1 1/2" M	-	51	1	14751
Airfix D-E 300	300	600	1444	G 1 1/2" M	-	65	1	14752
Airfix D-E 400	400	790	1287	G 2" M	-	89	1	14753
Airfix D-E 600	600	790	1647	G 2" M	-	110	1	14754
Airfix D-E 800	800	790	1994	G 2" M	-	148	1	14755
Airfix D-E 1000	1000	790	2345	G 2" M	-	170	1	14756
Airfix D-E 1600	1600	1000	2663	-	DN 80	550	1	14916
Airfix D-E 2000	2000	1200	2412	-	DN 80	620	1	14920
Airfix D-E 3000	3000	1200	3312	-	DN 80	805	1	14930


* According to EN 1092-1 PN16.



Airfix D-E - 16.0 bar

- Maximum working pressure: 16 bar.
- In accordance with AD2000.
- With electronic diaphragm rupture sensor and flanged connections.
- The diaphragm rupture sensor may be configured for remote read-out.



Type	Capacity [l]	Dimensions		Flanges [*] (2x)	Weight [kg]		Order Code
		Ø [mm]	H. [mm]				
Airfix D-E 50	50	450	839	DN 40	70	1	14701
Airfix D-E 80	80	450	1019	DN 40	80	1	14801
Airfix D-E 120	120	450	1274	DN 40	95	1	14813
Airfix D-E 180	180	550	1238	DN 40	135	1	14819
Airfix D-E 240	240	550	1498	DN 40	160	1	14825
Airfix D-E 300	300	550	1838	DN 40	190	1	14831
Airfix D-E 600	600	750	1843	DN 50	300	1	14861
Airfix D-E 800	800	750	2233	DN 50	350	1	14881
Airfix D-E 1000	1000	750	2733	DN 50	415	1	14911
Airfix D-E 1600	1600	1000	2682	DN 80	610	1	14917
Airfix D-E 2000	2000	1200	2425	DN 80	680	1	14921
Airfix D-E 3000	3000	1200	3335	DN 80	890	1	14931

^{*} According to EN 1092-1 PN16.



AIRFIX D-E-B

Standard vessels for use in all (potable) water installations. The construction also permits use in closed HVAC installations with a maximum temperature of 70 °C.

The composition of the bladder has been made for this range in such a way that there will be no variation in smell, colour or taste. The inside of the Airfix connection flange has a special coating which prevents oxidation.


- Nitrogen gas filling for longer retention of pre-charge.
- Replaceable butyl rubber bladder according to DIN4807/5.
- With single threaded coated steel connection (no flow-through function).
- Min./ maximum working temperature (bladder): 1 / 70 °C.
- Standard pre-charge: 6.0 bar.
- Colour: White, RAL 9010.
- In accordance with Pressure Equipment Directive 2014/68/EU.
- Material quality:
S235JR.
EN/ISO: P245N.

40 bar execution available on request.

Airfix D-E-B - 10.0 bar



- Maximum working pressure: 10.0 bar.

Type	Capacity [l]	Dimensions		Connection	Weight [kg]		Order Code
		Ø [mm]	H. [mm]				
Airfix D-E-B 1600	1600	1000	2680	Rp 2 1/2"	529	1	14918
Airfix D-E-B 2000	2000	1200	2400	Rp 2 1/2"	593	1	14922
Airfix D-E-B 3000	3000	1200	3300	Rp 2 1/2"	782	1	14932

Airfix D-E-B - 16.0 bar



- Maximum working pressure: 16.0 bar.

Type	Capacity [l]	Dimensions		Connection	Weight [kg]		Order Code
		Ø [mm]	H. [mm]				
Airfix D-E-B 50	50	450	830	Rp 1 1/2"	58	1	14703
Airfix D-E-B 80	80	450	1010	Rp 1 1/2"	69	1	14803
Airfix D-E-B 120	120	450	1265	Rp 1 1/2"	83	1	14815
Airfix D-E-B 180	180	550	1255	Rp 1 1/2"	124	1	14821
Airfix D-E-B 240	240	550	1515	Rp 1 1/2"	147	1	14827
Airfix D-E-B 300	300	550	1855	Rp 1 1/2"	178	1	14833
Airfix D-E-B 600	600	750	1840	Rp 2"	282	1	14863
Airfix D-E-B 800	800	750	2230	Rp 2"	333	1	14883
Airfix D-E-B 1000	1000	750	2730	Rp 2"	398	1	14913
Airfix D-E-B 1600	1600	1000	2680	Rp 2 1/2"	587	1	14919
Airfix D-E-B 2000	2000	1200	2400	Rp 2 1/2"	657	1	14923
Airfix D-E-B 3000	3000	1200	3300	Rp 2 1/2"	864	1	14933

Airfix D-E-B - 25.0 bar



- Maximum working pressure: 25.0 bar.

Type	Capacity [l]	Dimensions		Connection	Weight [kg]		Order Code
		Ø [mm]	H. [mm]				
Airfix D-E-B 50	50	450	830	Rp 1 1/2"	59	1	14705
Airfix D-E-B 80	80	450	1010	Rp 1 1/2"	71	1	14805
Airfix D-E-B 120	120	450	1265	Rp 1 1/2"	87	1	14811
Airfix D-E-B 180	180	550	1255	Rp 1 1/2"	123	1	14817
Airfix D-E-B 240	240	550	1515	Rp 1 1/2"	149	1	14829
Airfix D-E-B 300	300	550	1855	Rp 1 1/2"	182	1	14835
Airfix D-E-B 600	600	750	1840	Rp 2"	349	1	14865
Airfix D-E-B 800	800	750	2230	Rp 2"	417	1	14885
Airfix D-E-B 1000	1000	750	2730	Rp 2"	500	1	14905

Mono Connections



Stainless steel (AISI 304) and powder coated steel mono connections for non-potable water systems.

Stainless steel connections suitable for:

- Airfix D-E-B 10 bar: 1600 - 3000 l.
- Airfix D-E-B 16, 25 bar: 50 - 3000 l.
- Airfix D-E 10 bar: 100 - 1000 l.: Available on request.
- Airfix D-E 10 bar: 1600 - 3000 l.
- Airfix D-E 16 bar: 50 - 3000 l.

Coated steel connections suitable for:

- Airfix D-E 10 bar: 1600 - 3000 l.
- Airfix D-E 16 bar: 50 - 3000 l.

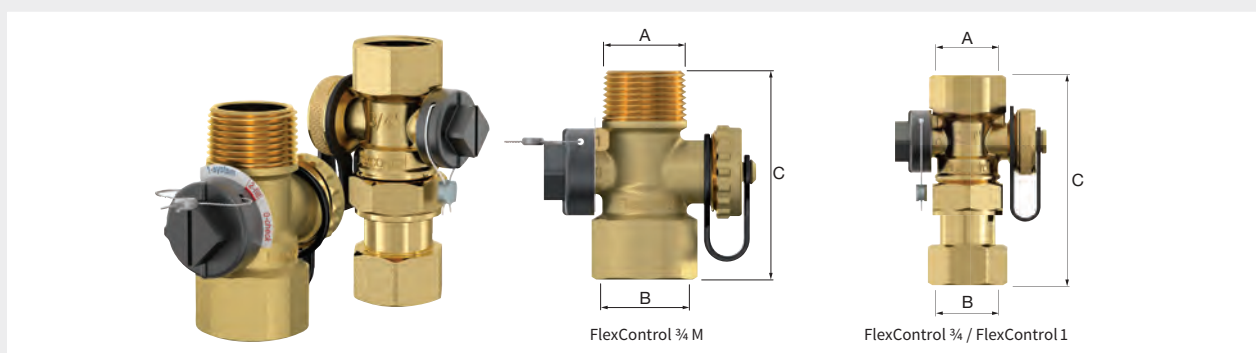
Type	Capacity [l]	Connection		Order Code
Mono small - Stainless steel	50 - 300	G 1 1/2"	1	14960
Mono medium - Stainless steel	600 - 1000	G 2"	1	14961
Mono large - Stainless steel	1600 - 3000	G 2 1/2"	1	14962
Mono small - Coated steel	50 - 300	G 1 1/2"	1	14955
Mono medium - Coated steel	600 - 1000	G 2"	1	14956
Mono large - Coated steel	1600 - 3000	G 2 1/2"	1	14957


CONNECTION SETS AND ISOLATING UNIONS

FlexControl

This isolating union connects the expansion vessel to the central heating system and enables verification of the vessel's gas charge or, alternatively, allows you to replace it without draining the entire system.

- Saves a considerable amount of time when servicing a Flexcon vessel.
- Enables you to check the pre-charge pressure without having to disconnect the vessel.
- Enables you to change the vessel or check the pre-charge pressure without having to release the system pressure or drain the system.
- With integrated ball valve and hose connection.
- Flexcontrol $\frac{3}{4}$ " F / 1" F: With swivel nut connection for easy mounting of the expansion vessel.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Maximum working pressure: 10 bar.
- Maximum working temperature (design): 130 °C.

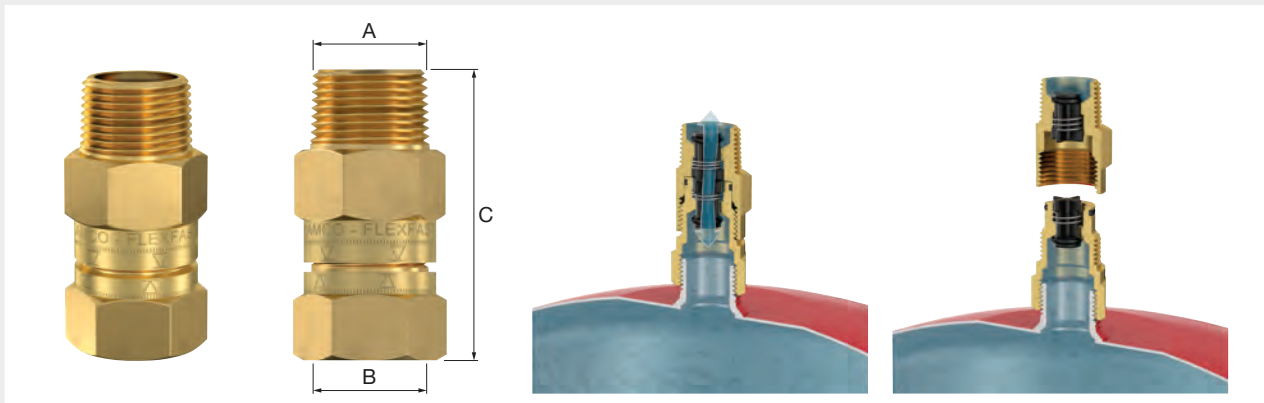



Type	Connection		Dimension C [mm]	Weight [kg]		Order Code
	A	B				
FlexControl $\frac{3}{4}$ M	R $\frac{3}{4}$ "	Rp $\frac{3}{4}$ "	60	0.24	1	28925
FlexControl $\frac{3}{4}$	Rp $\frac{3}{4}$ "	G $\frac{3}{4}$ " F	92	0.31	1	28920
FlexControl 1	Rp 1"	G 1" F	100	0.36	1	22390

Flexfast 3/4

This isolating union makes it possible to check quickly and easily if a Flexcon expansion vessel is still working correctly (gas charge) or if it needs to be replaced.

- Easy to assemble with the right tools; then just screw in the components by hand.
- Enable you to change the vessel without having to release pressure or drain the system.
- Saves a considerable amount of time when servicing a Flexcon vessel.
- Material: Brass.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Minimum/Maximum working temperature: -10 °C / 90 °C (continuous).
- Working pressure: 0 - 10 bar.

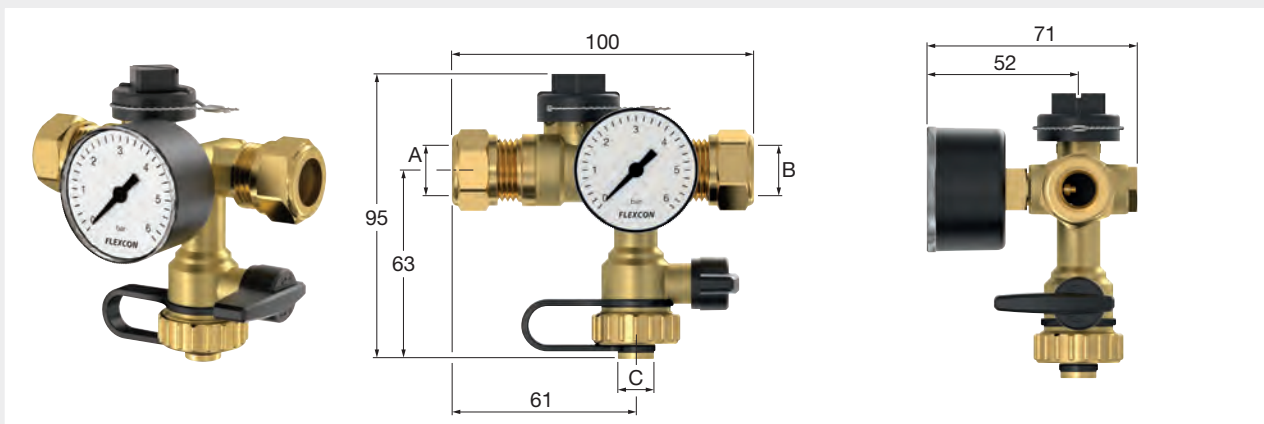



Type	Connection		Dimension C [mm]		Order Code
	A	B			
Flexfast 3/4	R 3/4"	G 3/4" F	68	1	27920

Flexcon Connection Group 1/2

The Flexcon connection group 1/2" is used for draining and/or filling the system and disconnecting an expansion vessel in heating and cooling installations.

- The set consists of a sealed ball valve including an integrated filling and drain ball valve and pressure gauge.
- Minimum/Maximum system temperature: -10 °C / 120 °C.
- System pressure: 0 - 6 bar.
- Suitable for addition of glycol-based anti-freeze up to 50%.



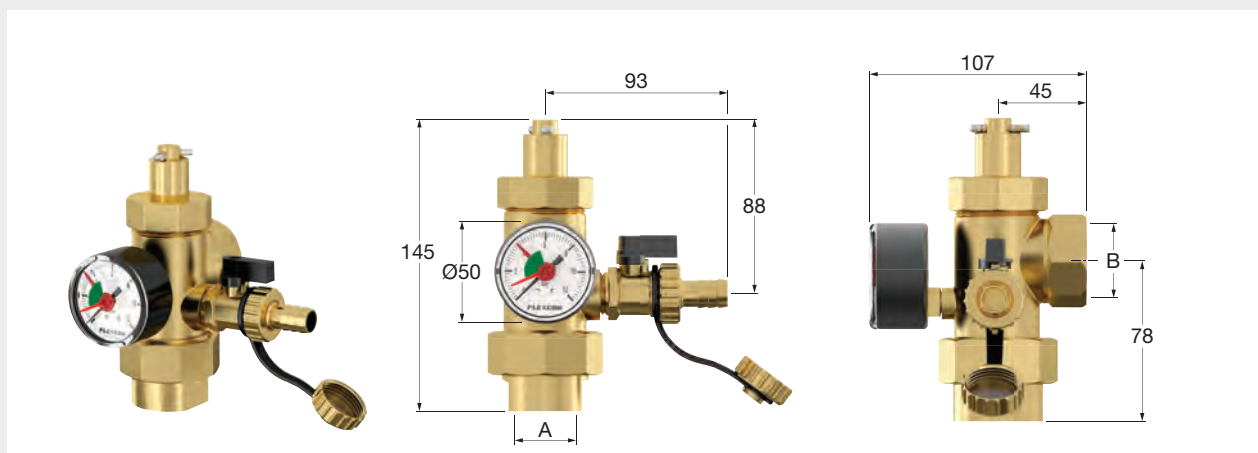
Type	Connection			With pressure gauge		Order Code
	A	B	C			
Flexcon connection group 1/2	R 1/2" / K15 *	R 1/2" / K15*	3/4"	yes	1	27290

* Compression connection.

Flexcon Connection Group 1

Block and bleed valve for 100 - 1000 litre expansion vessels.

The set consists of a shut-off valve, a fill/drain tap with hose nipple and pressure gauge (0 - 12 bar).




Type	Connection		With pressure gauge		Order Code
	A	B			
Flexcon connection group 1	1" F	1" F	yes	1	27293

Diaphragm Expansion Vessel* service coupling heating



Safety quick coupling in acc. with DIN 4751 Sheet 2 / 93 enables quick replacement of the MM*, without draining the heating water.

- Components made from brass

Type	Model	Connection			Order Code
		M	F		
MM service coupling	For heating and solar applications	3/4"	3/4"	1	M69080.3


* MM = Membrane Expansion Vessel

Diaphragm Expansion vessel* cap valve



Enables the quick repair or replacement of the MM* without draining the system. Complete with manometer for checking the system and tank pressure without disassembling the tank, with bleeding devices, including sealable cap.

- Components made from brass

Type	Model		Order Code
MM cap valve	Applicable for 3/4" and 1"	1	M69088

* MM = Membrane Expansion Vessel

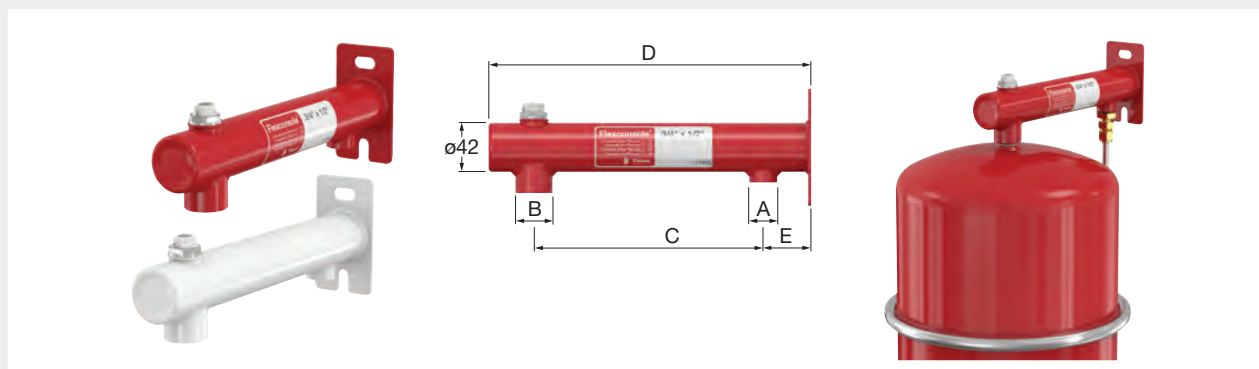
WALL MOUNTING


For mounting Flexcon expansion vessels (2 - 25 litres) to a wall.

Flexconsole $\frac{3}{4}$ "

With the Flexconsole the Flexcon vessel is set up vertically fitted to the water connection with the water nipple fitted on connection B of the console and the expansion pipe fitted to connection A.

- Equipped with a wall plate with two slots for accurate wall mounting.
- Supplied with a $\frac{1}{2}$ " radiator cap plus manual deaerator.

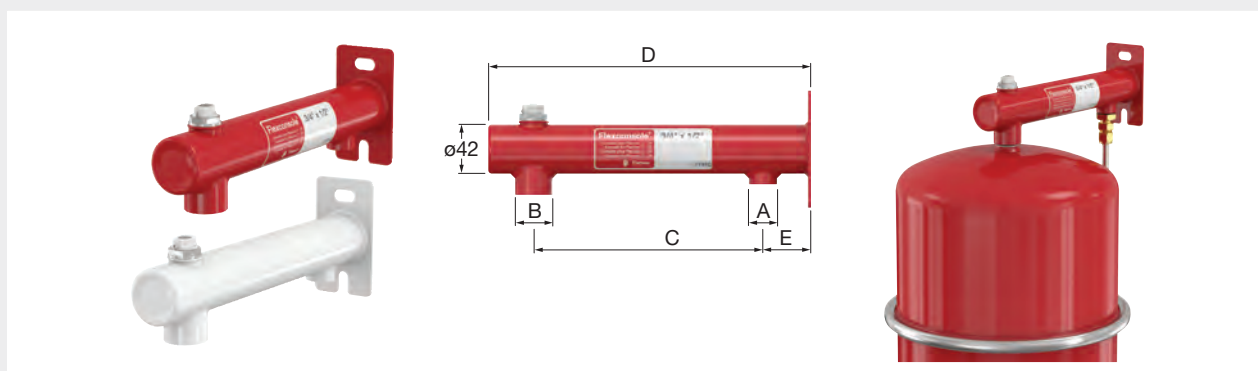



Type	Connection		Dimensions				Order Code
	A	B	C [mm]	D [mm]	E [mm]		
Flexconsole $\frac{3}{4}$ x $\frac{1}{2}$	Rp $\frac{1}{2}$ "	Rp $\frac{3}{4}$ "	195	275	41	1	27910
Flexconsole $\frac{3}{4}$ x $\frac{1}{2}$ white	Rp $\frac{1}{2}$ "	Rp $\frac{3}{4}$ "	195	275	41	1	27989
Flexconsole $\frac{3}{4}$ x $\frac{3}{4}$ D	Rp $\frac{3}{4}$ "	Rp $\frac{3}{4}$ "	195	275	41	10	27911

Flexconsole NPT

With the Flexconsole the Flexcon vessel is set up vertically fitted to the water connection with the water nipple fitted on connection B of the console and the expansion pipe fitted to connection A.

- Equipped with a wall plate with two slots for accurate wall mounting.
- Minimum/Maximum working temperature: -10 °C / 120 °C (14 °F / 248 °F).
- Minimum/Maximum working pressure: 0.2 / 10.0 bar (3 / 145 Psi).
- Suitable for addition of glycol-based anti-freeze up to 50%.
- In accordance with ANSI/ASME B1.20.1.
- Application:
97975 only suitable for hydronic systems.
97976 only suitable for potable water.



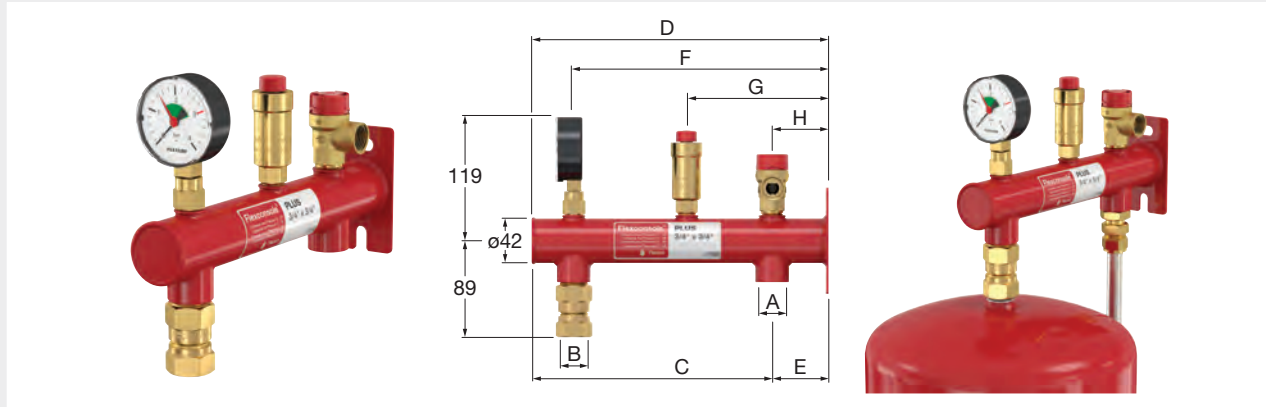
Type	Connection		Dimensions				Order Code
	A	B	C ["]	D ["]	E ["]		
Flexconsole 1/2 NPT x 1/2 NPT	1/2" NPT	1/2" NPT	7.67	10.83	1.61	1	97975
Flexconsole 3/4 NPT x 1/2 NPT - SST	1/2" NPT	3/4" NPT	7.67	10.83	1.61	1	97976


Type	Connection		Dimensions			Order Code
	A [mm]	B	C [mm]	D [mm]		
Floconsole 3/4 x 15 mm red	15	3/4"	195	275	1	27995
Floconsole 3/4 x 15 mm white	15	3/4"	195	275	1	27998

Flexconsole Plus

A complete product for hanging expansion vessels up to 25 litres attached to the water supply and to the wall. As the conventional Flexconsole but including accessories.

- Supplied with:
Flexcon pressure gauge (0 - 4 bar) with shut off valve,
Flexvent $\frac{3}{8}$ " floatvent with shut off valve,
Safety valve $\frac{1}{2}$ " (set pressure: 3 bar),
Flexfast quick-release coupling,
Fixing set.

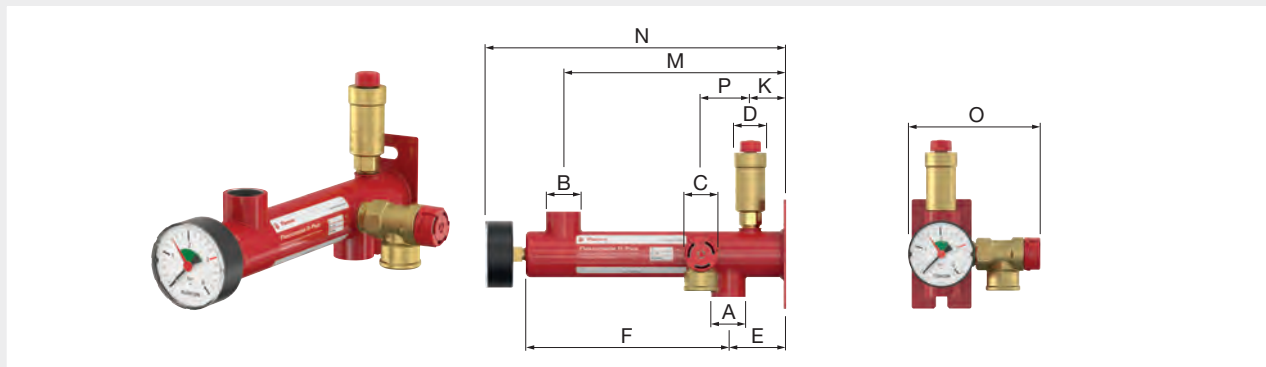



Type	Connection		Dimensions							Order Code
	A	B	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]		
Flexconsole Plus - 1.5 bar	Rp $\frac{3}{4}$ "	Rp $\frac{3}{4}$ "	255	305	50	266	130	50	1	27994
Flexconsole Plus - 2.5 bar	Rp $\frac{3}{4}$ "	Rp $\frac{3}{4}$ "	255	305	50	266	130	50	1	27993
Flexconsole Plus - 3 bar	Rp $\frac{3}{4}$ "	Rp $\frac{3}{4}$ "	234	275	41	236	130	50	1	27996
Flexconsole Plus - without Flexfast - 3 bar	Rp $\frac{3}{4}$ "	Rp $\frac{3}{4}$ "	225	275	41	236	130	50	1	27988

Flexconsole R Plus

As the conventional Flexconsole R, but also with:

- Baseflex pressure gauge (0 - 4 bar).
- Flexvent float vent $\frac{3}{8}$ " with shut off valve.
- Safety valve set to 3.0 bar.



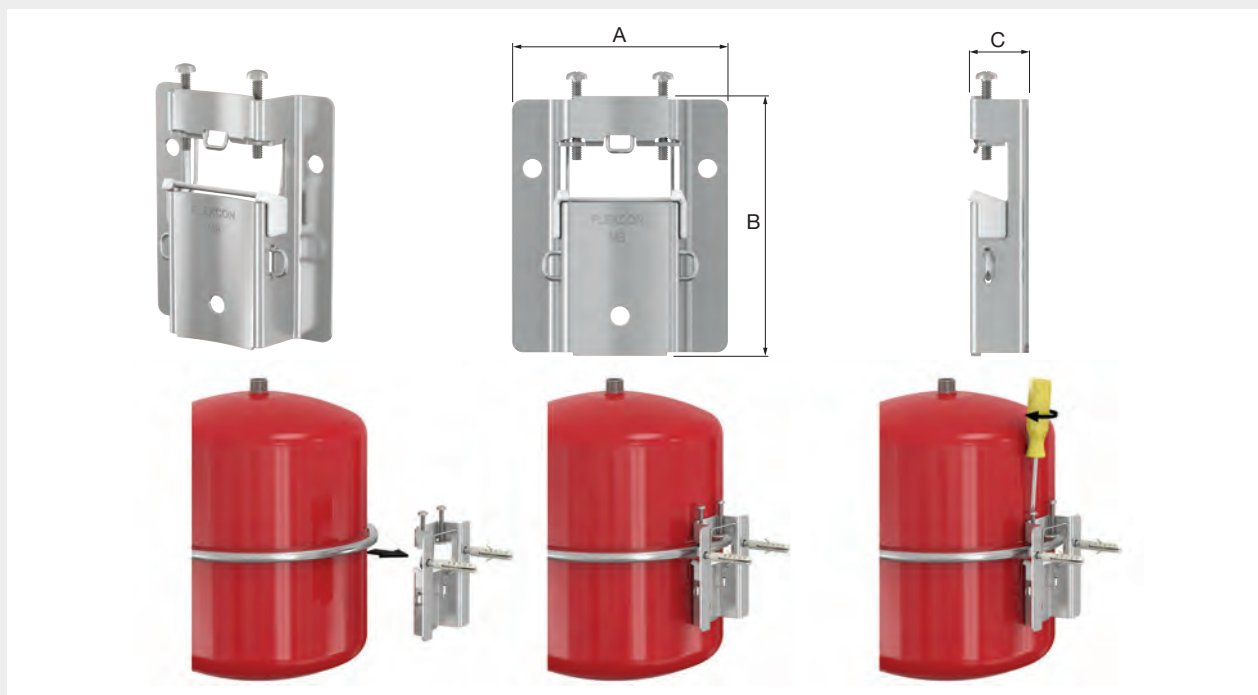
Type	Connection				Dimensions								Order Code
	A	B	C	D	E [mm]	F [mm]	K [mm]	M [mm]	N [mm]	O [mm]	P [mm]		
Flexconsole R Plus	Rp 3/4"	Rp 3/4"	Rp 1/2"	Rp 3/8"	50	180	30	200	270	55	45	1	27990


MB

For mounting Flexcon/Airfix vessels of 8 - 25 litres. Provided with a slot into which the Flexcon vessel clamp ring fits precisely. Tightening the two bolts is all that is needed to make a sturdy connection.

- Material: DC01 A-m, zinc coated.
- Connection to the wall with two Ø8 plugs and two Ø6 screws with hexagon head (wrench 10).
- Connection of the vessel to the MB by means of two M5 bolts with cross head.
- Separately available are sets of 5 bands for connection vessels without clench ring (size approx. Ø 325 mm).

- **MB 3: With spring and adapter for easy mounting.**




Type	Dimensions				Order Code
	A [mm]	B [mm]	C [mm]		
Flexcon vessel support MB 2	94	113	26	25	27913
Flexcon vessel support MB 3	94	113	26	25	27903

SB-A Band

For mounting expansion vessels without clench ring (2 - 35 litres) to the wall.

- To be combined with MB 2.

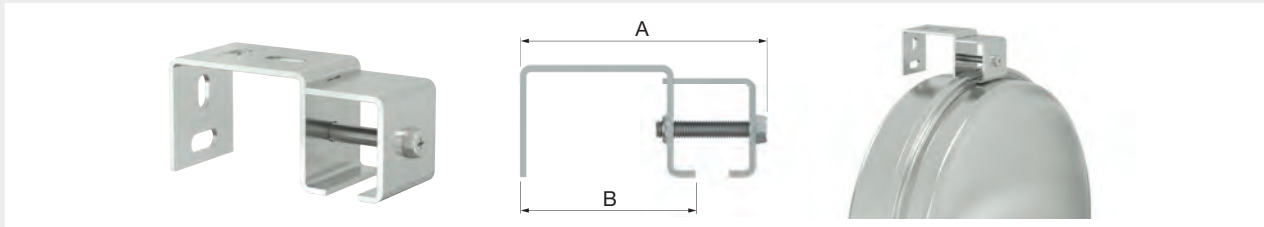



Type	Application		Order Code
SB-A	Band for fitting expansion vessels without clench ring, to be combined with MB 2	5	27914

Cubex R Bracket

For easy mounting of Cubex R vessels of 12 - 18 litres to a wall.

- Material: DD12., zinc plated.
- Cubex R expansion vessels have to be installed with the system connector facing downwards.
- Connection to the clench ring of the vessel.
- Connection of the vessel to the mounting bracket by one M 8 x 45 bolt.



Type	Dimensions		Weight [kg]		Order Code
	A [mm]	B [mm]			
Cubex R bracket	107	80	0.3	1	27915

ACCESSORIES FOR THE INSTALLER

Vessel Carrier



A handy vessel carrier which makes it very easy and safe to handle or transport the exchanged vessel.

- Easy to use.
- Prevents spilling of (polluted) heating installation water in your transporter or at home with the customer.
- The vessel can be handled with one hand only.
- Easy to be mounted and removed (for multiple use).


Type	Connection	Application		Order Code
Vessel carrier	G 3/4" F	Flexcon/Airfix 2 - 25	1	27902

Flexcon Drain Tub

The accessory for draining low positioned tap points.

- Flexible in use.
- With hook for easy storage.
- Vital for every installer.
- Made from high grade SBR rubber.

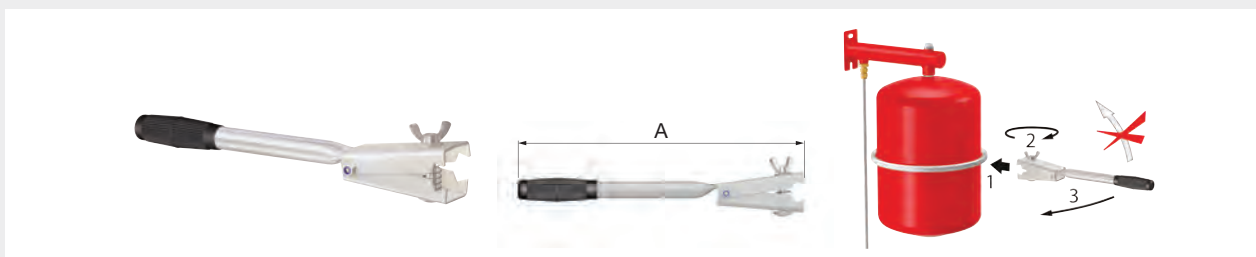


Type	Capacity [l]	Dimensions		Weight [kg]		Order Code
		Ø [mm]	H. [mm]			
Flexcon Drain Tub	± 4.0	280	125	0.5	10	27958

Flexcon DT

An easy tool to assist with mounting and removing Flexcon and Airfix expansion vessels of 2 - 25 litres.

By tightening the wing nut, the Flexcon DT is attached to the expansion vessel clamp ring. Thereafter, the expansion vessel can be unscrewed with a lateral movement.



Type	Application	Dimensions A [mm]		Order Code
Flexcon DT	Flexcon/Airfix 2 - 25	350	1	27925

Flexcon GVA 90




Gas valve extension angled at 90° to increase accessibility of Flexcon 110 - 1000 gas valves.

Type	Connection			Order Code
	Vessel	Outlet		
Flexcon GVA 90	Vg 8 F	Vg 8 M	10	27952

Precharge Pressure Tester



Tool to check the pre-charge pressure of Flexcon and Airfix expansion vessels.

Type	Pressure range [bar]		Order Code
Precharge tester (0.15 - 7.0 bar)	0.15 - 7.0	1	27907

AIRFIXCONTROL

With this component the flushing function is fully guaranteed. When the vessel is disconnected from the system the system flow remains in function.

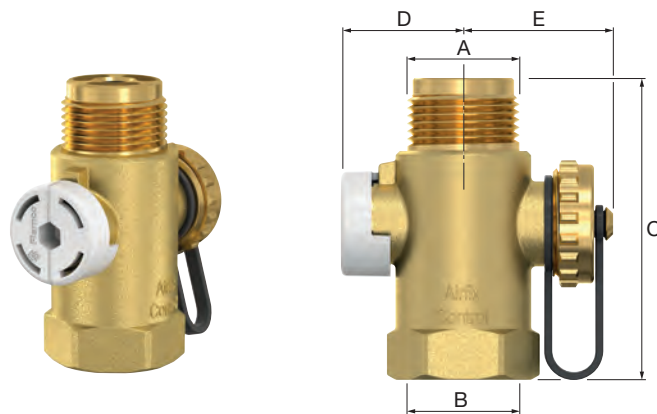
AirfixControl enables an easy yearly precharge check of the Airfix A or D expansion vessel.


DVGW certification applied in combination with Airfix A or Airfix D.

- For contact with potable water this isolator consists of materials approved by the relevant authorities.
- Integrated vessel draining facility for yearly pre-charge check without vessel removal.
- In closed position the flow remains intact and system remains pressurized.

AirfixControl

- Maximum water temperature: 70 °C.
- Maximum working pressure: 10 bar.



Type	Connections		Dimensions			Weight [kg]		Order Code
	A	B	C [mm]	D [mm]	E [mm]			
AirfixControl	G 3/4" M	G 3/4" F	71	29	34	0.24	1	28930

DIN
4807-5



FLEXCON M-K/U COMPRESSOR EXPANSION AUTOMAT

For sealed heating installations (acc. to EN12828) and chilled water (cooling) installations.

Ideal for larger systems and systems which cannot tolerate the rise in pressure associated with standard sealed system equipment. These units are distinguished by their wide range of applications. The Flexcon M-K/U is delivered completely pre-assembled and ready for operation. Installation is both simple and cost-effective due to the adjustable system connection. The unit is combined with the latest technology SPC control unit.



The benefits of the Flexcon M-K/U

- Stable system pressure and a large working vessel volume.
- Compact, space saving unit, which has a low noise, oil free compressor.
- Replaceable butyl bladder.
- Intuitive SPC controller. This is a 'plug and play' control system, with operating values, clear on-screen instructions, intuitive and easy to use and with economic energy-save mode.
- 20 languages to choose from.
- Easy to install and commission.
- For single or master/slave operation (failure changeover operation available on request).
- Connectivity for pressurisation unit and Building Management System or system monitoring device.
- Operation with one or two compressors possible.
- Delivered with oil free compressor, flexible connecting hose, weight-capacity sensor and height adjustable feet.
- As an option, the Flexcon M-K/U can be fitted with a Flexvent Super automatic air vent.
- With RS 485 interface.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Vessels 400 - 1,000 litres: in accordance with EN13831 / 1,200 - 10,000 litres: in accordance with AD2000.
- Suitable for systems with a maximum flow temperature of 120 °C. Note: additional requirements can be placed on your central heating system above 110° C.
- Maximum temperature bladder: 70 °C.
- In accordance with European Pressure Equipment Directive 2014/68/EU and Machinery Directive 2006/42/EC.
- Electricity supply: 230 v ~ 50 Hz.
- Maximum heating capacity: 12 MW.
- Maximum cooling capacity: 24 MW.
- Red (RAL 3002) epoxy powder coating.

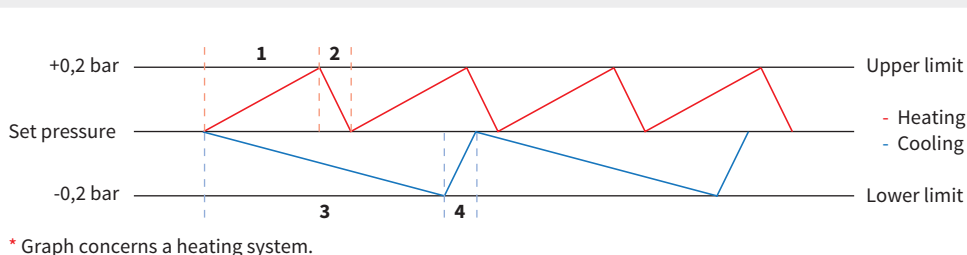
Accurate pressure monitoring

• When the temperature rises:

Pressure rises and reaches the upper limit (1):
The solenoid valve blows off air => Pressure drops to the set pressure (2).

• When the temperature drops:

Pressure drops and reaches the lower limit (3):
The compressor pumps in air => Pressure rises to the set pressure (4).



How a Flexcon M-K/U works

(1) Cold

The automat contains a small amount of water. The automat is at rest.

(2) Warming up

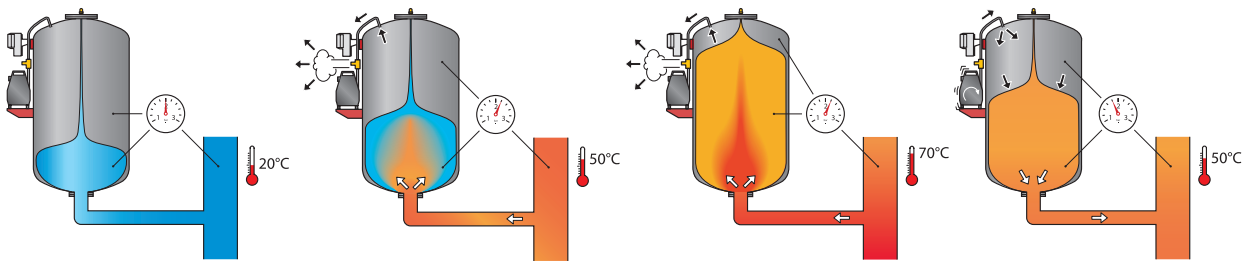
The volume of water, and thus the system pressure, increases. The controller responds to this by discharging air from the vessel and, as a result, the expansion water flows into the bladder.

(3) Full power

By storing increasing amounts of water in the vessel the controller keeps the system pressure at a constant level. When the system has warmed up completely, the vessel will be almost full to capacity.

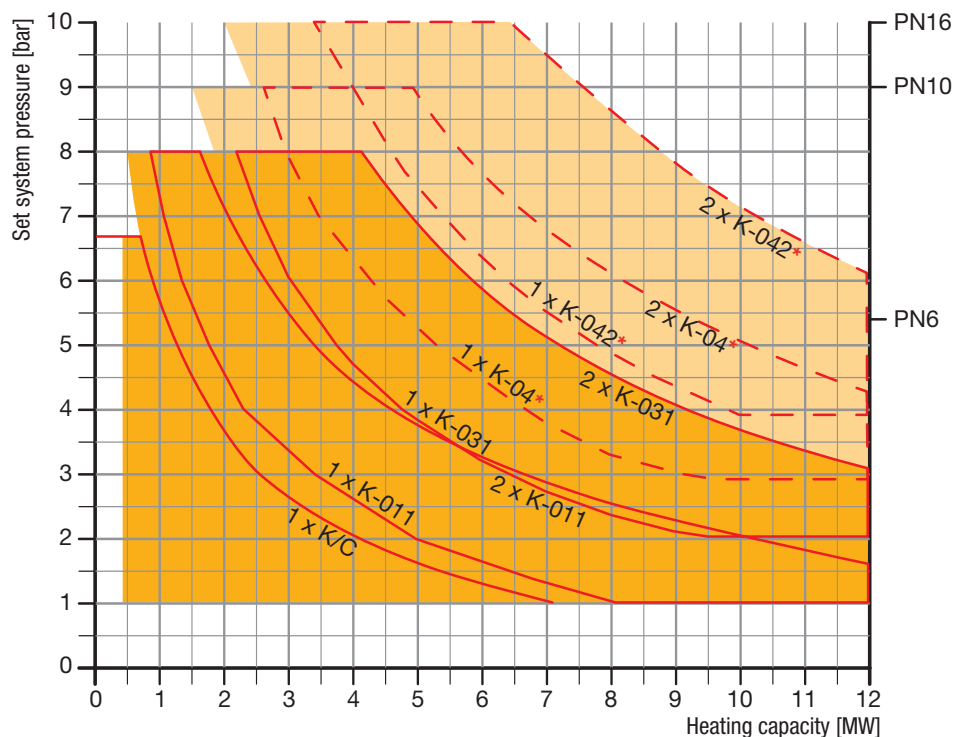
(4) Cooling down

When the volume of water and thus the system pressure decreases, the controller will respond by increasing the airpressure in the vessel with displacement of water back into the system as a result. This restores equilibrium in the system pressure.



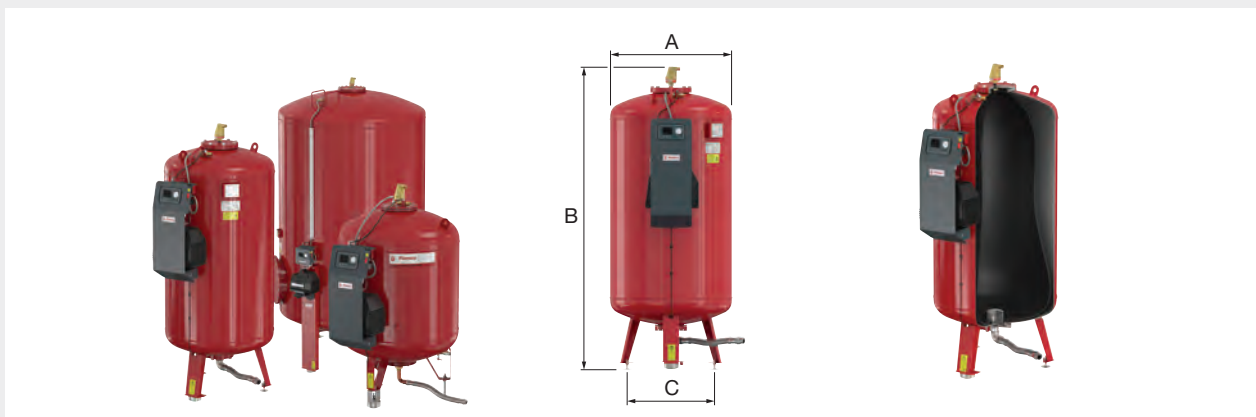
Flexcon M-K compressor curves


Flexcon M-K compressor selection graph. Heating Installation (nominal characteristics).



Flexcon M-K/U - internal coating

- With internal coating.

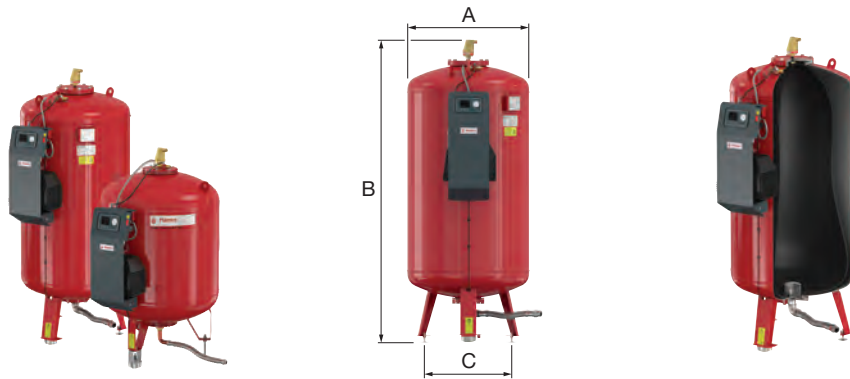



Type	Capacity [l]	Max. working pressure (Compressor) [bar]	Design pressure [PN]	Dimensions			Com- pressor	Syst. conn.	Weight [kg]		Order Code
				A [mm]	B [mm]	C [mm]					
Flexcon M-K/U 400	400	5.4	6.0	790	1437	610	K-011	G 1 1/4" M	90	1	23450
Flexcon M-K/U 400	400	8.0	10.0	790	1437	610	K-011	G 1 1/4" M	117	1	23470
Flexcon M-K/U 600	600	5.4	6.0	790	1737	610	K-011	G 1 1/4" M	105	1	23451
Flexcon M-K/U 600	600	8.0	10.0	790	1737	610	K-011	G 1 1/4" M	140	1	23471
Flexcon M-K/U 800	800	5.4	6.0	790	2144	610	K-031	G 1 1/4" M	120	1	23452
Flexcon M-K/U 800	800	8.0	10.0	790	2144	610	K-031	G 1 1/4" M	165	1	23472
Flexcon M-K/U 1000	1000	5.4	6.0	790	2493	610	K-031	G 1 1/4" M	135	1	23453
Flexcon M-K/U 1000	1000	8.0	10.0	790	2493	610	K-031	G 1 1/4" M	190	1	23473
Flexcon M-K/U 1200	1200	5.4	6.0	1000	2110	850	K-031	R 1 1/2"	313	1	23554
Flexcon M-K/U 1200	1200	8.0	10.0	1000	2110	850	K-031	R 1 1/2"	418	1	23574
Flexcon M-K/U 1600	1600	5.4	6.0	1000	2610	850	K-031	R 1 1/2"	368	1	23555
Flexcon M-K/U 1600	1600	8.0	10.0	1000	2610	850	K-031	R 1 1/2"	508	1	23575
Flexcon M-K/U 2000	2000	5.4	6.0	1200	2362	1050	K-031	R 2"	453	1	23556
Flexcon M-K/U 2000	2000	8.0	10.0	1200	2362	1050	K-031	R 2"	618	1	23576
Flexcon M-K/U 2800	2800	5.4	6.0	1200	2962	1050	K-031	R 2 1/2"	538	1	23557
Flexcon M-K/U 2800	2800	8.0	10.0	1200	2962	1050	K-031	R 2 1/2"	785	1	23577
Flexcon M-K/U 3500	3500	5.4	6.0	1200	3762	1050	K-031	R 2 1/2"	648	1	23558
Flexcon M-K/U 3500	3500	8.0	10.0	1200	3762	1050	K-031	R 2 1/2"	938	1	23578
Flexcon M-K/U 5000	5000	2.4	3.0	1500	3635	1520	K-031	Rp 1 1/2"	976	1	23559
Flexcon M-K/U 6500	6500	2.4	3.0	1800	3550	1820	K-031	Rp 1 1/2"	1476	1	23560
Flexcon M-K/U 8000	8000	2.4	3.0	1900	3650	1920	K-031	Rp 1 1/2"	1581	1	23561
Flexcon M-K/U 10000	10000	2.4	3.0	2000	4070	2020	K-031	Rp 1 1/2"	1821	1	23562



Flexcon M-K/U

- Without internal coating.



Type	Capacity [l]	Max. working pressure (Compressor) [bar]	Design pressure [PN]	Dimensions			Com- pressor	Syst. conn.	Weight [kg]		Order Code
				A [mm]	B [mm]	C [mm]					
Flexcon M-K/U 400	400	5.4	6.0	790	1437	610	K-011	G 1 1/4" M	90	1	23430
Flexcon M-K/U 400	400	8.0	10.0	790	1437	610	K-011	G 1 1/4" M	117	1	23440
Flexcon M-K/U 600	600	5.4	6.0	790	1737	610	K-011	G 1 1/4" M	105	1	23431
Flexcon M-K/U 600	600	8.0	10.0	790	1737	610	K-011	G 1 1/4" M	140	1	23441
Flexcon M-K/U 800	800	5.4	6.0	790	2144	610	K-031	G 1 1/4" M	120	1	23432
Flexcon M-K/U 800	800	8.0	10.0	790	2144	610	K-031	G 1 1/4" M	165	1	23442
Flexcon M-K/U 1000	1000	5.4	6.0	790	2493	610	K-031	G 1 1/4" M	135	1	23433
Flexcon M-K/U 1000	1000	8.0	10.0	790	2493	610	K-031	G 1 1/4" M	190	1	23443
Flexcon M-K/U 1200	1200	5.4	6.0	1000	2110	850	K-031	R 1 1/2"	313	1	22422
Flexcon M-K/U 1200	1200	8.0	10.0	1000	2110	850	K-031	R 1 1/2"	418	1	22472
Flexcon M-K/U 1600	1600	5.4	6.0	1000	2610	850	K-031	R 1 1/2"	368	1	22427
Flexcon M-K/U 1600	1600	8.0	10.0	1000	2610	850	K-031	R 1 1/2"	508	1	22477
Flexcon M-K/U 2000	2000	5.4	6.0	1200	2362	1050	K-031	R 2"	453	1	22432
Flexcon M-K/U 2000	2000	8.0	10.0	1200	2362	1050	K-031	R 2"	618	1	22482
Flexcon M-K/U 2800	2800	5.4	6.0	1200	2962	1050	K-031	R 2 1/2"	538	1	22437
Flexcon M-K/U 2800	2800	8.0	10.0	1200	2962	1050	K-031	R 2 1/2"	758	1	22487
Flexcon M-K/U 3500	3500	5.4	6.0	1200	3762	1050	K-031	R 2 1/2"	648	1	22442
Flexcon M-K/U 3500	3500	8.0	10.0	1200	3762	1050	K-031	R 2 1/2"	938	1	22492



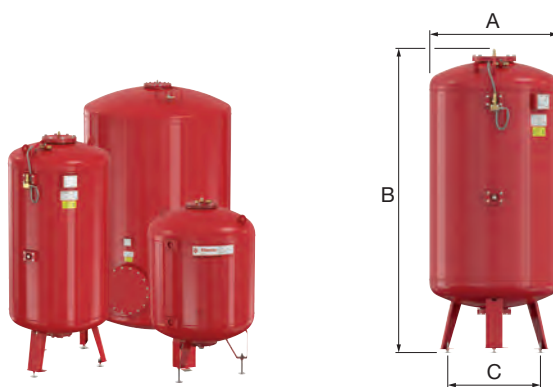
FLEXCON M-K AUXILIARY VESSELS


Auxiliary vessels for Flexcon M-K/U automats. For sealed heating installations (acc. to EN12828) and chilled water (cooling) installations.

- Without control unit and compressor.
- Replaceable butyl bladder.
- Delivered with height adjustable feet.
- Accessories to be ordered separately.
- As an option, the Flexcon M-K can be fitted with a Flexvent Super automatic air vent.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Vessels 400 - 1,000 litres: in accordance with EN13831 / 1,200 - 10,000 litres: in accordance with AD2000.
- Suitable for systems with a maximum flow temperature of 120 °C.
- Max. temperature bladder: 70 °C.
- In accordance with European Pressure Equipment Directive 2014/68/EU and Machinery Directive 2006/42/EC.
- Red (RAL 3002) epoxy powder coating.

Flexcon M-K - internal coating

- With internal coating.




Type	Capacity [l]	Design pressure [PN]	Dimensions			Syst. conn.	Weight [kg]		Order Code
			A [mm]	B [mm]	C [mm]				
Flexcon M-K 400	400	6.0	790	1352	610	G 1 1/4" F	77	1	23460
Flexcon M-K 400	400	10.0	790	1352	610	G 1 1/4" F	104	1	23480
Flexcon M-K 600	600	6.0	790	1652	610	G 1 1/4" F	92	1	23461
Flexcon M-K 600	600	10.0	790	1652	610	G 1 1/4" F	127	1	23481
Flexcon M-K 800	800	6.0	790	2059	610	G 1 1/4" F	107	1	23462
Flexcon M-K 800	800	10.0	790	2059	610	G 1 1/4" F	152	1	23482
Flexcon M-K 1000	1000	6.0	790	2408	610	G 1 1/4" F	122	1	23463
Flexcon M-K 1000	1000	10.0	790	2408	610	G 1 1/4" F	177	1	23483
Flexcon M-K 1200	1200	6.0	1000	2025	850	Rp 1 1/2"	290	1	23524
Flexcon M-K 1200	1200	10.0	1000	2025	850	Rp 1 1/2"	395	1	23544
Flexcon M-K 1600	1600	6.0	1000	2525	850	Rp 1 1/2"	345	1	23525
Flexcon M-K 1600	1600	10.0	1000	2525	850	Rp 1 1/2"	485	1	23545
Flexcon M-K 2000	2000	6.0	1200	2277	1050	Rp 2"	430	1	23526
Flexcon M-K 2000	2000	10.0	1200	2277	1050	Rp 2"	595	1	23546
Flexcon M-K 2800	2800	6.0	1200	2877	1050	Rp 2 1/2"	515	1	23527
Flexcon M-K 2800	2800	10.0	1200	2877	1050	Rp 2 1/2"	735	1	23547
Flexcon M-K 3500	3500	6.0	1200	3677	1050	Rp 2 1/2"	625	1	23528
Flexcon M-K 3500	3500	10.0	1200	3677	1050	Rp 2 1/2"	915	1	23548
Flexcon M-K 5000	5000	3.0	1500	3550	1520	Rp 1 1/2"	953	1	23529
Flexcon M-K 6500	6500	3.0	1800	3465	1820	Rp 1 1/2"	1453	1	23530
Flexcon M-K 8000	8000	3.0	1900	3565	1920	Rp 1 1/2"	1558	1	23531
Flexcon M-K 10000	10000	3.0	2000	3985	2020	Rp 1 1/2"	1798	1	23532

Flexcon M-K Connecting Kit (pneumatic)




- Pressure hose connection.
For pressure equalisation between air chambers of multiple vessels.
- Length: 3 metre.

Type	Suitable for		Order Code
Connecting kit (2 vessels)	Flexcon M-K/U / Flexcon M-K	1	22380
Connecting kit (3 or more vessels)	Flexcon M-K	1	22381

Flange Connection



- Adapter with flange connection PN 16 and fill and drain valve.
- Suitable for 6.0 and 10.0 bar vessels.

Volume of tank [l]	Connections		L. [mm]	Suitable for		Order Code
	In	PN 16				
400 - 1000	R 1 1/4"	DN 32	350	Flexcon M-K / M-K/U	1	23795
1200 - 1600	R 1 1/2"	DN 40	470	Flexcon M / M-K / M-K/U	1	23796
2000	R 2"	DN 50	560	Flexcon M / M-K / M-K/U	1	23797
2800 - 5200	R 2 1/2"	DN 65	560	Flexcon M / M-K / M-K/U	1	23798

EXTRA COMPRESSORS

The second compressor unit is assembled on a second console on the Flexcon M-K/U compressor expansion automat. Both compressors must be of equal capacity and type. Delivered complete, assembled and ready for use.

Note: This configuration comes with failure changeover operation option only.

Second Compressor Unit



Type	Application	Max. operating pressure [bar]		Order Code
2nd Compressor unit K-011	Flexcon M-K/U	8	1	On Request
2nd Compressor Unit K-031	Flexcon M-K/U	8	1	On Request

FLEXCON M-K/C COMPRESSOR EXPANSION AUTOMAT


Compressor controlled expansion vessel with fixed diaphragm for smaller sealed heating installations (acc. to EN12828) and chilled water (cooling) installations. This product is especially designed for smaller commercial systems with limited space, providing all the benefits of an automat at an affordable price.

- Delivered completely pre-assembled and ready for operation.
 - With oil free compressor, flexible connecting hose, weight-capacity sensor, height adjustable feet and diaphragm rupture sensor.
 - Connectivity for pressurisation unit and Building Management System or system monitoring device.
 - Intuitive and programmable SCU controller with graphic display and 18 languages to choose from.
 - Easy to install and commission.
 - Diaphragm: Fixed flexible rubber diaphragm with rolling action (not replaceable).
 - With RS 485 interface.
 - Accessories to be ordered separately.
- Suitable for addition of glycol-based anti-freeze up to 50%.
 - Vessels in accordance with EN13831.
 - Suitable for systems with a maximum flow temperature of 120 °C. Note: additional requirements can be placed on your central heating system above 110° C.
 - Maximum temperature diaphragm: 70 °C.
 - Minimum temperature at (heating) outlet: -10 °C.
 - Electricity supply: 230V 50/60Hz 1ph.
 - Maximum heating capacity: 7 MW.
 - Maximum cooling capacity: 11 MW.
 - In accordance with European Pressure Equipment Directive 2014/68/EU and Machinery Directive 2006/42/EC.
 - Red (RAL 3002) epoxy powder coating.
 - Noise level: 65 dB.

For stand-alone applications only.

Flexcon M-K/C



Type	Capacity [l]	Max. working pressure [bar]	Design pressure [PN]	Dimensions		Syst. conn.	Weight [kg]		Order Code
				Ø [mm]	H. [mm]				
Flexcon M-K/C 110	110	5.4	6.0	509	1235	G 1" F	37	1	23225
Flexcon M-K/C 200	200	5.4	6.0	600	1410	G 1" F	54	1	23226
Flexcon M-K/C 325	325	5.4	6.0	600	1830	G 1" F	78	1	23229
Flexcon M-K/C 350	350	5.4	6.0	790	1475	G 1" F	70	1	23227
Flexcon M-K/C 425	425	5.4	6.0	790	1630	G 1" F	76	1	23228



FLAMCOMAT G4 - PUMP UNITS

Flextronic

The Flextronic is a new control platform developed by Flamco for further optimising the performance of its automats and expanding their functionality. At the same time, Flamco brings (wireless) remote communication and data that enables preventative maintenance.

- Optimal connectivity with BMS, Modbus, BACnet via RS 485 and ethernet interface.
- Can be combined with Flamconnect Remote Service. (Please check your local sales office for availability.)
- Extensive data storage for online and offline analysis.
- 'Extended screen' operation via mobile or tablet device.
- Also suitable for existing automats (available as a retrofit kit).
- Three configurable potential free outputs.
- The user-friendly control unit displays all operating and error conditions in a comprehensible and convenient way.
- Advanced technology ensures lowest power consumption, long service life and easy maintenance.
- Operating modes: single (mono), automatic change-over or load dependent (duo) and combined operation.
- Microprocessor control, self-learning, with graphical display.
- 20 languages can be selected in the menu of the Flextronic.

Flamcomat G4

For pressurisation, deaeration and topping up in sealed heating installations (acc. to EN12828) and chilled water (cooling) installations.

The Flamcomat G4 is a pump-controlled, low-maintenance expansion unit that efficiently absorbs differential pressures in heating and cooling installations and effectively removes gas. After all, the formation of gas in the installation can cause dirt accumulation, corrosion and wear, leading to faults and a loss of efficiency. Investing in the Flamcomat G4 means opting for certainty and flexibility. The Flamcomat G4 has a number of automatic functions, for the filling procedure and balancing, temperature monitoring and leak detection. The system is also suitable for connecting into a smart Master-Slave configuration and for communicating with it remotely (with the Flextronic and Remote Service).

- Simple commissioning.
- Automatic leakage detection.
- Automatic filling of vessel and system.
- Scalable thanks to Master-Slave option (expected Q4 2020).
- If you have a unit with multiple pumps and valves balancing ensures that the runtime of the components is automatically and evenly distributed.
- Suitable for installations with high temperatures (> 110 °C) in combination with accessory 17504.
- Efficient operation and low power consumption.
- Suitable for Flamconnect Remote Service. (Please check your local sales office for availability.)
- Automatically performs volumetric control and automatic topping-up during the heating or cooling cycles.
- Integrated turbo degassing allows for very rapid degassing.
- The degassing function allows for continuous degassing if desired.
- Due to the hydraulic design of the Flamcomat G4 and the connection sets the vessel can be positioned anywhere around the Flamcomat.
- Beams are fitted to the Flamcomat G4 for protection of components and easy transport into hard to reach places.
- The position of the second pump on a double pump Flamcomat G4 can be positioned on either side of the Flamcomat.
- The Flamcomat G4 pump units require approximately 50% less surface area compared to older models.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Working temperature: 3 °C / 70 °C.
- In accordance with Machinery Directive 2006/42/EC.

How a Flamcomat G4 works

1. Cold

The automat contains a small amount of water. The automat is still at rest.

2. Warming up

The volume of water and the system pressure increases. The unit responds to this by opening the solenoid valve. Water flows into the pressureless vessel. The water in the vessel is de-aerated due to both the drop in pressure and the presence of the PALL rings.

3. Full power

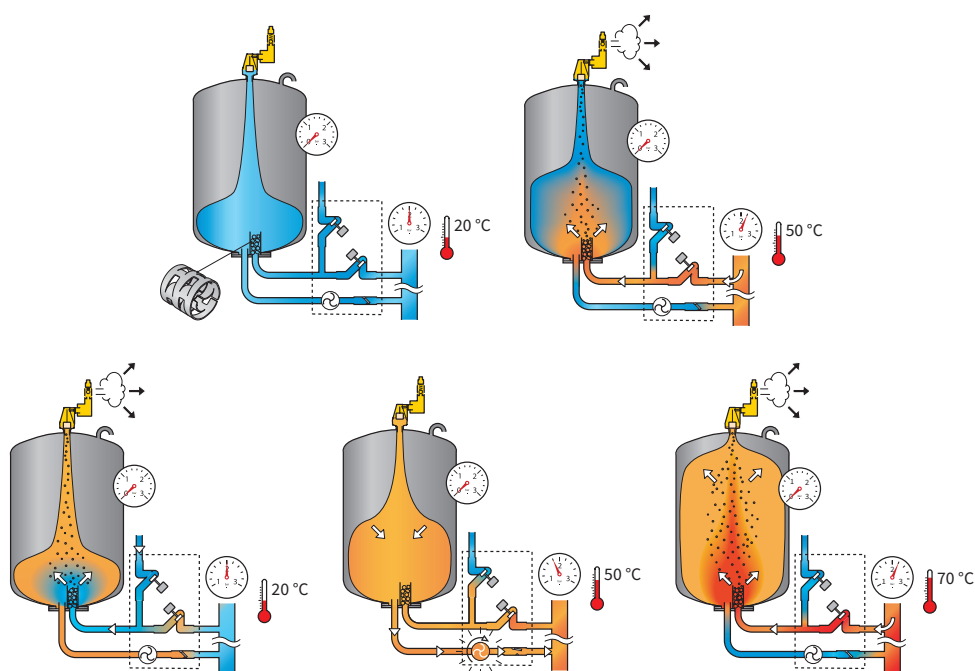
By storing an increasing amount of water in the tank, the automat keeps the system pressure almost constant. When the system has warmed up completely, the vessel will be almost full to capacity.

4. Cooling down

The volume of water and the system pressure decreases. The de-aerated water is pumped from the pressureless vessel back into the system. This restores the system pressure.

5. Topping-up

If the water level in the vessel drops to a critical level, an appropriate amount of water will be carefully pumped into the system from the water mains. This water will be de-aerated (by pressure loss and the PALL rings), before entering the vessel.




Flamcomat G4 pump units - Technical specifications

Type	Nominal voltage	Rated current [A]	Rated power [kW]	Noise level [dB]	Protection class of pump unit	Design pressure [PN]	Pump orientation
MM / G4	230 V ~1 N PE 50 Hz	0.43	0.09	54	IP44	PN 6	hor.
M02 / G4	230 V ~1 N PE 50 Hz	2.77	0.62	52	IP44	PN 10	hor.
M10 / G4	230 V ~1 N PE 50 Hz	4.4	0.75	49	IP44	PN 10	hor.
M20 / G4	230 V ~1 N PE 50 Hz	7.2	1.1	64	IP44	PN 10	hor.
M60 / G4	230 V ~1 N PE 50 Hz	7.4	1.1	52	IP44	PN 10	vert.
M80 / G4	400 V ~3 N PE 50 Hz	3.4	1.5	54	IP44	PN 16	vert.
M100 / G4	400 V ~3 N PE 50 Hz	4.75	2.2	54	IP44	PN 16	vert.
M130 / G4	400 V ~3 N PE 50 Hz	6.4	3.0	54	IP44	PN 16	vert.
DM / G4	230 V ~1 N PE 50 Hz	0.86	0.18	57	IP44	PN 6	hor.
D02 / G4	230 V ~1 N PE 50 Hz	5.54	1.24	55	IP44	PN 10	hor.
D10 / G4	230 V ~1 N PE 50 Hz	8.8	1.5	52	IP44	PN 10	hor.
D20 / G4	230 V ~1 N PE 50 Hz	14.4	2.2	67	IP44	PN 10	hor.
D60 / G4	230 V ~1 N PE 50 Hz	14.8	2.2	55	IP44	PN 10	vert.
D80 / G4	400 V ~3 N PE 50 Hz	6.8	3.0	57	IP44	PN 16	vert.
D100 / G4	400 V ~3 N PE 50 Hz	9.5	4.4	57	IP44	PN 16	vert.
D130 / G4	400 V ~3 N PE 50 Hz	12.8	6.0	57	IP44	PN 16	vert.

Single Pump Control

- For the correct Flamcomat pump selection, see ('Flamcomat G4 Pump Selection Graphs').
- Maximum system pressure: 6, 10 and 16 bar.



Type*	For boiler output [kW]	Working pressure [bar]	Dimensions L. x W. x H. [mm]	Vessel	Connection to			Order Code
					System conn.	Water supply		
MM / G4	100 - 200	1.2 - 3.0	530 x 230 x 930	G 1" M	G 1 1/4" F	Rp 1/2"	1	17940
M02 / G4	500 - 2300	1.2 - 3.5	530 x 230 x 930	G 1" M	G 1 1/4" F	Rp 1/2"	1	17943
M10 / G4	900 - 4700	2.0 - 5.0	530 x 230 x 930	G 1" M	G 1 1/4" F	Rp 1/2"	1	17944
M20 / G4	1600 - 8400	2.0 - 5.0	570 x 230 x 930	G 1" M	G 1 1/4" F	Rp 1/2"	1	17945
M60 / G4	1400 - 4700	3.5 - 8.5	550 x 230 x 930	G 1" M	G 1 1/4" F	Rp 1/2"	1	17946
M80 / G4	1400 - 4900	4.7 - 10.2	550 x 230 x 930	G 1" M	G 1 1/4" F	Rp 1/2"	1	17947
M100 / G4	1300 - 5200	5.9 - 14.1	550 x 230 x 1000	G 1" M	G 1 1/4" F	Rp 1/2"	1	17884
M130 / G4	3300 - 5300	8.0 - 14.4	610 x 230 x 1190	G 1" M	G 1 1/4" F	Rp 1/2"	1	17886

* For larger, more powerful systems please contact Flamco.



Double Pump Control

- For the correct Flamcomat pump selection, see ('Flamcomat G4 Pump Selection Graphs').
- Maximum system pressure: 6, 10 and 16 bar.



Type*	For boiler output [kW]	Working pressure [bar]	Dimensions L. x W. x H. [mm]	Vessel	Connection to System conn.	Water supply		Order Code
DM / G4	100 - 400	1.2 - 3.0	530 x 230 x 970	G 1" M	G 1 1/4" F	Rp 1/2"	1	17948
D02 / G4	500 - 4400	1.2 - 3.5	600 x 480 x 970	G 1" M	G 1 1/4" F	Rp 1/2"	1	17949
D10 / G4	900 - 9200	2.0 - 5.0	600 x 480 x 970	G 1" M	G 1 1/4" F	Rp 1/2"	1	17950
D20 / G4	1600 - 10000	2.0 - 5.0	600 x 480 x 970	G 1" M	G 1 1/4" F	Rp 1/2"	1	17951
D60 / G4	1400 - 9400	3.5 - 8.5	600 x 480 x 970	G 1" M	G 1 1/4" F	Rp 1/2"	1	17952
D80 / G4	1400 - 9400	4.7 - 10.2	600 x 480 x 980	G 1" M	G 1 1/4" F	Rp 1/2"	1	17953
D100 / G4	1300 - 10000	5.9 - 14.1	600 x 480 x 1000	G 1" M	G 1 1/4" F	Rp 1/2"	1	17885
D130 / G4	3300 - 10000	8.0 - 14.4	600 x 480 x 1190	G 1" M	G 1 1/4" F	Rp 1/2"	1	17887

* For larger, more powerful systems please contact Flamco.



Flamcomat G4 pump units 60Hz - Technical specifications

Type	Nominal voltage	Rated current [A]	Rated power [kW]	Noise level [dB]	Protection class of pump unit	Design pressure [PN]	Pump orientation
M02 / G4 60Hz	230 V ~1 N PE 60 Hz	4.10	0.60	52	IP44	PN 10	hor.
M10 / G4 60Hz	230 V ~1 N PE 60 Hz	5.80	0.67	49	IP44	PN 10	hor.
M20 / G4 60Hz	230 V ~1 N PE 60 Hz	7.98	1.33	64	IP44	PN 10	hor.
M60 / G4 60Hz	400 V ~3 N PE 60 Hz	3.10	1.50	52	IP44	PN 10	vert.
M80 / G4 60Hz	400 V ~3 N PE 60 Hz	3.10	1.50	54	IP44	PN 16	vert.
M100 / G4 60Hz	400 V ~3 N PE 60 Hz	4.50	2.20	54	IP44	PN 16	vert.
M130 / G4 60Hz	400 V ~3 N PE 60 Hz	6,20	3.00	54	IP44	PN 16	vert.
D02 / G4 60Hz	230 V ~1 N PE 60 Hz	8.20	1.20	55	IP44	PN 10	hor.
D10 / G4 60Hz	230 V ~1 N PE 60 Hz	11.60	1.36	52	IP44	PN 10	hor.
D20 / G4 60Hz	400 V ~3 N PE 60 Hz	5.96	2.66	67	IP44	PN 10	hor.
D60 / G4 60Hz	400 V ~3 N PE 60 Hz	6,20	3.00	55	IP44	PN 10	vert.
D80 / G4 60Hz	400 V ~3 N PE 60 Hz	6.20	3.00	57	IP44	PN 16	vert.
D100 / G3 60Hz	400 V ~3 N PE 60 Hz	9.00	4.40	57	IP44	PN 16	vert.
D130 / G4 60Hz	400 V ~3 N PE 60 Hz	12.40	6.00	57	IP44	PN 16	vert.

Single Pump Control - 60Hz

- For the correct Flamcomat pump selection, see ('Flamcomat G4 Pump Selection Graphs').
- Maximum system pressure: 6, 10 and 16 bar.



Type*	For boiler output [kW]	Working pressure [bar]	Dimensions L. x W. x H. [mm]	Vessel	Connection to System conn.	Water supply		Order Code
M02 / G4 60Hz	900 - 3000	1.6 - 3.2	530 x 230 x 930	G 1" M	G 1 1/4" F	Rp 1/2"	1	17540
M10 / G4 60Hz	2700 - 5700	2.4 - 4.3	530 x 230 x 930	G 1" M	G 1 1/4" F	Rp 1/2"	1	17541
M20 / G4 60Hz	2300 - 9300	2.5 - 5.3	570 x 230 x 930	G 1" M	G 1 1/4" F	Rp 1/2"	1	17542
M60 / G4 60Hz	2100 - 6100	3.7 - 8.3	550 x 230 x 930	G 1" M	G 1 1/4" F	Rp 1/2"	1	17543
M80 / G4 60Hz	1500 - 5600	5.3 - 9.5	550 x 230 x 930	G 1" M	G 1 1/4" F	Rp 1/2"	1	17544
M100 G4 60Hz	1800 - 6100	6.0 - 13.0	550 x 230 x 1000	G 1" M	G 1 1/4" F	Rp 1/2"	1	17545
M130 G4 60Hz	4400 - 6400	8.0 - 14.4	610 x 230 x 1190	G 1" M	G 1 1/4" F	Rp 1/2"	1	17546

* For larger, more powerful systems please contact Flamco.



Double Pump Control - 60Hz

- For the correct Flamcomat pump selection, see ('Flamcomat G4 Pump Selection Graphs').
- Maximum system pressure: 6, 10 and 16 bar.



Type*	For boiler output [kW]	Working pressure [bar]	Dimensions L. x W. x H. [mm]	Vessel	Connection to System conn.	Water supply		Order Code
D02 / G4 60Hz	900 - 5700	1.6 - 3.2	600 x 480 x 970	G 1" M	G 1 1/4" F	Rp 1/2"	1	17547
D10 / G4 60Hz	2700 - 10000	2.4 - 4.3	600 x 480 x 970	G 1" M	G 1 1/4" F	Rp 1/2"	1	17548
D20 / G4 60Hz	2300 - 10000	2.5 - 5.3	600 x 480 x 970	G 1" M	G 1 1/4" F	Rp 1/2"	1	17549
D60 / G4 60Hz	2100 - 11500	3.7 - 8.3	600 x 480 x 970	G 1" M	G 1 1/4" F	Rp 1/2"	1	17550
D80 / G4 60Hz	1500 - 10400	5.3 - 9.5	600 x 480 x 980	G 1" M	G 1 1/4" F	Rp 1/2"	1	17551
D100 / G4 60Hz	1800 - 11500	6.0 - 13.0	600 x 480 x 1000	G 1" M	G 1 1/4" F	Rp 1/2"	1	17552
D130 / G4 60Hz	4400 - 12000	8.0 - 14.4	600 x 480 x 1190	G 1" M	G 1 1/4" F	Rp 1/2"	1	17553

* For larger, more powerful systems please contact Flamco.



Flamcomat D Pump Set Units

The Flamcomat D Pump Set Unit is an advanced product that combines a balanced pressure system with an effective pressure step deaerator function and an inter-link to a top up pressurisation unit.


Product Features:

- On/Off switch, with indicator neon.
- Constructed as type AB air gap with weir overflow, fluid category 5.
- Electronic pressure transducer.
- Normally closed, common fault, volt free boiler interlock.
- Normally open high pressure, low pressure, transducer health and pump health volt free contacts.
- System logging.
- Easy setup and commissioning.
- Event logging for pump start, individual pump run hours counter, electrical interruption and common alarm.
- Volt free contacts for common fault, high pressure, low pressure, pump fault, pressure transducer fault.
- 18 Litre break tank with type AB Air Gap Fluid Cat 5.

Certifications and Standards Applied:

- PED 2014/68/EU Sound Engineering Practice.
- IEE - Electrical Safety Guidance.
- EMC 2004/108/EC.
- BS 7074 Parts 1 to 3.
- Machinery Directive 95/16/EC.
- Electronic Components have been tested and comply with the EMC Directives.
- EN 61000-6-2: Generic Standards – Immunity standard for industrial environments.
- EN 61000-6-3: Generic Standards – Emission standard for residential, commercial and light industrial environment.
- CE marked components, where applicable.
- EN 13831/8 - Closed expansion vessels.
- IP54 (BS EN60529) Rated Controller.
- IPX5 (BS EN60529) Rated Pump.
- WRAS approved float valve to BS1212 part 2.



Type	Dimensions			Connections			Dry Weight [kg]		Order Code
	D. [mm]	W. [mm]	H. [mm]	Vessel	System	Top-Up			
Pump Set D0	680	680	1400	1 1/2"	1 1/2"	1/2"	105	1	17900
Pump Set D1	680	680	1400	1 1/2"	1 1/2"	1/2"	110	1	17901
Pump Set D2	680	680	1400	1 1/2"	1 1/2"	1/2"	115	1	17902
Pump Set D3	680	680	1400	1 1/2"	1 1/2"	1/2"	150	1	17903
Pump Set D4	680	680	1600	1 1/2"	1 1/2"	1/2"	215	1	17904
Pump Set D5	680	680	1600	1 1/2"	1 1/2"	1/2"	225	1	17905
Pump Set D6	680	680	1600	1 1/2"	1 1/2"	1/2"	240	1	17906



Flamcomat D Pump Set Units - Performance

Type	Noise Rating [dBA]	Pump Model	Full Load Current [A]	Power Consumption [kW]	Required Supply Voltage [V]
Pump Set D0	58	Grundfos CM1-4	6.2	1	230V 50Hz, single phase
Pump Set D1	58	Grundfos CM3-6	8.8	1.34	230V 50Hz, single phase
Pump Set D2	65	Grundfos CM5-6	10.6	2.6	415V 50Hz, three phase
Pump Set D3	52	Grundfos CR3-15	14.8	2.2	230V 50Hz, single phase
Pump Set D4	54	Grundfos CR3-17	6.4	3	415V 50Hz, three phase
Pump Set D5	54	Grundfos CR3-23	9	4.4	415V 50Hz, three phase
Pump Set D6	55	Grundfos CR3-31	12.6	6	415V 50Hz, three phase
Top Up Equipment (Integral)	61	Pedrollo PQA60	5.0	0.74	230V/1ph/50Hz

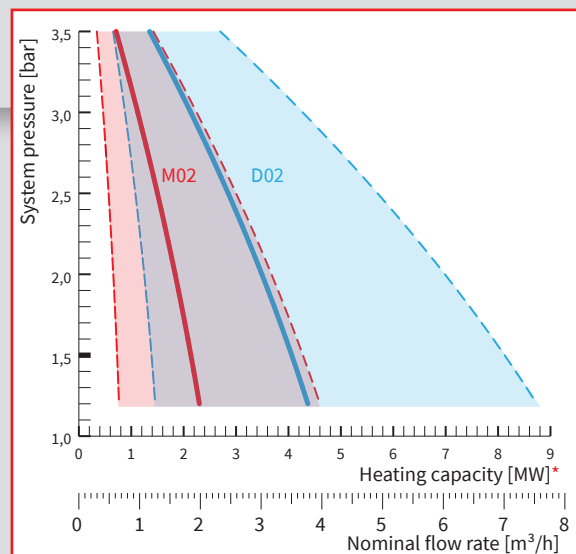
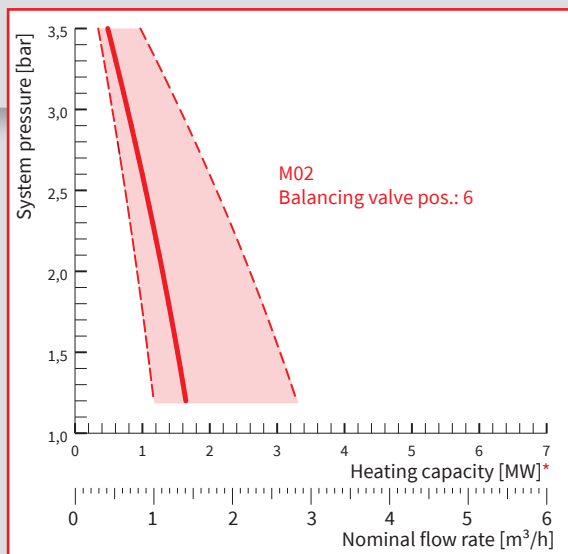
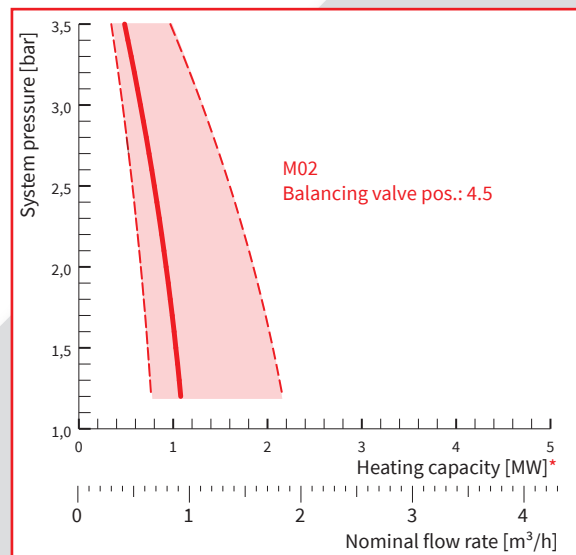
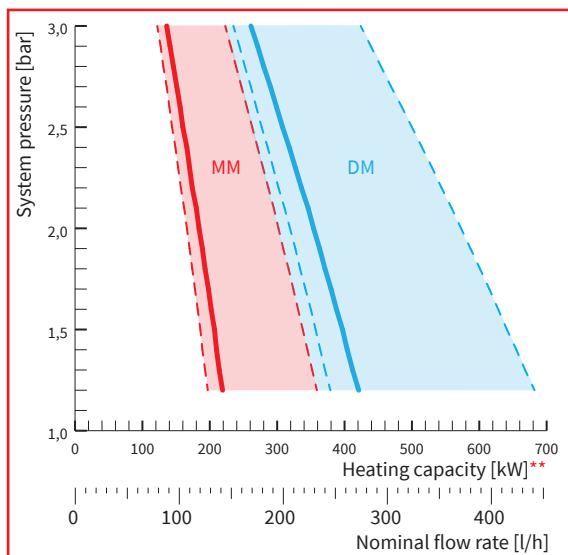
Flamcomat G4 Pump Selection Graphs

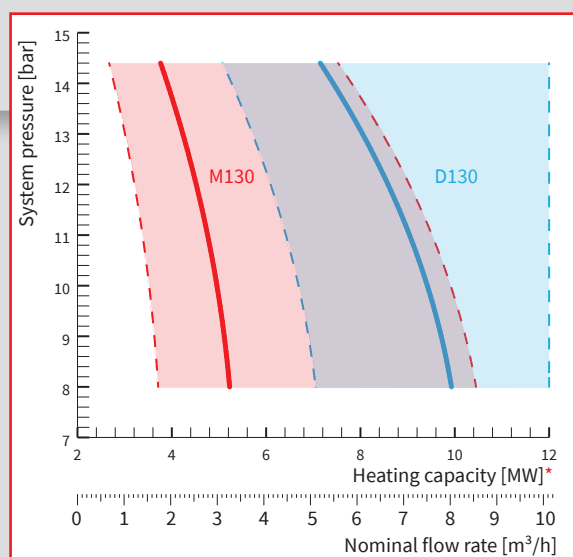
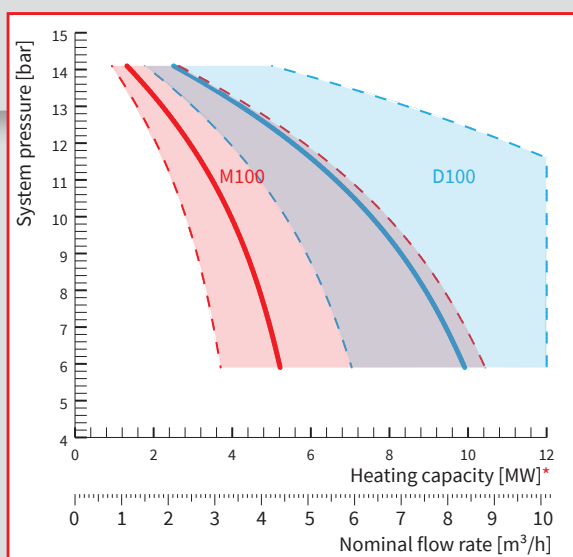
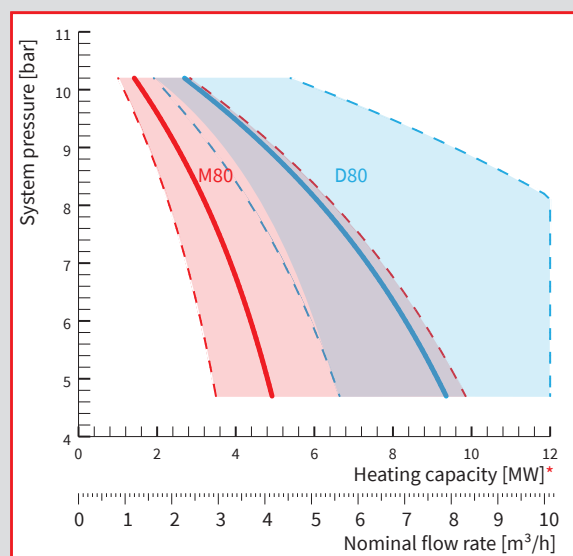
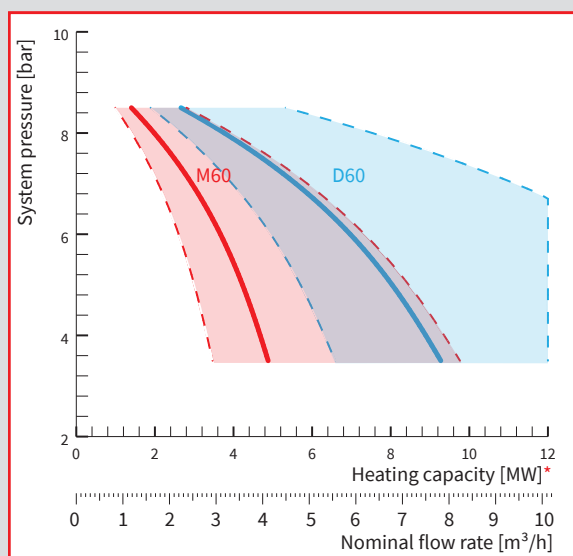
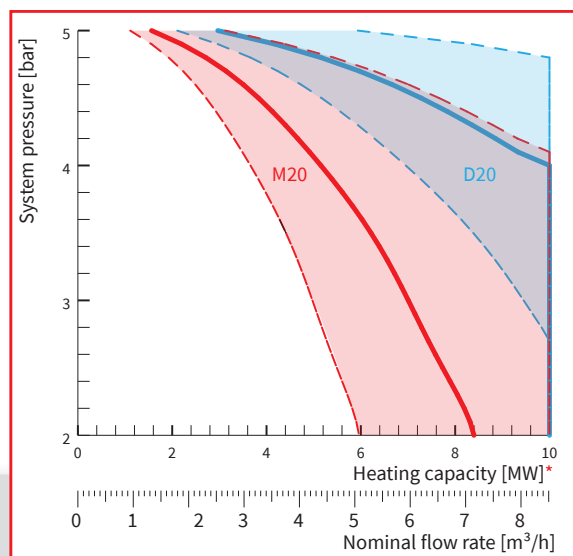
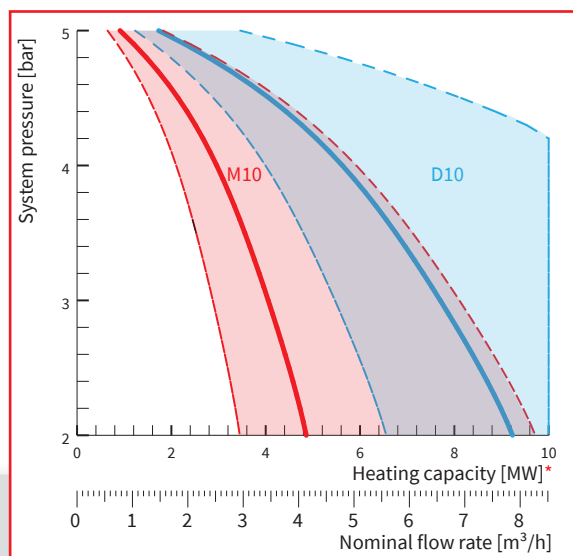
The Flamco calculation program for expansion automats determines the flow according to the exact contraction flow factor. You can find the calculation program for expansion automats at www.flamcogroup.com.



* based on 0.85 l/(kW·h)

** based on 0.65 l/(kW·h)

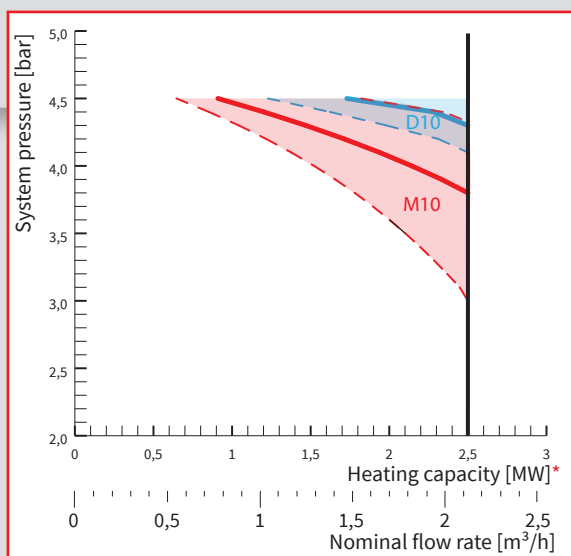
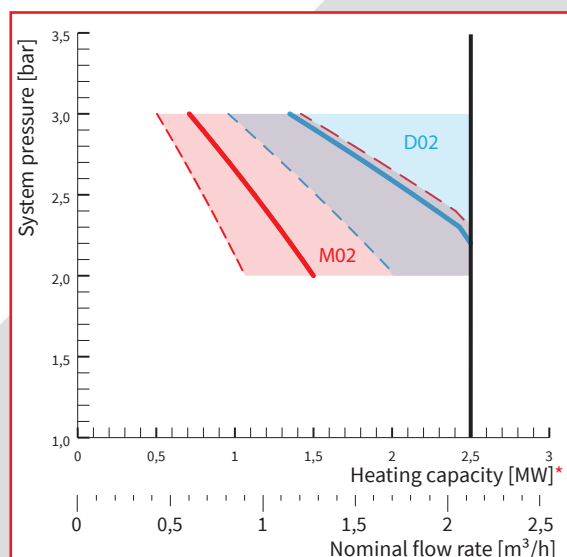
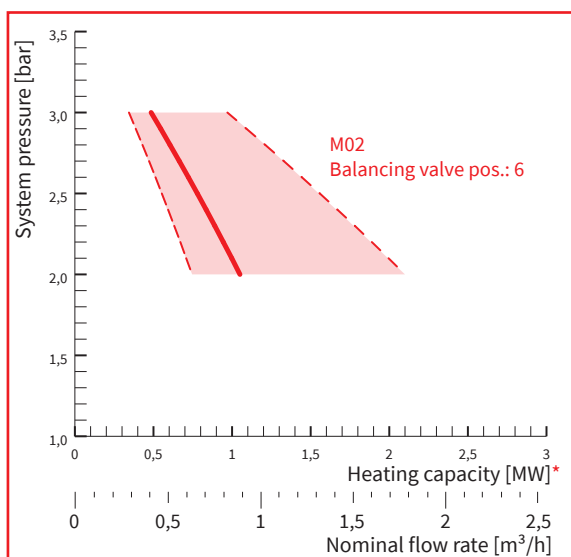
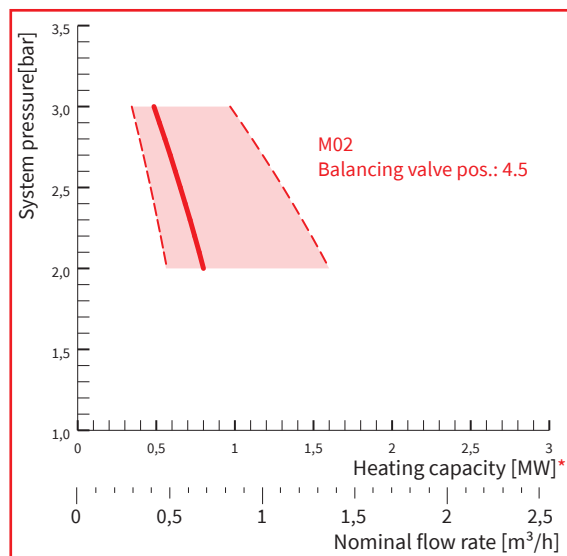




Flamcomat Starter G4 Pump Selection Graphs

The Flamco calculation program for expansion automats determines the flow according to the exact contraction flow factor (VDI4708-2). You can find the calculation program for expansion automats at www.flamcogroup.com.

* based on 0.85 l/(kW*h)



FLAMCOMAT VESSELS

For sealed heating installations (acc. to EN12828) and chilled water (cooling) installations.

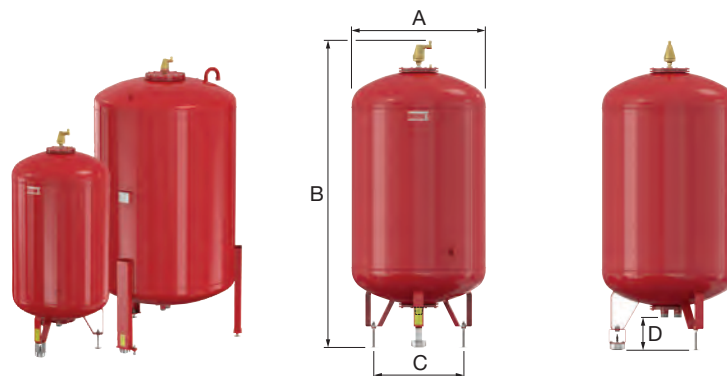
A multi function product which provides all the essential requirements for a sealed chilled or heated water system i.e. automatic expansion control, pressurisation, deaeration and make-up.

- Unique pressure step degassing process, even when the system is in equilibrium, by combination of pressure drop and application of patented PALL-ring technology.
- Replaceable butyl bladder.
- Pressureless.
- Flexible connections and hoses between pump unit and vessel to be ordered separately.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Vessels 100 - 1,000 litres: in accordance with EN13831 / 1,200 - 10,000 litres: in accordance with AD2000.
- Suitable for systems with a maximum flow temperature of 120 °C. Note: additional requirements can be placed on your central heating system above 110° C.
- Maximum temperature bladder: 70 °C.
- In accordance with European Pressure Equipment Directive 2014/68/EU and Machinery Directive 2006/42/EC.
- Red (RAL 3002) epoxy powder coating.

Flamcomat FG Main Vessels

Pressureless vessel without automat for the Flamcomat pump units.

- Delivered with Flexvent Super, height adjustable feet and weight-capacity sensor.



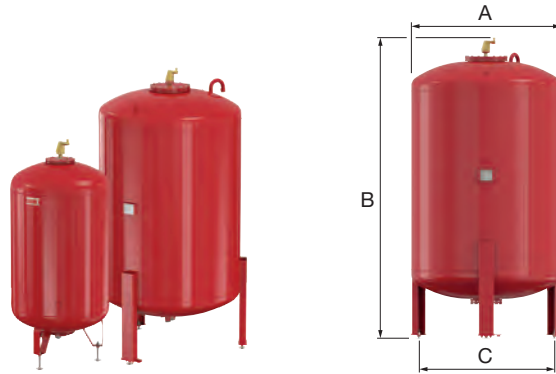
Type	Capacity [l]	Design pressure [PN]	Dimensions				Syst. conn.	Weight [kg]		Order Code
			A [mm]	B [mm]	C [mm]	D [mm]				
FG 100	100	PN 6	484	1050	360	150	G 1 1/2" M	35	1	17828
FG 200	200	PN 6	484	1560	360	150	G 1 1/2" M	31	1	17820
FG 300	300	PN 6	600	1596	450	185	G 1 1/2" M	41	1	17821
FG 400	400	PN 6	790	1437	610	185	G 1 1/2" M	62	1	17822
FG 500	500	PN 6	790	1587	610	185	G 1 1/2" M	70	1	17823
FG 600	600	PN 6	790	1737	610	185	G 1 1/2" M	77	1	17824
FG 800	800	PN 6	790	2144	610	185	G 1 1/2" M	92	1	17825
FG 1000	1000	PN 6	790	2493	610	185	G 1 1/2" M	106	1	17826
FG 1200	1200	PN 3	1000	2210	1060	170	G 1 1/2" M	291	1	17717
FG 1600	1600	PN 3	1000	2710	1060	170	G 1 1/2" M	346	1	17718
FG 2000	2000	PN 3	1200	2440	1265	220	G 1 1/2" M	431	1	17719
FG 2800	2800	PN 3	1200	3040	1265	225	G 1 1/2" M	516	1	17720
FG 3500	3500	PN 3	1200	3840	1265	225	G 1 1/2" M	626	1	17721
FG 5000	5000	PN 3	1500	3570	1570	225	G 1 1/2" M	1241	1	17722
FG 6500	6500	PN 3	1800	3500	1885	225	G 1 1/2" M	1711	1	17723
FG 8000	8000	PN 3	1900	3650	1985	225	G 1 1/2" M	1831	1	17724
FG 10000	10000	PN 3	2000	4050	2085	225	G 1 1/2" M	2026	1	17725




Flamcomat FB Auxiliary Vessels

Pressureless auxiliary vessel (more expansion volume, in combination with FG).

- Delivered with Flexvent Super and height adjustable feet.



Type	Capacity [l]	Design pressure [PN]	Dimensions			Syst. conn.	Weight [kg]		Order Code
			A [mm]	B [mm]	C [mm]				
FB 100	100	PN 6	484	1050	360	G 1 1/2" M	35	1	17829
FB 200	200	PN 6	484	1560	360	G 1 1/2" M	31	1	17830
FB 300	300	PN 6	600	1596	450	G 1 1/2" M	41	1	17831
FB 400	400	PN 6	790	1437	610	G 1 1/2" M	62	1	17832
FB 500	500	PN 6	790	1587	610	G 1 1/2" M	70	1	17833
FB 600	600	PN 6	790	1737	610	G 1 1/2" M	77	1	17834
FB 800	800	PN 6	790	2144	610	G 1 1/2" M	92	1	17835
FB 1000	1000	PN 6	790	2493	610	G 1 1/2" M	106	1	17836
FB 1200	1200	PN 3	1000	2210	1060	G 1 1/2" M	290	1	17767
FB 1600	1600	PN 3	1000	2710	1060	G 1 1/2" M	345	1	17768
FB 2000	2000	PN 3	1200	2440	1265	G 1 1/2" M	430	1	17769
FB 2800	2800	PN 3	1200	3040	1265	G 1 1/2" M	515	1	17770
FB 3500	3500	PN 3	1200	3840	1265	G 1 1/2" M	625	1	17771
FB 5000	5000	PN 3	1500	3570	1570	G 1 1/2" M	1240	1	17772
FB 6500	6500	PN 3	1800	3500	1885	G 1 1/2" M	1710	1	17773
FB 8000	8000	PN 3	1900	3650	1985	G 1 1/2" M	1830	1	17774
FB 10000	10000	PN 3	2000	4050	2085	G 1 1/2" M	2025	1	17775




Flamcomat insulation



Fleece insulation for Flamcomat FG main vessels and Flamcomat FB auxiliary vessels.

- Flamcomat insulation 100-1000L only for Flamcomat FB auxiliary vessels 100-1000L.
- Heating application only.
- Fire category B2 according to DIN 4102.
- Easy to install using a zipper.
- Insulation thickness: 50 mm.
- Colour: white-aluminium (RAL 9006).

Type		Order Code
Flamcomat insulation 100	1	18080
Flamcomat insulation 200	1	18081
Flamcomat insulation 300	1	18082
Flamcomat insulation 400	1	18083
Flamcomat insulation 500	1	18084
Flamcomat insulation 600	1	18085
Flamcomat insulation 800	1	18086
Flamcomat insulation 1000	1	18087
Flamcomat insulation 1200	1	18088
Flamcomat insulation 1600	1	18089
Flamcomat insulation 2000	1	18090
Flamcomat insulation 2800	1	18091
Flamcomat insulation 3500	1	18100
Flamcomat insulation 5000	1	18101
Flamcomat insulation 6500	1	18102
Flamcomat insulation 8000	1	18103
Flamcomat insulation 10000	1	18104

FLAMCOMAT STARTER G4 - PUMP UNITS

Flextronic

The Flextronic is a new control platform developed by Flamco for further optimising the performance of its automats and expanding their functionality. At the same time, Flamco brings (wireless) remote communication and data that enables preventative maintenance.

- Optimal connectivity with BMS, Modbus, BACnet via RS 485 and ethernet interface.
- Can be combined with Flamconnect Remote Service. (Please check your local sales office for availability.)
- Extensive data storage for online and offline analysis.
- 'Extended screen' operation via mobile or tablet device.
- Also suitable for existing automats (available as a retrofit kit).
- Three configurable potential free outputs.
- The user-friendly control unit displays all operating and error conditions in a comprehensible and convenient way.
- Advanced technology ensures lowest power consumption, long service life and easy maintenance.
- Operating modes: single (mono), automatic change-over or load dependent (duo) and combined operation.
- Microprocessor control, self-learning, with graphical display.
- 20 languages can be selected in the menu of the Flextronic.

Flamcomat Starter G4

For pressurisation, deaeration and topping up (optional) in sealed heating installations (acc. to EN12828) and chilled water (cooling) installations.

The Flamcomat Starter G4 is a pump-controlled, low-maintenance expansion unit that efficiently absorbs differential pressures in heating and cooling installations and effectively removes gas. After all, the formation of gas in the installation can cause dirt accumulation, corrosion and wear, leading to faults and a loss of efficiency. Investing in the Flamcomat Starter G4 means opting for certainty and flexibility. The Flamcomat Starter G4 has a number of automatic functions, for the filling procedure and balancing, temperature monitoring and leak detection.

- Simple commissioning.
- Automatic leakage detection.
- Automatic filling of vessel and system.
- If you have a unit with double pumps and valves balancing ensures that the runtime of the components is automatically and evenly distributed.
- Efficient operation and low power consumption.
- Suitable for Flamconnect Remote Service. (Please check your local sales office for availability.)
- Automatically performs volumetric control and automatic topping-up (optional) during the heating or cooling cycles.
- Integrated turbo degassing allows for very rapid degassing.
- The degassing function allows for continuous degassing if desired.
- Due to the hydraulic design of the Flamcomat Starter G4 and the connection sets the vessel can be positioned anywhere around the Flamcomat.
- The position of the second pump on a double pump Flamcomat Starter G4 can be positioned on either side of the Flamcomat.
- The Flamcomat Starter vessel is 70% efficient irrespective of the static height of the system.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Working temperature: 3 °C / 70 °C.
- Maximum system pressure: 10 bar.
- Design pressure: PN10.
- In accordance with Machinery Directive 2006/42/EC.

How a Flamcomat Starter G4 works

Cold

The automat contains a small amount of water. The automat is still at rest.

1. Warming up

The volume of water and the system pressure increases. The unit responds to this by opening the solenoid valve. Water flows into the vessel. The water in the vessel is de-aerated due to the drop in pressure.

2. Full power

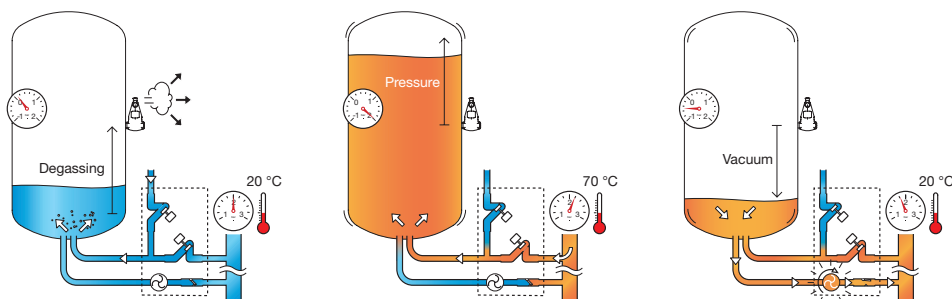
By storing an increasing amount of water in the tank, the automat keeps the system pressure almost constant. When the system has warmed up completely, the vessel will almost be to full capacity. The pressure in the vessel is rising to a maximum of 2 bar.

3. Cooling down

The volume of water and the system pressure decreases. The de-aerated water is pumped from the vessel back into the system. This restores the system pressure. Gas stays in the vessel because the pressure in the vessel is dropping during the pumping. Below the half of the vessel capacity, the pressure is dropping below zero (Vacuum).

Topping-up (optional)

If the water level in the vessel drops to a critical level, an appropriate amount of water will be refilled into the vessel from the water mains. This water will be de-aerated (by pressure drop in the vessel), before being pumped into the system.



Flamcomat Starter G4 pump units - Technical specifications

Type	Nominal voltage	Rated current [A]	Rated power [kW]	Noise level [dB]	Protection class of pump unit	Pump orientation
M02 Starter G4	230 V ~1 N PE 50 Hz	3.32	0.50	52	IP44	hor.
M10 Starter G4	230 V ~1 N PE 50 Hz	4.40	0.75	49	IP44	hor.
D02 Starter G4	230 V ~1 N PE 50 Hz	6.64	1.00	55	IP44	hor.
D10 Starter G4	230 V ~1 N PE 50 Hz	8.80	1.50	52	IP44	hor.

Flamcomat Starter G4 - Single Pump Control

- For the correct Flamcomat Starter G4 pump selection, see ('Flamcomat Starter G4 Pump Selection Graphs').
- Maximum system pressure: 10 bar.



Type	For boiler output [kW]	Working pressure [bar]	Dimensions L. x W. x H. [mm]	Vessel	Connection to System conn.	Water supply		Order Code
M02 G4 Starter	500 - 2300	2.0 - 3.0	550 x 230 x 915	G 1" M	G 1 1/4" F	Rp 1/2"	1	17997
M10 G4 Starter	900 - 4700	3.0 - 4.5	530 x 230 x 915	G 1" M	G 1 1/4" F	Rp 1/2"	1	17998



Flamcomat Starter G4 - Double Pump Control

- For the correct Flamcomat Starter G4 pump selection, see ('Flamcomat Starter G4 Pump Selection Graphs').
- Maximum system pressure: 10 bar.



Type	For boiler output [kW]	Working pressure [bar]	Dimensions L. x W. x H. [mm]	Vessel	Connection to System conn.	Water supply		Order Code
D02 G4 Starter	500 - 4400	2.0 - 3.0	600 x 480 x 970	G 1" M	G 1 1/4" F	Rp 1/2"	1	18000
D10 G4 Starter	900 - 2500	3.0 - 4.5	600 x 480 x 970	G 1" M	G 1 1/4" F	Rp 1/2"	1	18001



FLAMCOMAT STARTER VESSELS

For sealed heating installations (acc. to EN12828) and chilled water (cooling) installations.

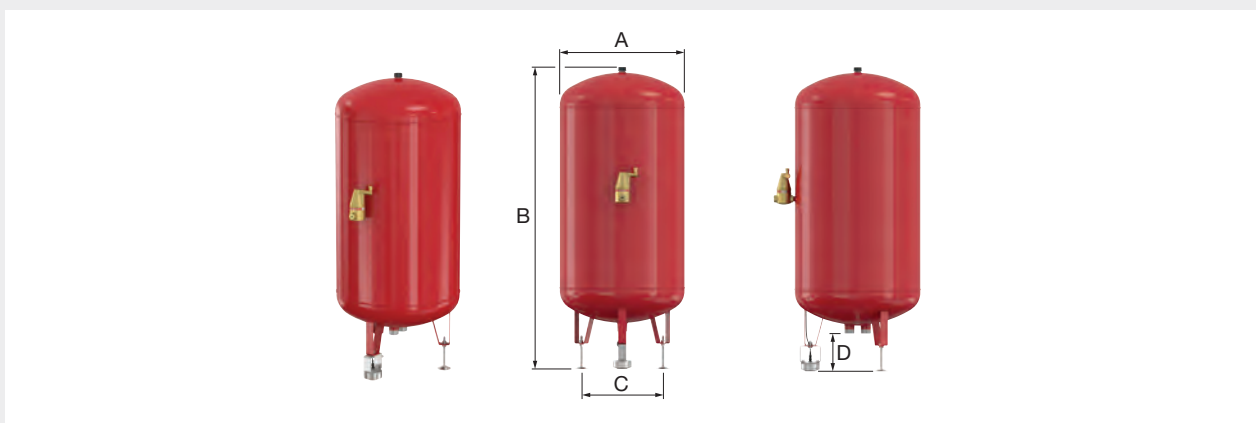
A multi function product which provides all the essential requirements for a sealed chilled, solar or heated water system i.e. automatic expansion control, pressurisation, deaeration and make-up.


- Unique pressure step degassing process, even when the system is in equilibrium, by combination of pressure drop.
- Flexible connections and hoses between pump unit and vessel to be ordered separately.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Vessels 100 - 600 litres: in accordance with EN13831.
- Suitable for systems with a maximum flow temperature of 120 °C.
- In accordance with European Pressure Equipment Directive 2014/68/EU and Machinery Directive 2006/42/EC.
- Red (RAL 3002) epoxy powder coating.

Flamcomat Starter Main Vessels

Pressureless vessel without automat for the Flamcomat Starter pump units.

- Delivered with deaeration unit, height adjustable feet and weight-capacity sensor.



Type	Capacity [l]	Design pressure [PN]	Dimensions				Syst. conn.	Weight [kg]		Order Code
			A [mm]	B [mm]	C [mm]	D [mm]				
Flamcomat Starter 100	100	PN 6	484	904	360	171	G 1 1/2" M	27	1	18003
Flamcomat Starter 200	200	PN 6	600	1081	450	180	G 1 1/2" M	42	1	18004
Flamcomat Starter 300	300	PN 6	600	1451	450	180	G 1 1/2" M	56	1	18005
Flamcomat Starter 400	400	PN 6	790	1293	610	215	G 1 1/2" M	76	1	18006
Flamcomat Starter 600	600	PN 6	790	1653	610	215	G 1 1/2" M	97	1	18007



ACCESSORIES FOR FLAMCOMAT

Selection Table for Accessoires Flamcomat

Type	Order Code	Flamcomat (G3)		Flamcomat G4		Flamcomat Starter		Flamcomat Starter G4	
		Pump units	Vessels	Pump units	Vessels	Pump units	Vessels	Pump units	Vessels
Drain set	17651	all	all	-	-	-	-	-	-
Drain set	17653	all	all	all	all	-	-	-	-
Ball valve DN 25 without adapter (set)	17660	MM - M80, DM - D80	FG 100 - 10000	all	FG 100 - 10000	all	all	all	all
Ball valve DN 32 without adapter (set)	17661	M100 - M130, D100 - D130	FG 100 - 10000	-	-	-	-	-	-
Ball valve DN 32 with adapter	17738	-	FB 100 - 10000	-	FB 100 - 10000	-	-	-	-
Flexible connection 1	17610	MM - M80, DM - D80	FG & FB 100 - 1600	all	FG & FB 100 - 1600	all	all	all	all
Flexible connection 2	17611	MM - M80, DM - D80	FG & FB 2000 - 5000	all	FG & FB 2000 - 5000	-	-	-	-
Flexible connection 3	17612	MM - M80, DM - D80	FG & FB 6500 - 10000	all	FG & FB 6500 - 10000	-	-	-	-
Flexible connection 5	17755	M100 - M130, D100 - D130	FG & FB 100 - 1000	-	-	-	-	-	-
Flexible connection 6	17756	M100 - M130, D100 - D130	FG & FB 1200 - 5000	-	-	-	-	-	-
Flexible connection 7	17757	M100 - M130, D100 - D130	FG & FB 6500 - 10000	-	-	-	-	-	-
Sensor connecting group 1	17615	MM - M80, DM - D80	FG & FB 100 - 1600	all	FG & FB 100 - 1600	-	-	-	-
Sensor connecting group 2	17616	MM - M80, DM - D80	FG & FB 2000 - 5000	all	FG & FB 2000 - 5000	-	-	-	-
Sensor connecting group 3	17617	MM - M80, DM - D80	FG & FB 6500 - 10000	all	FG & FB 6500 - 10000	-	-	-	-
Sensor connecting group 5	17814	M100 - M130, D100 - D130	FG & FB 100 - 1000	-	-	-	-	-	-
Sensor connecting group 6	17815	M100 - M130, D100 - D130	FG & FB 1200 - 5000	-	-	-	-	-	-
Sensor connecting group 7	17816	M100 - M130, D100 - D130	FG & FB 6500 - 10000	-	-	-	-	-	-
Auxiliary vessel connection	17647	-	all	-	all	-	-	-	-
Refill connection set	18015	standard	-	standard	-	all	all	all	all
T-piece	17664	-	FB 100 - 10000	-	FB 100 - 10000	-	-	-	-
Vessel connection type 4	17730	MM - M80, DM - D80	FB 100 - 10000	all	FB 100 - 10000	-	-	-	-
Vessel connection type 5	17731	M100 - M130, D100 - D130	FB 100 - 10000	-	-	-	-	-	-
Prescor BFP BA 1/2 M	27400	all	FG & FB 100 - 3500	all	FG & FB 100 - 3500	all	all	all	all
Prescor BFP BA 3/4 M	27402	all	FG & FB 100 - 3500	all	FG & FB 100 - 3500	all	all	all	all
Prescor BFP BA K15 Unit	27406	all	FG & FB 100 - 3500	all	FG & FB 100 - 3500	all	all	all	all
Backflow preventer BA	17736	all	FG & FB 100 - 3500	all	FG & FB 100 - 3500	all	all	all	all
Min. pressure switch	27459	all	all	all	all	all	all	all	all
Max. pressure switch	27458	all	all	all	all	all	all	all	all
Bimetallic temperature switch	17659	all	all	all	all	all	all	all	all
Impuls output water meter	17739	all	-	all	-	all	-	all	-
Surge vessel type M	17732	all	all	all	all	all	all	all	all
Surge vessel type L	17733	all	all	all	all	all	all	all	all

Type	Order Code	Flamcomat (G3)		Flamcomat G4		Flamcomat Starter		Flamcomat Starter G4	
		Pump units	Vessels	Pump units	Vessels	Pump units	Vessels	Pump units	Vessels
Flamcomat M10 Reducer kit	17503	M10	-	M10	-	-	-	-	-
Easycontact	23649	all	all	*	-	all	all	*	-
Diaphragm rupture sensor	22386	all	all	all	all	-	-	-	-
Analogue signalling	17802	all	all	*	-	all	all	*	-
SD card module	17803	all	all	*	-	all	all	*	-
SPC Ext. Module Master + Slave	17500	all	-	*	-	-	-	-	-
Extra Slave Module	17501	all	-	*	-	-	-	-	-


* Standard controller functionality (by USB).

Drain Sets



Drain off module for Flamcomat with SPC controller. Prevents against overfilling of main vessel when the expansion volume is temporarily larger than the volume of the vessel. Available with water meter or pulse water meter for a flow (Kvs) of 16 or 20 m³/h. The versions with a pulse water meter allow the monitoring of the flow rate by the SPC controller.

- Nominal pressure: PN 10.
- Working temperature flow: 3 °C / 105 °C.
- Working temperature backflow: 3 °C / 70 °C
- Electricity supply: 230V 1Ph N PE 50Hz ca. 10W.
- Applicable with controller: SPC-lw respectively -hw.

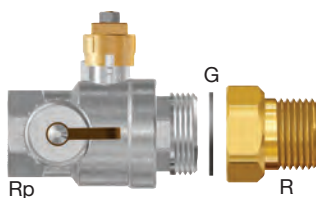
Type		Order Code
Drain set with water meter pulse large - 20 m³/h	1	17651
Drain set with water meter large - 20 m³/h	1	17653


Drain sets - Selection Table Flamcomat

Type	Order Code	Flamcomat (G3)		Flamcomat G4		Flamcomat Starter		Flamcomat Starter G4	
		Pump units	Vessels	Pumps units	Vessels	Pumps units	Vessels	Pumps units	Vessels
Drain set	17651	all	all	-	-	-	-	-	-
Drain set	17653	all	all	all	all	-	-	-	-

Ball Valve

With drain connection, PN 16, 120 °C.



Type	Connection			Drain connection		Order Code
	Rp	G	R			
Ball valve DN 32 with adapter	1 1/4"	1 1/2"	1 1/4"	G 3/4"	1	17738
Ball valve DN 25 without adapter (set)	1"	1 1/4"	-	G 3/4"	2	17660
Ball valve DN 32 without adapter (set)	1 1/4"	1 1/2"	-	G 3/4"	2	17661


Ball Valve - Selection Table Flamcomat

Type	Order Code	Flamcomat (G3)		Flamcomat G4		Flamcomat Starter		Flamcomat Starter G4	
		Pump units	Vessels	Pumps units	Vessels	Pumps units	Vessels	Pumps units	Vessels
Ball valve DN 32 with adapter	17738	-	FB 100 - 10000	-	FB 100 - 10000	-	-	-	-
Ball valve DN 25 without adapter (set)	17660	MM - M80, DM - D80	FG 100 - 10000	all	FG 100 - 10000	all	all	all	all
Ball valve DN 32 without adapter (set)	17661	M100 - M130, D100 - D130	FG 100 - 10000	-	-	-	-	-	-

Flexible Connecting Kit (set of 2)

For connecting the Flamcomat main or auxiliary vessel to the pump-unit, face sealed female, with ball valve and drainage valve.



Type	Connection		Length [mm]	Weight [kg]		Order Code
	Vessel	Pump-unit				
Flexible connection 1	G 1 1/2" F	G 1" F	940	1.4	1	17610
Flexible connection 2	G 1 1/2" F	G 1" F	1240	1.5	1	17611
Flexible connection 3	G 1 1/2" F	G 1" F	1440	1.6	1	17612
Flexible connection 5	G 1 1/2" F	G 1 1/2" M	704	5.0	1	17755
Flexible connection 6	G 1 1/2" F	G 1 1/2" M	954	5.5	1	17756
Flexible connection 7	G 1 1/2" F	G 1 1/2" M	1204	6.5	1	17757


Flexible Connecting Kit - Selection Table Flamcomat

Type	Order Code	Flamcomat (G3)		Flamcomat G4		Flamcomat Starter		Flamcomat Starter G4	
		Pump units	Vessels	Pumps units	Vessels	Pumps units	Vessels	Pumps units	Vessels
Flexible connection 1	17610	MM - M80, DM - D80	FG & FB 100 - 1600	all	FG & FB 100 - 1600	all	all	all	all
Flexible connection 2	17611	MM - M80, DM - D80	FG & FB 2000 - 5000	all	FG & FB 2000 - 5000	-	-	-	-
Flexible connection 3	17612	MM - M80, DM - D80	FG & FB 6500 - 10000	all	FG & FB 6500 - 10000	-	-	-	-
Flexible connection 5	17755	M100 - M130, D100 - D130	FG & FB 100 - 1000	-	-	-	-	-	-
Flexible connection 6	17756	M100 - M130, D100 - D130	FG & FB 1200 - 5000	-	-	-	-	-	-
Flexible connection 7	17757	M100 - M130, D100 - D130	FG & FB 6500 - 10000	-	-	-	-	-	-

Gas Sensor Connecting Group

For connecting the Flamcomat main vessel to the pump unit, face sealed female, with ball valve and drainage valve. Includes a deaeration sensor for signalling the control unit to continue or stop active deaeration.



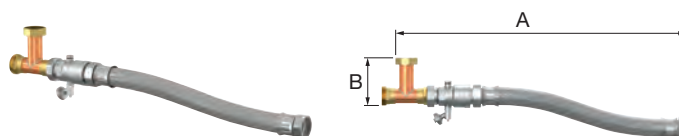
Type	Connection to		Weight [kg]		Order Code
	Vessel	Pump-unit			
Sensor connecting group 1	G 1 1/2" F	G 1" F	4.6	1	17615
Sensor connecting group 2	G 1 1/2" F	G 1" F	4.8	1	17616
Sensor connecting group 3	G 1 1/2" F	G 1" F	4.8	1	17617
Sensor connecting group 5	G 1 1/2" F	G 1 1/2" M	5.0	1	17814
Sensor connecting group 6	G 1 1/2" F	G 1 1/2" M	5.5	1	17815
Sensor connecting group 7	G 1 1/2" F	G 1 1/2" M	6.5	1	17816


Gas Sensor Connecting Group - Selection Table Flamcomat

Type	Order Code	Flamcomat (G3)		Flamcomat G4		Flamcomat Starter		Flamcomat Starter G4	
		Pump units	Vessels	Pumps units	Vessels	Pumps units	Vessels	Pumps units	Vessels
Sensor connecting group 1	17615	MM - M80, DM - D80	FG & FB 100 - 1600	all	FG & FB 100 - 1600	-	-	-	-
Sensor connecting group 2	17616	MM - M80, DM - D80	FG & FB 2000 - 5000	all	FG & FB 2000 - 5000	-	-	-	-
Sensor connecting group 3	17617	MM - M80, DM - D80	FG & FB 6500 - 10000	all	FG & FB 6500 - 10000	-	-	-	-
Sensor connecting group 5	17814	M100 - M130, D100 - D130	FG & FB 100 - 1000	-	-	-	-	-	-
Sensor connecting group 6	17815	M100 - M130, D100 - D130	FG & FB 1200 - 5000	-	-	-	-	-	-
Sensor connecting group 7	17816	M100 - M130, D100 - D130	FG & FB 6500 - 10000	-	-	-	-	-	-

Auxiliary Vessel Connection Flamcomat

Connection set including T-piece PN10, hose and a block & bleed valve for easy installation of a Flamcomat FB auxiliary vessel. Use the pump connection from the FG main vessel for installing a FB auxiliary vessel with the connection set.



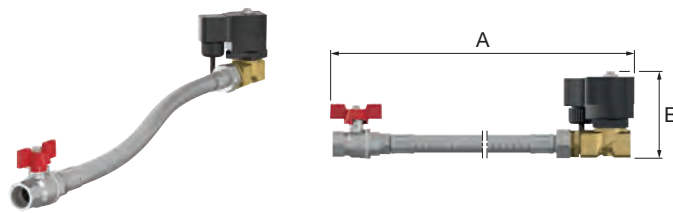
Type	Connection		Dimensions		Weight [kg]		Order Code
	Flamcomat FG	Flamcomat FB	A [mm]	B [mm]			
Auxiliary vessel connection Flamcomat	G 1 1/2" F	G 1 1/2" F	710	105	3.2	1	17647


Auxiliary vessel connection - Selection Table Flamcomat

Type	Order Code	Flamcomat (G3)		Flamcomat G4		Flamcomat Starter		Flamcomat Starter G4	
		Pump units	Vessels	Pumps units	Vessels	Pumps units	Vessels	Pumps units	Vessels
Auxiliary vessel connection Flamcomat	17647	-	all	-	all	-	-	-	-

Refill Connection Set Flamcomat Starter

For flexible connected and controlled refill supply to the Flamcomat Starter pump.



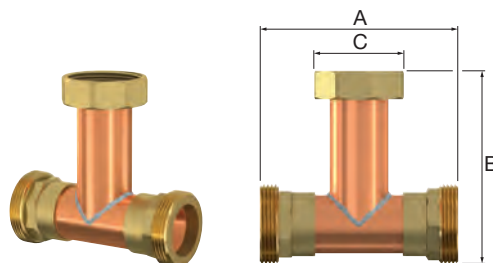
Type	Connection to the pump unit	Dimensions		Weight [kg]		Order Code
		A [mm]	B [mm]			
Refill connection set	G 1/2" F	605	86	0.8	1	18015


Refill Connection Set - Selection Table Flamcomat

Type	Order Code	Flamcomat (G3)		Flamcomat G4		Flamcomat Starter		Flamcomat Starter G4	
		Pump units	Vessels	Pumps units	Vessels	Pump units	Vessels	Pump units	Vessels
Refill connection set	18015	standard	-	standard	-	all	all	all	all

T-piece

T-piece PN 10 for an easy installation of a Flamcomat FB auxiliary vessel. Use the pump connection from the FG main vessel for installing an FB auxiliary vessel with the T-piece.



Type	Dimensions			Weight [kg]		Order Code
	A [mm]	B [mm]	C [mm]			
T-Piece G 1 1/2"	120	105	52	0.6	1	17664

T-Piece - Selection Table Flamcomat


Type	Order Code	Flamcomat (G3)		Flamcomat G4		Flamcomat Starter		Flamcomat Starter G4	
		Pump units	Vessels	Pumps units	Vessels	Pumps units	Vessels	Pumps units	Vessels
T-Piece	17664	-	FB 100 - 10000	-	FB 100 - 10000	-	-	-	-

Rotating Connection, Face Sealed

Vessel connection pair for Flamcomat FB.

- Rotatable connector, front side sealed.



Type	Nom.	Connection to		Weight [kg]		Order Code
		Vessel	Pump			
Vessel connection type 4	DN 25	G 1 1/2" F	R 1"	0.4	1	17730
Vessel connection type 5	DN 32	G 1 1/2" F	R 1 1/4"	0.5	1	17731

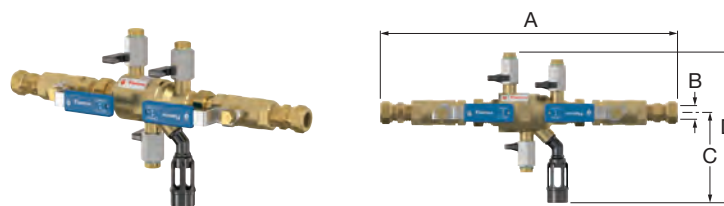
Rotating Connection, Face Sealed - Selection Table Flamcomat


Type	Order Code	Flamcomat (G3)		Flamcomat G4		Flamcomat Starter		Flamcomat Starter G4	
		Pump units	Vessels	Pumps units	Vessels	Pumps units	Vessels	Pumps units	Vessels
Vessel connection type 4	17730	MM - M80, DM - D80	FB 100 - 10000	all	FB 100 - 10000	-	-	-	-
Vessel connection type 5	17731	M100 - M130, D100 - D130	FB 100 - 10000	-	-	-	-	-	-

Prescor BFP BA

Backflow preventer Prescor BFP type BA suitable for installations with liquid class 4.

- Low pressure drop.
- Lowest sound class: ≤ 20 dB(A) according to DIN-52 218 Group I.
- Easy to install both horizontally and vertically.
- Provided with strainer.
- Smallest in its class.
- Complete set.
- Material: brass, SST, plastic and EPDM.
- Working temperature: 1 °C / 65 °C.
- Nominal design pressure: PN 10.



Type	DN (syst.)	Connection (B)	Dimensions			Vessel capacity [l]	Ball valves (2x)	Weight [kg]		Order Code
			A [mm]	C [mm]	D [mm]					
Prescor BFP BA 1/2 M	15	G 1/2" M	171	105	175	≤ 3500	-	0,83	1	27400
Prescor BFP BA G 3/4 M Unit	15	G 3/4" M	288	105	175	≤ 3500	•	1,46	1	27402
Prescor BFP BA K15 Unit	15	K 15	351	105	175	≤ 3500	•	1,52	1	27406



Prescor BFP BA - Selection Table Flamcomat


Type	Order Code	Flamcomat (G3)		Flamcomat G4		Flamcomat Starter		Flamcomat Starter G4	
		Pump units	Vessels	Pumps units	Vessels	Pumps units	Vessels	Pumps units	Vessels
Prescor BFP BA ½ M	27400	all	FG & FB 100 - 3500	all	FG & FB 100 - 3500	all	all	all	all
Prescor BFP BA G ¾ M Unit	27402	all	FG & FB 100 - 3500	all	FG & FB 100 - 3500	all	all	all	all
Prescor BFP BA K15 Unit	27406	all	FG & FB 100 - 3500	all	FG & FB 100 - 3500	all	all	all	all

Backflow preventer BA



Backflow preventer BA suitable for pump controlled pressurisation units for heating and chilled water (cooling) installations.

- Including strainer.
- Maximum working pressure: 10 bar.
- Maximum working temperature: 65 °C.

Type	Connection	Vessel capacity [l]	K _{vs} value * [m³/h]	Weight [kg]		Order Code
Backflow preventer	Rp 1/2" - R 1/2"	> 3500	3.5	0.6	1	17736


* The K_{vs} value is the K_v value in the fully opened position.

Backflow preventer BA - Selection Table Flamcomat

Type	Order Code	Flamcomat (G3)		Flamcomat G4		Flamcomat Starter		Flamcomat Starter G4	
		Pump units	Vessels	Pumps units	Vessels	Pumps units	Vessels	Pumps units	Vessels
Backflow preventer	17736	all	FG & FB 100 - 3500	all	FG & FB 100 - 3500	all	all	all	all

Pressure Safety Switch



Type	Connection ["]		Order Code
Minimum pressure switch	G 1/2"	1	27459
Maximum pressure switch	G 1/2"	1	27458

Pressure Safety Switch - Selection Table Flamcomat

Type	Order Code	Flamcomat (G3)		Flamcomat G4		Flamcomat Starter		Flamcomat Starter G4	
		Pump units	Vessels	Pumps units	Vessels	Pumps units	Vessels	Pumps units	Vessels
Minimum pressure switch	27459	all	all	all	all	all	all	all	all
Maximum pressure switch	27458	all	all	all	all	all	all	all	all

Bimetallic Temperature Switch




Electromechanical switch with fixed switching temperature of 70 °C.

Flamcomat: Reaching 70 °C is detected as an error and is stored in the error memory. When this temperature is reached the temperature switch prevents the system from degassing until the temperature falls below 70 °C again.

M-K automats: Reaching 70 °C is detected as an error and is stored in the error memory.

- Maximum working pressure: 25 bar.
- Working temperature: 3 °C/ 95 °C.
- Switching point: 70 °C.
- Applicable with controller: SPC-lw respectively -hw.

Type		Order Code
Bimetallic Temperature Switch	1	17659

Bimetallic Temperature Switch - Selection Table Flamcomat

Type	Order Code	Flamcomat (G3)		Flamcomat G4		Flamcomat Starter		Flamcomat Starter G4	
		Pump units	Vessels	Pumps units	Vessels	Pumps units	Vessels	Pumps units	Vessels
Bimetallic Temperature Switch	17659	all	all	all	all	all	all	all	all

Impulse Output Water Meter



- PN 10, 90 °C.
- 50 Hz.

Type	Features	Length [mm]		Order Code
Impulse output water meter	1 impulse/10 litres	80	1	17739

Impulse Output Water Meter - Selection Table Flamcomat


Type	Order Code	Flamcomat (G3)		Flamcomat G4		Flamcomat Starter		Flamcomat Starter G4	
		Pump units	Vessels	Pumps units	Vessels	Pumps units	Vessels	Pumps units	Vessels
Impulse output water meter	17739	all	-	all	-	all	-	all	-

Diaphragm Rupture Sensor

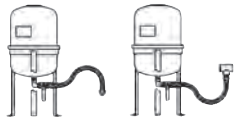
Remote monitoring.


- Can be integrated at a later date.



Type	Control unit		For automat					Order Code
	SCU	SPC	M-K/C	M-K/U	Flamcomat	Flamcomat Starter		
Diaphragm rupture sensor	-	✓	-	✓	✓	-	1	22386

Surge Vessel (PN 6)



Type	Capacity [l]	Dimensions		Syst. conn.	Weight [kg]		Order Code
		Ø [mm]	H. [mm]				
Surge vessel type M	18	286	600	1/2"	8.5	1	17732
Surge vessel type D	18	286	600	1 1/4"	10	1	17733

Surge Vessel (PN 6) - Selection Table Flamcomat


Type	Order Code	Flamcomat (G3)		Flamcomat G4		Flamcomat Starter		Flamcomat Starter G4	
		Pump units	Vessels	Pumps units	Vessels	Pumps units	Vessels	Pumps units	Vessels
Surge vessel type M	17732	all	all	all	all	all	all	all	all
Surge vessel type D	17733	all	all	all	all	all	all	all	all

Flamcomat M10 Reducer kit



For use in combination with a Flamcomat M10 pump automat in installations where a higher working pressure is needed but system volume is relative small.

- Automat capacity reduction by means of an installable reduction ring (Hv10 or Hv15).
- Can be used in combination with a Flamcomat M10 G3/G4 produced on the 1st of November 2019 or later.

Type		Order Code
Flamcomat M10 Reducer kit	1	17503

Flamcomat M10 Reducer kit - Selection Table Flamcomat

Type	Order Code	Flamcomat (G3)		Flamcomat G4		Flamcomat Starter		Flamcomat Starter G4	
		Pump units	Vessels	Pumps units	Vessels	Pumps units	Vessels	Pumps units	Vessels
Flamcomat M10 Reducer kit	17503	M10	-	M10	-	-	-	-	-

Flamcomat kit 110 °C

When the temperature of a heating system rises to above 110 °C, there is a danger of overheating as a result of steam formation or overheated water.

The Flamcomat G4 with Flextronic is Flamco's first expansion automat that can automatically switch off above the temperature limit. It can also supply a potential free signal that can be used to interrupt the central heating installation, when the system pressure drops below safety limits. By doing so, you can guarantee a safe situation for both people and equipment.

The system naturally complies with the European standards EN12952 and EN12953.

In order to be able to use the 110 °C mode, you will need a temperature switch and a minimum pressure limiter, which have been made available as an easy to install kit.


Pre-requisites:

- Flamcomat from the G3 and G4 generation.
- Ball valve (set) DN 25.
- VB intermediate vessel.

Product features:

- Suitable for addition of glycol-based anti-freeze up to 50%.
- Maximum system pressure: 16 bar.
- Maximum working temperature of components: 70 °C.
- Length of cable: 2 meter.



Type	System	Connection to Flamcomat	Switches		Order Code
Flamcomat kit 110 °C	G 1 1/4" F	G 1" M	G 1/2" M	1	17504

Flamcomat kit 110 °C - Selection Table Flamcomat


Type	Order Code	Flamcomat (G3)		Flamcomat G4		Flamcomat Starter		Flamcomat Starter G4	
		Pump units	Vessels	Pumps units	Vessels	Pumps units	Vessels	Pumps units	Vessels
Flamcomat kit 110 °C	17504	MM - M80, DM - D80	-	all	-	-	-	-	-

OPTIONAL CONTROL UNITS

Easycontact



Remote volt free failure contacts for pressure, level and thermal motor protection.

Type	Control unit		For automat					Order Code
	SCU	SPC	M-K/C	M-K/U	Flamco-mat	Flamcomat Starter		
Easycontact	✓	✓	✓	✓	✓	✓	1	23649

Analogue Signalling



For analogue signalling (0-10 V) of vessel volume (0-100%) and system pressure (0-16 bar).

- Internal.
- Build-in afterwards is possible.
- Setting up data processing and visualisation is the responsibility of the installer.


Type	Control unit		For automat					Order Code
	SCU	SPC	M-K/C	M-K/U	Flamco-mat	Flamcomat Starter		
Analogue signalling	-	✓	-	✓	✓	✓	1	17802

SD Card Module



External SD Card module used for:

- Saving of SPC parameter files.
- Downloading of files via SD Card to PC.
- Transmission of the files to Service Centre.
- Firmware updates by the service support.


Type	Control unit		For automat					Order Code
	SCU	SPC	M-K/C	M-K/U	Flamco-mat	Flamcomat Starter		
SD card module	-	✓	-	✓	✓	✓	1	17803

SPC Extension module



Connection module for communication between two controls.

- For SPC control.
- Makes linked operating options possible (Configuration and Commissioning by Flamco Service Only).

Type	Control unit		For automat					Order Code
	SCU	SPC	M-K/C	M-K/U	Flamco-mat	Flamcomat Starter		
SPC Extension modules Master + Slave	-	✓	-	✓	✓	-	1	17500
Extra Slave Module	-	✓	-	✓	✓	-	1	17501

TOP UP DEVICES

Flexcon PA AutoFill pressurisation assistant

The Flamco Flexcon PA AutoFill pressurisation assistant is used to monitor heating systems and to assist the installer and end-user with pressure maintenance. The Flexcon PA AutoFill logs and alerts when pressurisation problems occur and assists in (or control) topping-up the heating system to the correct working pressure. It can also advise on expansion vessel life expectancy without disconnecting the vessel and you can configure monitoring on maintenance intervals for third party components. The Flexcon PA AutoFill comes with a smartphone/tablet application for advanced and complete delivery of system status, guided maintenance advice and an automatic filling device for complete automation of topping-up and leak detection of heating systems.

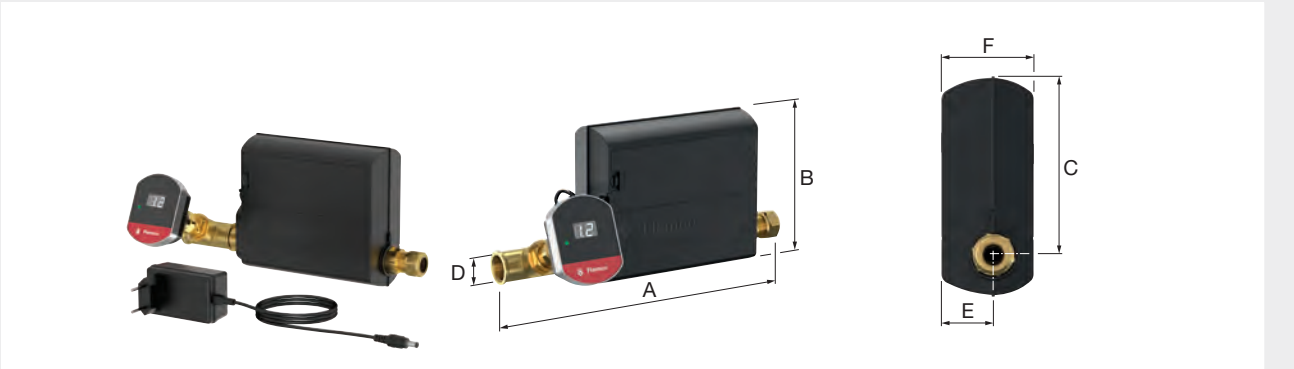
Advantages:


- Eliminates unscheduled service call-outs for nuisance failures caused by pressure loss in the system, increasing comfort for end customers.
- Monitoring of fill pressure, safety valve discharges, expansion vessel end of life span and scheduled maintenance intervals of any components.
- The Flexcon PA AutoFill set includes automatic topping-up and leak detection functionality.
- The mobile app enables end customers to share event logs with their installer for remote support.
- The Flexcon PA AutoFill gives the installer eyes on site to see how the installation's pressurisation is functioning.

Specifications:

- Suitable for heating systems with expansion vessels with a system volume up to 40,000 l and for addition of glycol-based anti-freeze up to 50%.
- Can be combined with Flamconnect Remote Service.
- Power supply: 12V AC/DC adapter.
- Working system temperature: 0 °C / 90 °C.
- Working ambient temperature: 0 °C / 40 °C.
- Working system pressure up to 3.5 bar.
- Flow rate (filling): 0.7 m³ / hour.
- Design pressure: PN 6.

The Flexcon PA AutoFill set includes: Flexcon PA (G ¼" M), AutoFill unit (G ½" M), t-piece (G ½" F), straight coupling (G ½" F), shut-off valve (¼" x ½"), 2x compression nut/ring (15 mm).



Type	Connection (D)	Dimensions						Order Code
		A [mm]	B [mm]	C [mm]	E [mm]	F [mm]		
Flexcon PA AutoFill	G ½" - 15 mm (2x)	263	136	109.5	32	57	1	23761



Flexcon PA pressurisation assistant

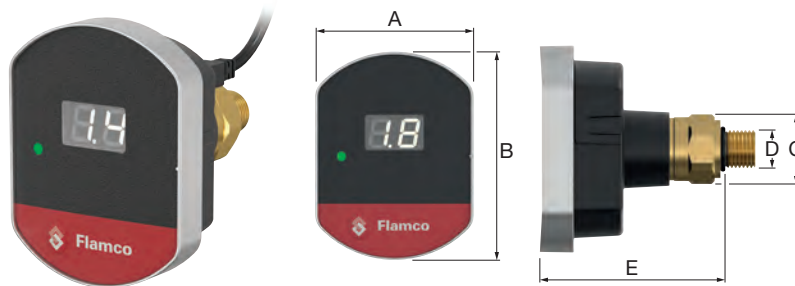
The Flamco Flexcon PA pressurisation assistant is used to monitor heating systems and to assist the installer and end-user with pressure maintenance. The Flexcon PA logs and alerts when pressurisation problems occur and assists in (or control) topping-up the heating system to the correct working pressure. It can also advise on expansion vessel life expectancy without disconnecting the vessel and you can configure monitoring on maintenance intervals for third party components. The Flexcon PA comes with a smartphone/tablet application for advanced and complete delivery of system status and guided maintenance advice.


Advantages:

- Eliminates unscheduled service call-outs for nuisance failures caused by pressure loss in the system, increasing comfort for end customers.
- Monitoring of fill pressure, safety valve discharges, expansion vessel end of life span and scheduled maintenance intervals of any components.
- The mobile app enables end customers to share event logs with their installer for remote support.
- The Flexcon PA gives the installer eyes on site to see how the installation's pressurisation is functioning.

Specifications:

- Suitable for heating systems up to 40,000 l and for addition of glycol-based anti-freeze up to 50%.
- Power supply: 5V AC/DC adapter.
- Working system temperature: 0 °C / 90 °C.
- Working ambient temperature: 0 °C / 40 °C.
- Working system pressure up to 3.5 bar.
- Flow rate (filling): 0.7 m³ / hour.
- Design pressure: PN 6.



Type	Connection (D)	Dimensions					Order Code
		A [mm]	B [mm]	C [mm]	E [mm]		
Flexcon PA	G 1/4"	54	71	22	63	1	23760



Füilly

PG = 6040



Automatic filling valve for heating systems. The Füilly ensures a constant system pressure during the bleeding process.

- Type RM 8 (8 l/min).
- With filter, non-return valve, 6 bar manometer, 1/2" hose fitting and worm drive hose clip with 3/4" locking nut.
- Suitable for primary pressure up to 10 bar.
- Regulates between 0.4 - 3.0 bar (1.5 bar factory set).
- Maximum working temperature: 70 °C.
- Maximum glycol content: 50%.

Type	Connection		Weight [kg]		Order Code
	A	B (to hose)			
Füilly	1/2"	1/2"	0.48	1	M59092

Prescofiller



Domestic heating system filling device with safety valve and pressure gauge 0 - 4 bar.

- Prescomano and ball valve are supplied separately from the fill and drain tap, so that mounting in all positions is possible.
- Minimum/Maximum working temperature: -10 °C / 120 °C.
- Peak load: 140 °C.

Type	Set pressure [bar]	Connection		Heating capacity [kW]		Order Code
		Inlet	Outlet			
Prescofiller	3.0	1/2" M	1/2" F	125	1	27685

Manofiller



Domestic heating system filling device with pressure gauge 0 - 4 bar.

- Filling device suitable for mounting on one of the radiator connections.
- Especially interesting for situations where the pressure gauge is mounted on or at the boiler, but the filling of the installation is done in another place.
- Mounting in all positions possible.
- Minimum/Maximum working temperature: -10 °C / 120 °C.
- Peak load: 140 °C.

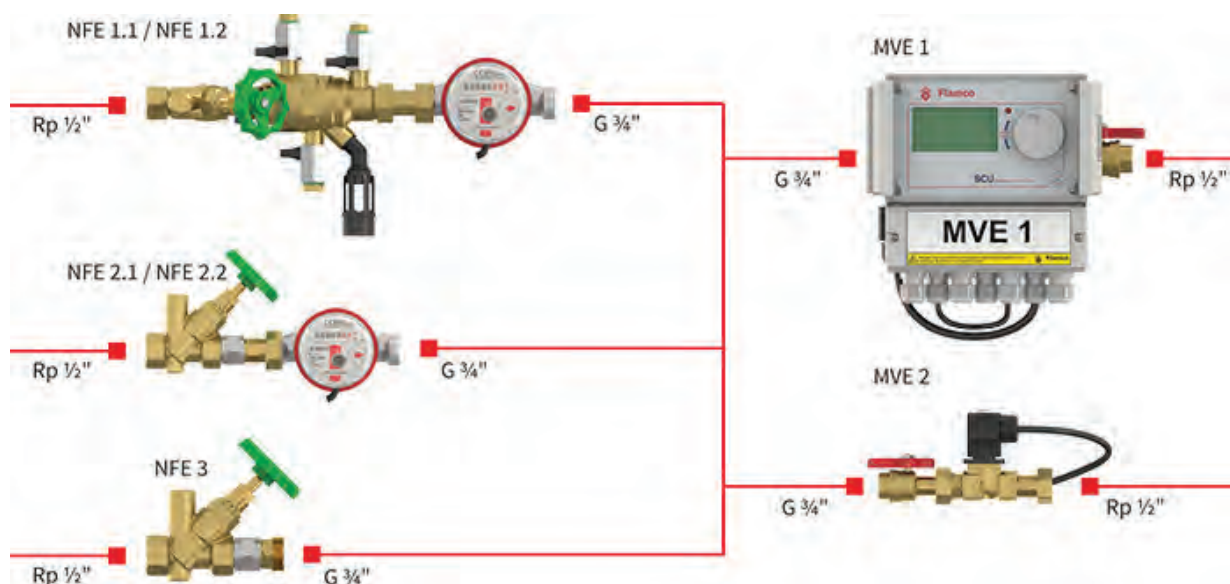
Type	Connection ["]		Order Code
Manofiller	1/2" M	1	27097

Uni-Fill Filling Sets



Type	System connection	Max. working pressure [bar]		Order Code
Uni-Fill Filling Loop + Pressure Reducing Valve (auto)	15 mm / 1/2"	10	1	27306
Uni-Fill P Filling Loop	15 mm / 1/2"	10	1	27305

TOPPING UP - MVE/NVE




MVE 1 Direct Pressurisation Control



Automatic topping-up direct from water mains expansion automats (signal controlled) or self supported with pressure sensor.

- With digital control, pressure sensor and ball valve.
- Maximum working pressure: 10 bar.
- Maximum working temperature: 90 °C.
- Electricity supply: 230 V / 50 Hz.


Type	L. [mm]	Connection to		Weight [kg]		Order Code
		Potable water	System			
MVE 1	210	G $\frac{1}{2}$ " / 15mm	G $\frac{1}{2}$ " / 15mm	9	1	23785

MVE 2 Solenoid Valve Unit



Solenoid valve units for systems with expansion automats with SPC / SCU-control or other 230 V refill signal.

- With ball valve.
- Maximum working pressure: 10 bar.
- Maximum working temperature: 90 °C.


Type	L. [mm]	Connection to		Weight [kg]		Order Code
		Potable water	System			
MVE 2	160	G $\frac{1}{2}$ " / 15mm	G $\frac{1}{2}$ " / 15mm	2	1	23786

NFE 1 Top-up Unit



Used for direct top up from potable water supply according to DIN 1988 and DIN EN 1717.

- Consists of a backflow preventer, water meter, ball valve and non-return valve.
- Maximum working pressure: 10 bar.
- Maximum working temperature: 65 °C.

Type	L. [mm]	Connection to		K _{vs} value ** (Backflow-preventer) [m³/h]	Weight [kg]		Order Code
		Potable water	System				
NFE 1.1	300	G ¹ / ₂ " / 15mm	G ¹ / ₂ " / 15mm	2.2	3	1	23780
NFE 1.2 *	300	G ¹ / ₂ " / 15mm	G ¹ / ₂ " / 15mm	2.2	3	1	23781

* NFE 1.2 has an impulse output water meter (10 litres / impulse).


** The K_{vs} value is the K_v value in the fully opened position.

NFE 2 Top-up Unit



Used for top up from a water supply where a backflow preventer is not needed.

- Consists of a water meter, ball valve and non-return valve.
- Maximum working pressure: 10 bar.
- Maximum working temperature: 90 °C.

Type	L. [mm]	Connection to		Weight [kg]		Order Code
		Potable water	System			
NFE 2.1	190	G ¹ / ₂ " / 15mm	G ¹ / ₂ " / 15mm	2	1	23782
NFE 2.2 *	190	G ¹ / ₂ " / 15mm	G ¹ / ₂ " / 15mm	2	1	23783


* NFE 2.2 has an impulse output water meter (10 litres / impulse).

NFE 3 Top-up Unit



Used for top up from a water supply, where a backflow preventer is not needed.

- Consists of a ball valve and non-return valve.
- Maximum working pressure: 10 bar.
- Maximum working temperature: 90 °C.

Type	L. [mm]	Connection to		Weight [kg]		Order Code
		Potable water	System			
NFE 3 *	101	G ¹ / ₂ " / 15mm	G ¹ / ₂ " / 15mm	0.5	1	23784

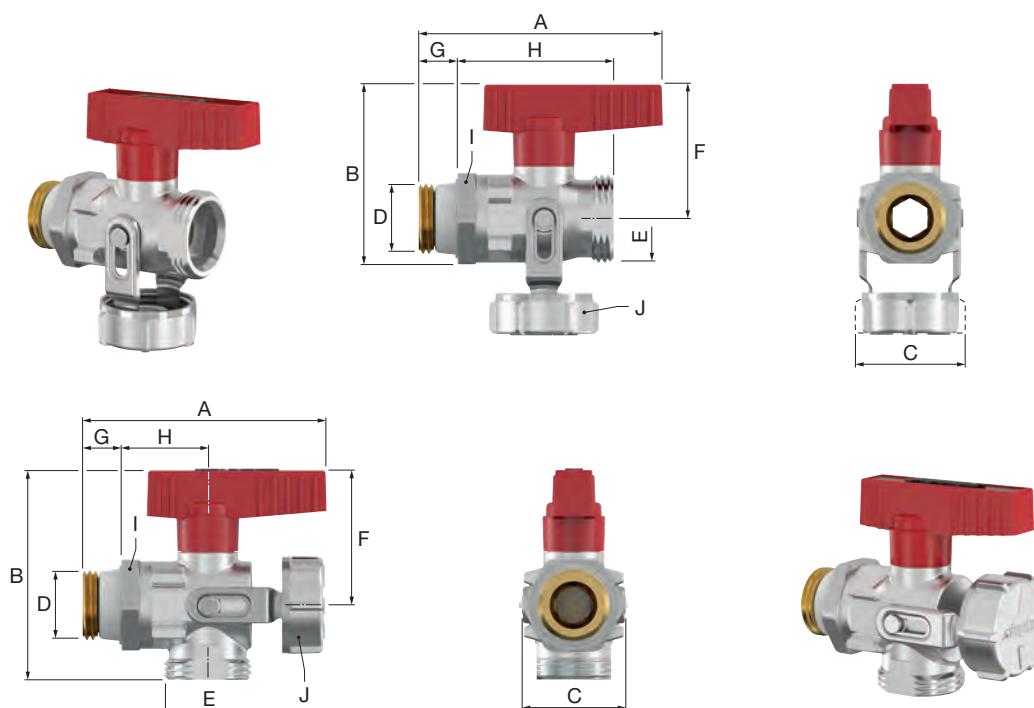
* NFE 3 is not necessary if the top-up water is free from impurities > 0.2 mm, the system has not been filled from a district-heating system and sufficient filters have been fitted for the solenoid valve (MVE).

TOP UP & KFE VALVES

KFE Ball Valve with Male Thread

PG = 706

With red lever handle, self-sealing with special thread seal, without hose connection.



Type	Version	Connection			Article no.
		D	E		
KFE-KH - D	straight	G 1/2" M	G 3/4" M	20	F10637
KFE-KH - E	angle	G 1/2" M	G 3/4" M	20	F10670



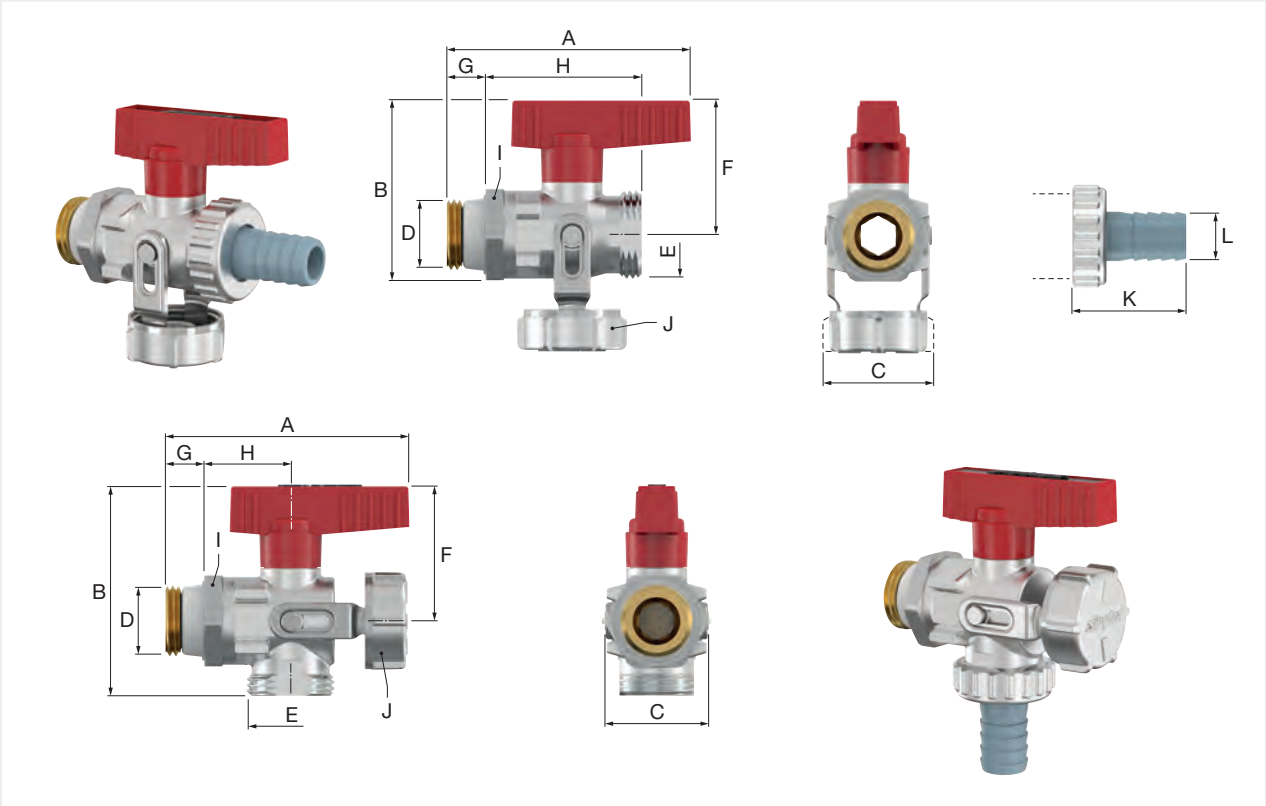
Dimensions


Type	Dimensions [mm]							
	A	B	C	F	G	H	I (WS)	J (WS)
KFE-KH - D	72	52.5	32.5	40	11	46.5	27	30
KFE-KH - E	72	62.0	31.0	40	11	26.0	27	30

KFE Ball Valve with Male Thread with Hose Connection

PG = 706

With red lever handle, self-sealing with special thread seal.



Type	Version	Connection			Article no.
		D	E		
KFE-KH - D SV	straight	G 1/2" M	G 3/4" M	20	F10638
KFE-KH - E SV	angle	G 1/2" M	G 3/4" M	20	F10671

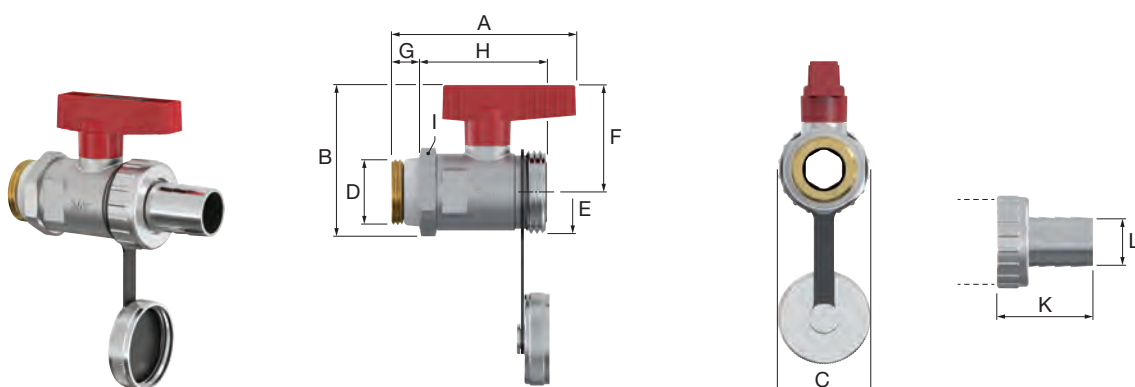



Dimensions

Type	Dimensions [mm]									
	A	B	C	F	G	H	I (WS)	J (WS)	K	L (Ø)
KFE-KH - D SV	72	52.5	32.5	40	11	46.5	27	30	33	14.5
KFE-KH - E SV	72	62.0	31.0	40	11	26.0	27	30	33	14.5

KFE Ball Valve with Male Thread DN 20 with Hose Connection
PG = 706

With red lever handle, self-sealing with special thread seal.



Type	Version	Connection			Article no.
		D	E		
KFE-KH DN20 - D SV	straight	G 3/4" M	G 1" M	10	F10680

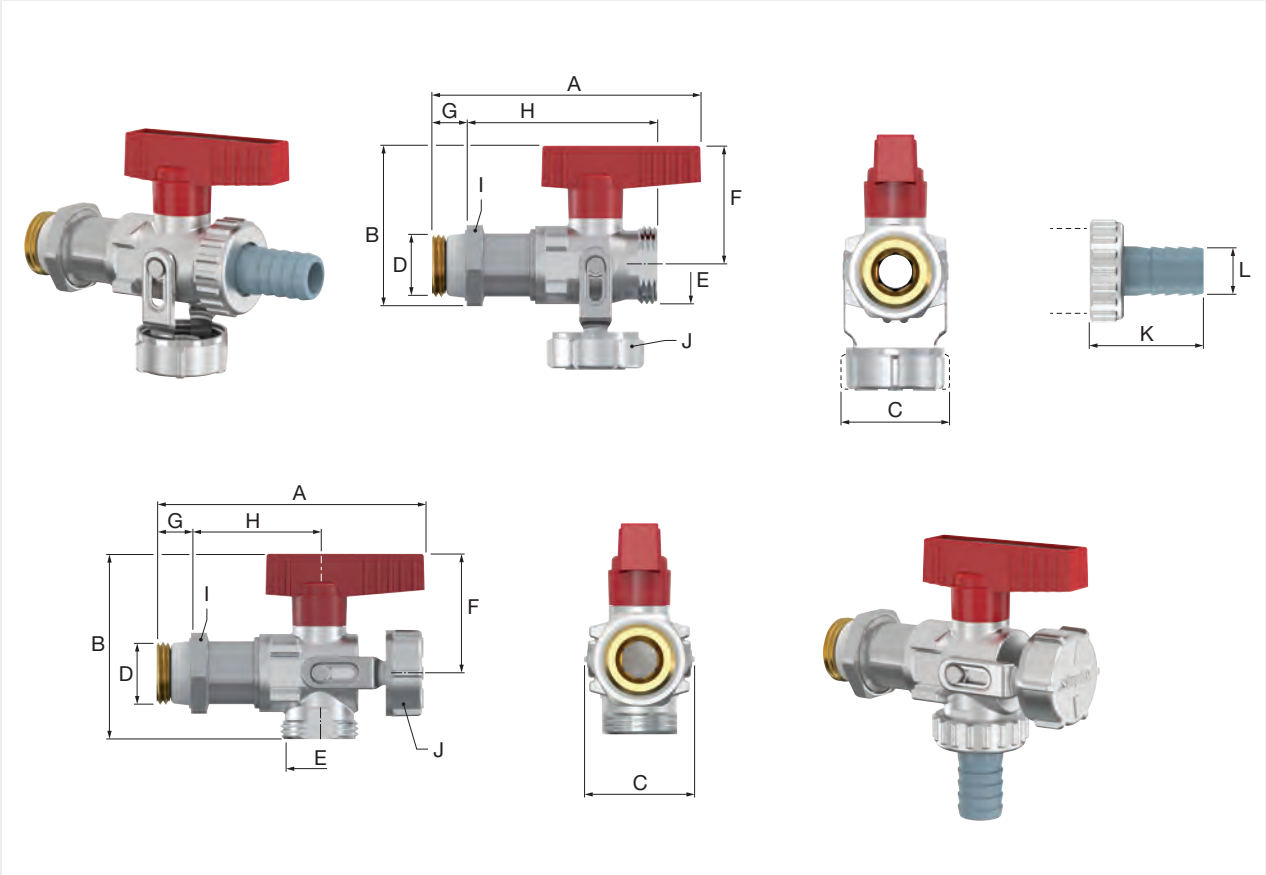

Dimensions

Type	Dimensions [mm]								
	A	B	C	F	G	H	I (WS)	K	L (Ø)
KFE-KH DN20 - D SV	73	60	37	42.5	11	50	32	35	20

KFE Ball Valve with Male Thread, Long Version with Hose Connection

PG = 706

With red lever handle, self-sealing with special thread seal.



Type	Version	Connection			Article no.
		D	E		
KFE-KH long - D SV	straight	G 1/2" M	G 3/4" M	20	F10641
KFE-KH long - E SV	angle	G 1/2" M	G 3/4" M	20	F10674



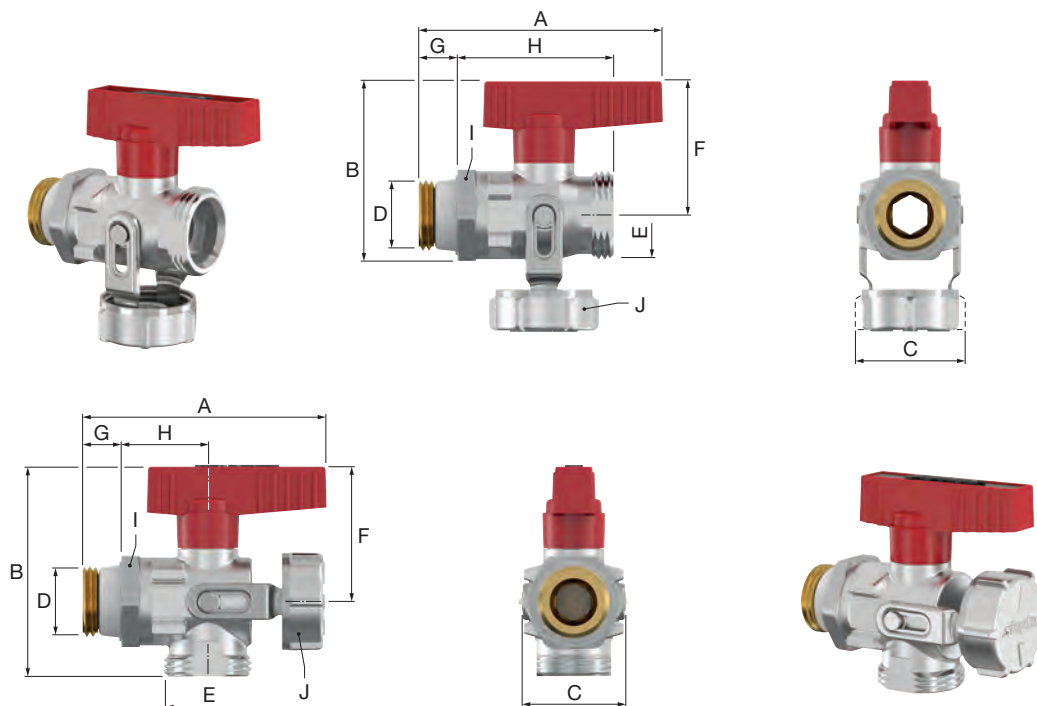
Dimensions

Type	Dimensions [mm]									
	A	B	C	F	G	H	I (WS)	J (WS)	K	L (Ø)
KFE-KH long - D SV	89	54.5	32.5	40	11	63.5	27	30	33	14.5
KFE-KH long - E SV	89	62.0	31.0	40	11	43.5	27	30	33	14.5

KFE Ball Valve with Male Thread, Silicone-free
PG = 706

With red lever handle, self-sealing with special thread seal, without hose connection.

- **Why silicone-free?** Free of lubricants and assembly aids that interfere with painting of completed installations.



Type	Version	Connection			Article no.
		D	E		
KFE-KH silicone-free - D	straight	G 1/2" M	G 3/4" M	20	F10657
KFE-KH silicone-free - E	angle	G 1/2" M	G 3/4" M	20	F10658


Dimensions

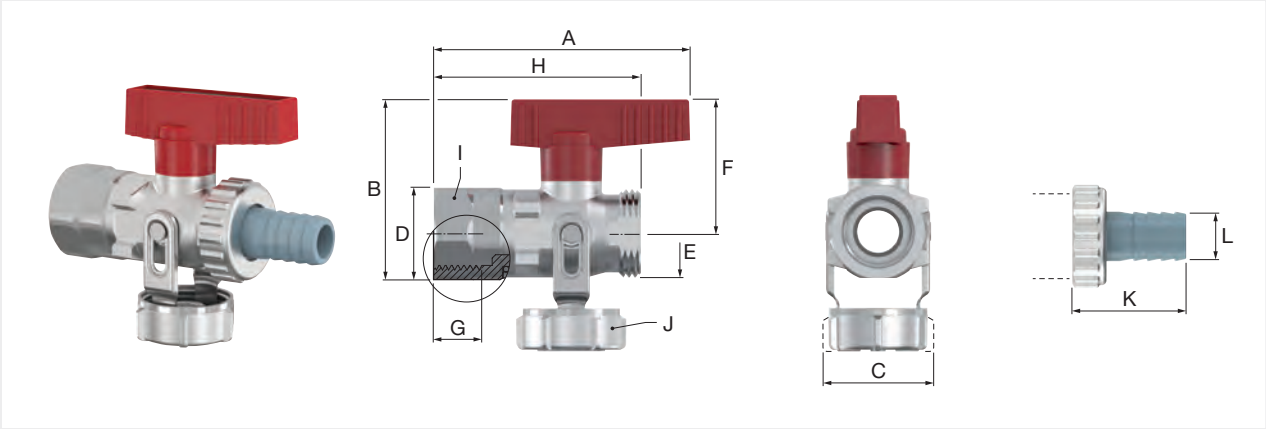
Type	Dimensions [mm]							
	A	B	C	F	G	H	I (WS)	J (WS)
KFE-KH silicone-free - D	72	52.5	32.5	40	11	46.5	27	30
KFE-KH silicone-free - E	72	62.0	31.0	40	11	26.0	27	30




KFE Ball Valve with Female Thread with Hose Connection

PG = 706

With red lever handle.

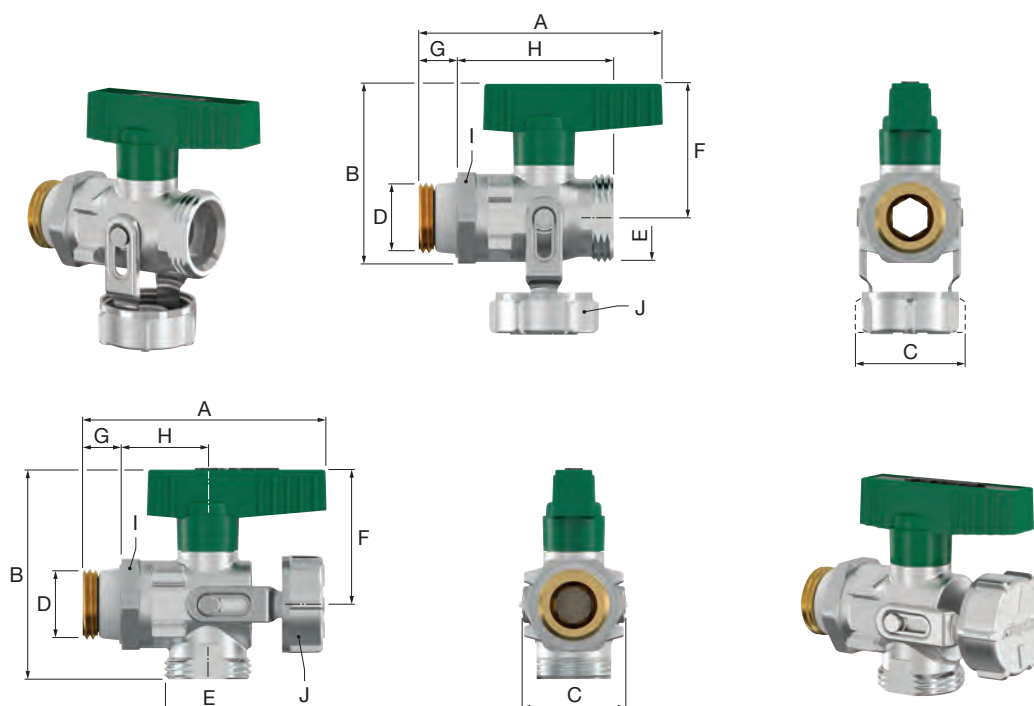


Type	Version	Connection			Article no.
		D	E		
KFE-KH F - D SV	straight	Rp 1/2"	G 3/4" M	20	F10646



Dimensions

Type	Dimensions [mm]									
	A	B	C	F	G	H	I (WS)	J (WS)	K	L (Ø)
KFE-KH F - D SV	76	53.0	32.5	40	12	61.0	27	30	33	14.5



Type	Version	Connection			Article no.
		D	E		
KFE-KH DVGW - D	straight	G 1/2" M	G 3/4" M	20	F10639
KFE-KH DVGW - E	angle	G 1/2" M	G 3/4" M	20	F10669



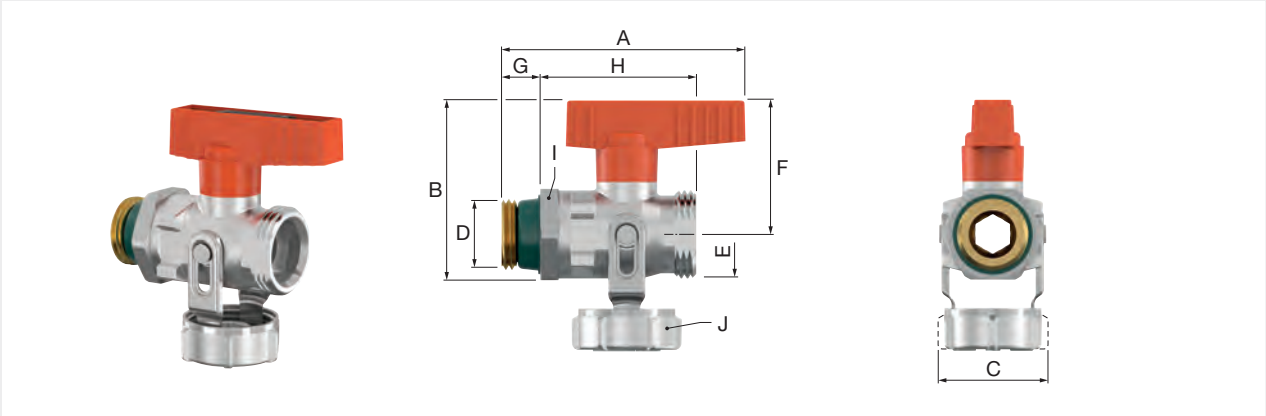
Dimensions

Type	Dimensions [mm]							
	A	B	C	F	G	H	I (WS)	J (WS)
KFE-KH DVGW - D	72	52.5	32.5	40	11	46.5	27	30
KFE-KH DVGW - E	72	62.0	31.0	40	11	26.0	27	30

KFE Ball Valve for Solar

PG = 706

Without hose connection.



Type	Version	Connection			Article no.
		D	E		
KFE-KH Solar - D	straight	G 1/2" M	G 3/4" M	20	F10647

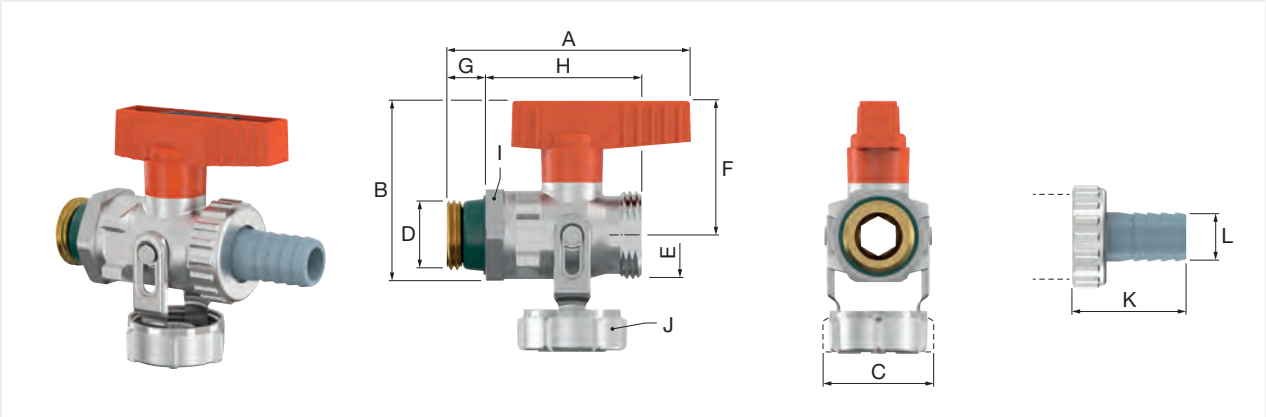


Dimensions

Type	Dimensions [mm]							
	A	B	C	F	G	H	I (WS)	J (WS)
KFE-KH Solar - D	72	52.5	32.5	40	11	46.5	27	30

KFE Ball Valve for Solar with Hose Connection

PG = 706



Type	Version	Connection			Article no.
		D	E		
KFE-KH Solar - D SV	straight	G 1/2" M	G 3/4" M	20	F10648



Dimensions

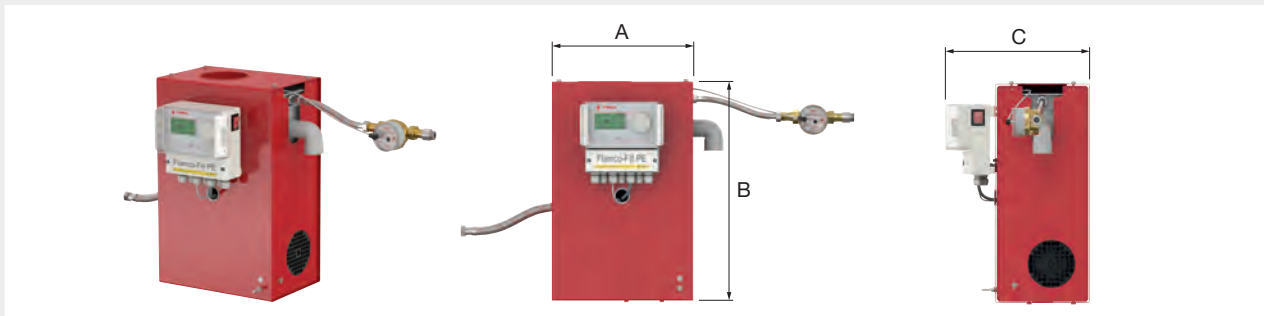
Type	Dimensions [mm]									
	A	B	C	F	G	H	I (WS)	J (WS)	K	L (Ø)
KFE-KH Solar - D SV	72	52.5	32.5	40	11	46.5	27	30	33	14.5


TOP UP AUTOMATS

Flamco-Fill PE Top-up Unit (pressurisation)

The Flamco-Fill PE pressurisation units monitor the pressure in sealed heating and cooling installations and tops them up as necessary. Topping-up depends on the pressure or level at a pre-set interval. There are two working methods available. One for installations with expansion automats (command based on level in automat) and one for installations with Flexcon expansion vessels (command based on installation pressure).

- Particularly suitable for small feed pressures for medium and large heating and cooling systems.
- For separating potable water supply and the closed system a break tank is used which does not require any backflow preventer.
- With impulse water meter for monitoring the amount of water added.
- Any malfunctions will result in a visible alarm and may be made visible automatically in the malfunction log, even via remote control (dead socket).
- Convenient operation with constant display of all important operating parameters.
- Active process menu (active diagram with the status of switching elements and sensors).
- Topping-up according to DIN EN 1717 and DIN 1988.
- Control unit can also be used in water preparation systems.
- 17 languages can be selected in the menu (eg: D, GB, NL and F)
- RS 485 interface.
- Electricity supply: 230 V / 50-60 Hz.
- Mains water pressure (potable water inlet): 1 - 10 bar.
- Nominal system pressure: 1 - 9 bar (PN 10).
- Working temperature (inlet side): 3 °C / 30 °C.
- Maximum flow rate: 210 l/h.
- In accordance with European Pressure Equipment Directive 2014/68/EU and Machinery Directive 2006/42/EC.

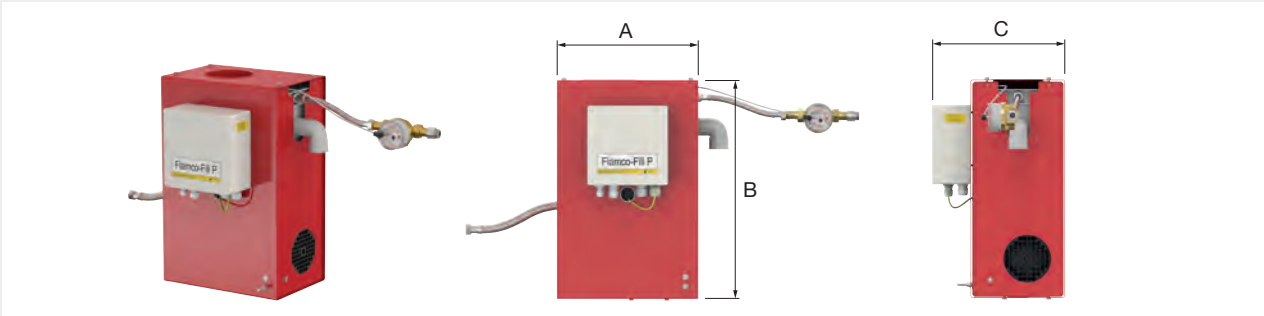



Type	Dimensions			Connection to		Weight [kg]		Order Code
	A [mm]	B [mm]	C [mm]	Potable water	System			
Flamco-Fill PE	400	495	320	G 1/2"	G 1/2"	25	1	23757

Flamco-Fill P

Flamco-Fill P refills water in heating and chilled water (cooling) installations.
Same construction as Flamco-Fill PE, but without a controller.

- Specially developed for use in conjunction with a pressurisation automat (Flamcomat, M-K/U) with SPC controller.
- The controller of the automat monitors and manages all functions of the Flamco-Fill P.




Type	Dimensions			Connection to		Weight [kg]		Order Code
	A [mm]	B [mm]	C [mm]	Potable water	System			
Flamco-Fill P	400	495	305	G 1/2"	G 1/2"	24	1	17665



Feet for Flamco-Fill PE / P



Set of two feet for a floor standing installation of the Flamco-Fill PE and Flamco-Fill P.

Type		Order Code
Feet for Flamco-Fill PE / P (2x)	1	17666

WATER TREATMENT FOR TOPPING UP


Home XL Duplex

Refill cartridge for demineralized water.

- Refill cartridge filled with indicator resin for the complete demineralization of the refill water for permanent installation.
- High security due to color change of the indicator resin when exhausted.

The Home XL Duplex water refill cartridge can only be installed in conjunction with a system separator according to DIN 1717.




Type	Capacity [l]	Capacity at 1° dH [l]	Capacity at 12° dH to 0° dH [l]	Capacity at 20° dH to 0° dH [l]	Nachspeisemenge bis [l/jahr]	Max. flow [l/min.]	Connection		Order Code
Home XL Duplex	3.0	6000	500	300	400	4	1/2"	1	17668

Refill cartridge

Refill cartridge for Home XL Duplex (disposable cartridge).



Type	Capacity [l]		Order Code
Refill cartridge	1.5	1	17669

Wall bracket for Home XL / Home XL Duplex

Wall bracket for Home XL / Home XL Duplex including screws



Type		Order Code
Wall bracket for Home XL	1	17678
Wall bracket for Home XL Duplex	1	17679

Flamco pressurisation equipment

The Flamco compact wall mounted and free standing pressurisation units are fully automatic heating / chiller system topup devices, offering accurate control and reliability. They are suitable for pressure management in domestic, commercial and industrial sealed heating and cooling systems. With a choice of single or twin pump system for topping up water using a break-tank and a digital controller. With AB type break tank for back flow protection.

Digital pressurisation equipment including:

- Digital equipment comes with bright LED display scrolling messages including pump operation and alarm modes.
- Single or twin pump configurations.
- Complete with integral AB type water break tank utilising a WRAS approved float valve.
- Twin pump equipment operates as cyclic duty - standby with automatic changeover.
- Internal alarm with mute function.
- Security password protected.
- Auto resetting low water detection, for pump protection.
- Auto resetting high and low pressure alarm.
- Digital pressure setpoint with adjustable differential.
- Flood protection through a pump run limit timer.
- Normally closed, common fault, volt free contact (Boiler interlock).
- Normally open, individual volt free contacts for pump trip, high pressure, low pressure and sensor health.
- All volt free contacts are for use with electrical supplies up to 240V with a maximum current draw of 5 amps.
- RS 485 Connectivity with MODBUS protocol.
- Hours run counter (per pump).
- 12 month service reminder.
- Excessive start alarm (>3 times in 8 hours).
- Pump pulse option (2 second pulse per pump if inactive for 60 days).
- Fill system option (Not available on 130D/230D).

Selection Essentials

- Static Height of the building above the pressurisation unit (metres).
- Systems content [ltr] or boiler power [kW] (which can be used to estimate the systems content).
- Flow and return temperatures (or maximum ambient temperature in the case of a chilled water system).
- Glycol content (%) if required.
- Maximum allowable system pressure and/or safety relief valve setting.

Flexfiller Standard

- Floor standing, high flow rate (<18 l/min) top-up pressurisation unit.
- 18 litre break tank.
- 60Hz version available on request.



Flexfiller Midi / IP66

- Wall mounted, <12 l/min flow rate top-up pressurisation unit.
- 4 litre break tank.
- IP66: With IP66 rated cabinet.



PressDS

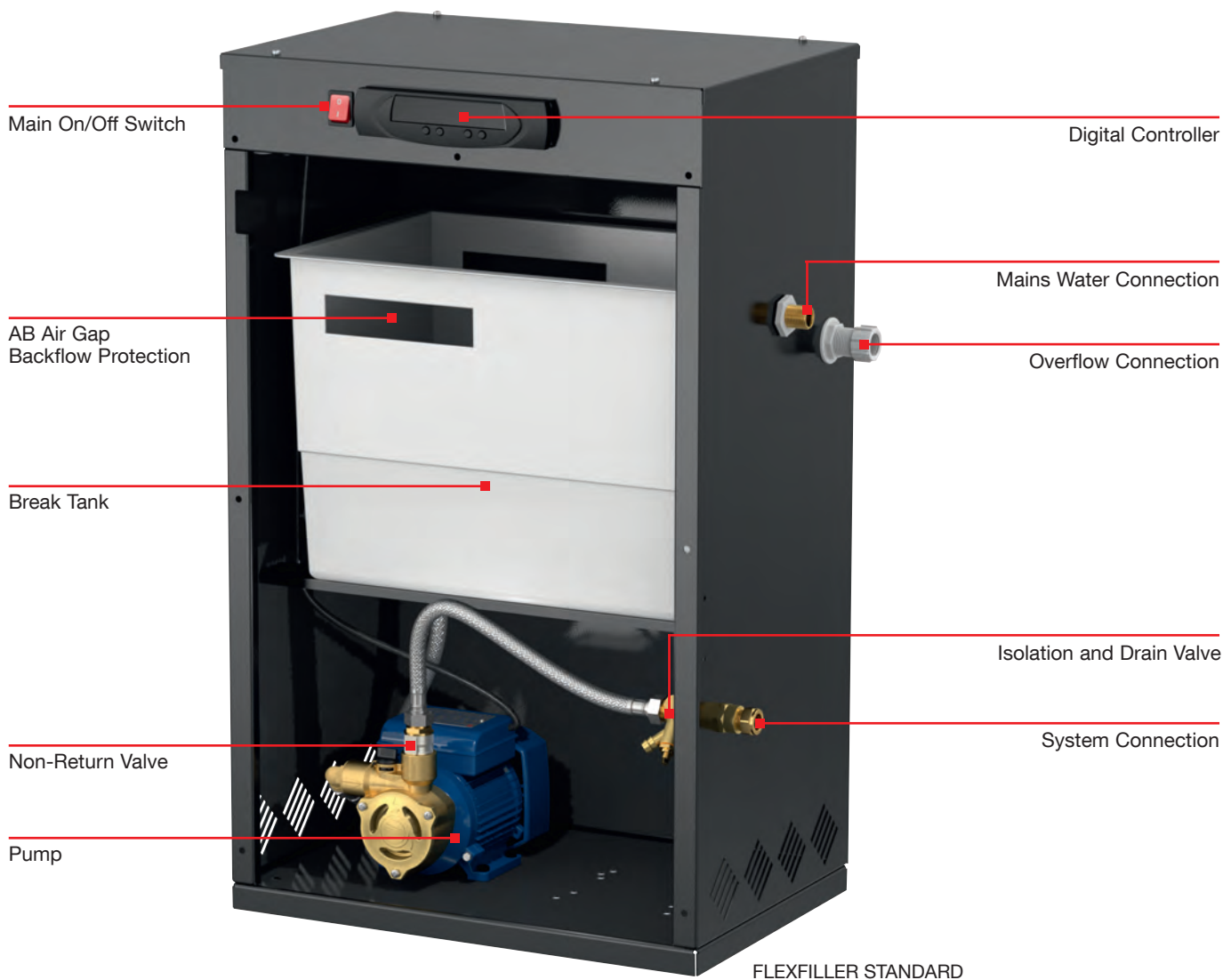
- Floor standing, high flow rate (<18 l/min) top-up glycol mixing pressurisation unit.
- 4 litre break tank.
- 18 litre tank for glycol top-up.
- The correct fluid mix is blended on demand at the time of system top-up.



Flexfiller Twin System

- Floor standing unit, with two high flow rate (<18 l/min) top-up pressurisation units.
- 18 litre break tank.
- Ideal where space restrictions make it beneficial to locate two systems in a single enclosure.





Digifiller

- Wall mounted, <12 l/min flow rate digital top-up pressurisation unit.
- 4 litre break tank.
- A self-bleed pump configuration.



Flexfiller Plus & Midifill Plus

- Combined digital top-up pressurisation unit with vacuum degasser.
- 18 litre break tank (Midifill: 4 litre).



Flexfiller Mini Digital

- Wall mounted, low flow rate (<0.4 l/min) digital top-up pressurisation unit.
- 2 litre break tank.
- Ideal for residential or small commercial application.



PressDS Plus

- Combined digital top-up ressurisation unit with vacuum degasser and additive tank.
- 4 litre break tank.
- 18 litre additive tank.



Pressurisation Units Features & Options

Pressurisation units are required anywhere where the mains water supply must be kept wholesome and protected from sealed system water, and essential anywhere where the mains water pressure is insufficient to fill and maintain the integrity of a sealed system.

General Technical Data and System Limits

Materials & Technical:

Housing: Mild Steel CR4.

Finish: Powder Coating.

Break Tank: WRAS Approved material.

Pump: See pump details.

Fluid Category Protection: Type AB Weir Overflow gap / Category 5.

Controller: MODBUS.

Directive: PED 2014/68/EU.

Required Supply Voltage: 230V/1/50Hz

(2160D: 415V/3/50Hz).

Flamco have created a range of pressurisation equipment to meet every need. While the standard range will meet most demands, at Flamco we also offer a bespoke equipment service when the out of the ordinary occurs.

System:

International Protection Marking: IP 54.

Ambient Temperature: 5 - 40 °C.

Operating Temperature: 5 - 85 °C.

Noise rating : <75 dBA.

Pressure rating: PN10 (2160D: PN16).

Nominal Operating Pressure Range: 1-16 bar.

Type		Function			Number of Pumps	Pressure Rating [PN]	Max. Delivery Pressure [bar]	Max. Delivery Flow Rate [l/min]	Floor Standing / Wall Mounted	Break Tank Capacity [l]	System Volume (guide) [l]
		Pressurisation	De-gasser	Dosing							
Flexfiller + Flexfiller 60Hz	125D	•			1	10	2.5	18	floor	18	< 300000
	225D	•			2	10	2.5	18	floor	18	< 300000
	150D	•			1	10	5.0	18	floor	18	< 300000
	250D	•			2	10	5.0	18	floor	18	< 300000
	180D	•			1	16	8.0	18	floor	18	< 300000
	280D	•			2	16	8.0	18	floor	18	< 300000
	2160D	•			2	16	16.0	18	floor	18	< 300000
Midi + IP66	125D	•			1	10	2.5	12	wall	4	< 16000
	225D	•			2	10	2.5	12	wall	4	< 16000
	150D	•			1	10	5.0	12	wall	4	< 16000
	250D	•			2	10	5.0	12	wall	4	< 16000
Mini Digital	130D	•			1	10	3.0	0.4	wall	2	< 2600
	230D	•			2	10	3.0	0.4	wall	2	< 2600
Digifiller	0.5	•			1	10	2.5	12	wall	4	< 16000
	1.0	•			1	10	2.5	12	wall	4	< 16000
	1.5	•			1	10	2.5	12	wall	4	< 16000
	2.0	•			1	10	2.5	12	wall	4	< 16000
Twin System	2x125D	•			2 *	10	2.5	18	floor	18	< 300000
	2x225D	•			4 **	10	2.5	18	floor	18	< 300000
	2x250D	•			4 **	10	5.0	18	floor	18	< 300000
PressDS	225	•			2	10	2.5	18	floor	4	< 300000
	250	•			2	10	5.0	18	floor	4	< 300000
	280	•			2	16	8.0	18	floor	4	< 300000
Flexfiller Plus	Midifill Plus 150D	•	•		1	10	5.0	12	wall	4	< 50000
	250D	•	•		2	10	6.0	12	floor	18	< 300000
	280D	•	•		2	10	8.0	12	floor	18	< 300000
	2160D	•	•		2	16	16.0	12	floor	18	< 300000
PressDS Plus	250	•	•	•	2	10	6.0	18	floor	4	< 300000
	280	•	•	•	2	10	8.0	18	floor	4	< 300000
	2160	•	•	•	2	16	16.0	18	floor	4	< 300000

* = 1 pump for each system

** = 2 pumps for each system.

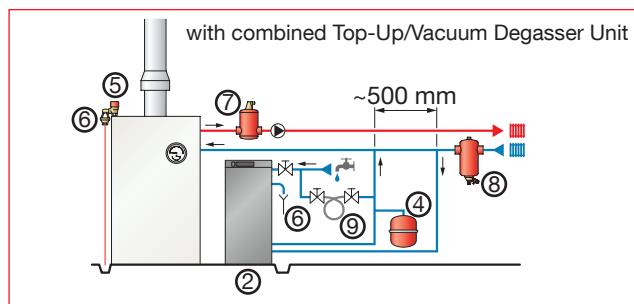
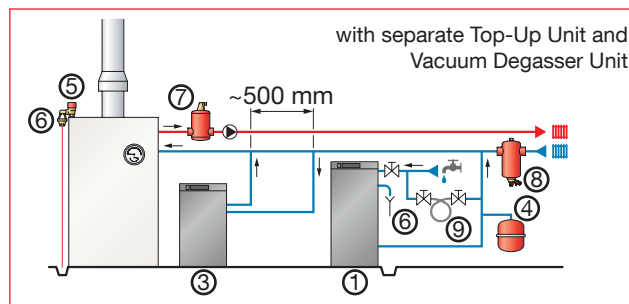
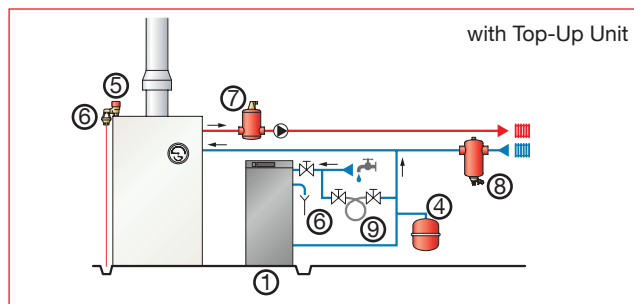
Installation and Schematic Layouts

Installation and Placement

The pressurisation unit should be installed in the return header of the system on the suction side of the circulating pump, in a frost-free and low humidity area. The point of connection will be the same as the system expansion vessel.

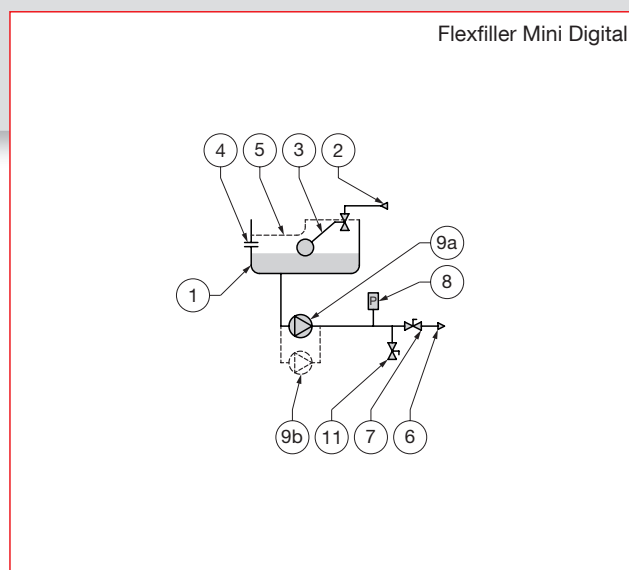
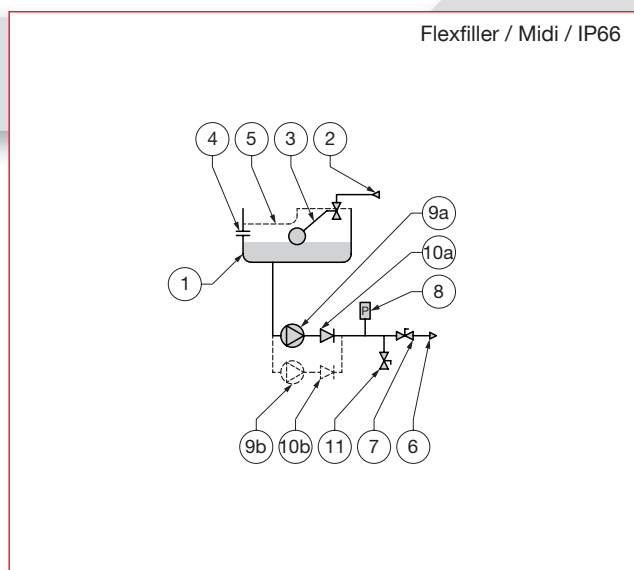
Connected to the system return pipe, to provide a neutral pressure reading. With combined units the two system connections must be installed on the return pipe approximately 0.5 metre apart.

System Schematics

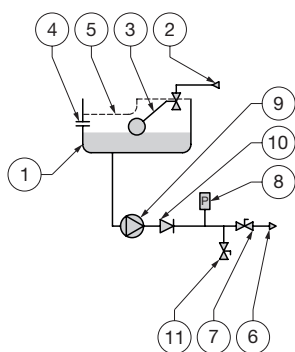


Nr	Description
1	Flexfiller Top-Up Unit
2	Flexfiller Plus / PressDS Plus Combined Unit
3	PSD Pressure Step Degasser
4	Flexcon Expansion Vessel
5	Prescor Safety Valve
6	Tundish
7	Flamcovent Smart Deaerator
8	Flamco Clean Smart Dirt Separator
9	Filling Loop (Optional)

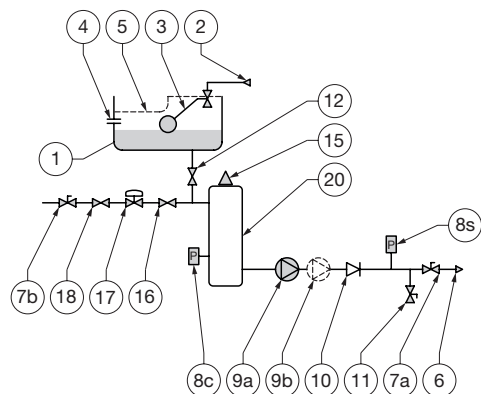
Product Schematics



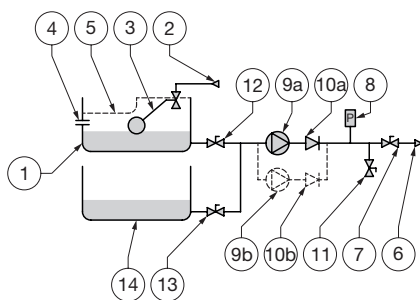
Digifiller



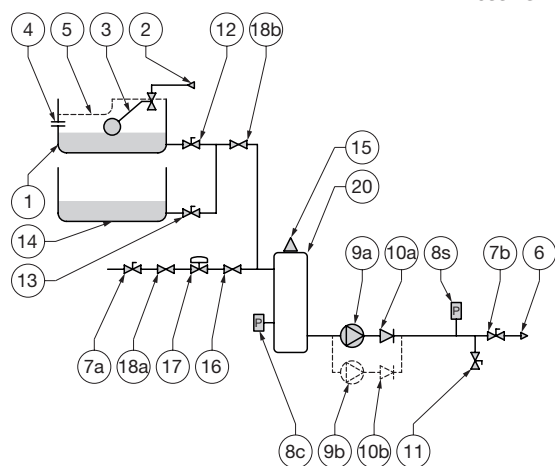
Flexfiller Plus



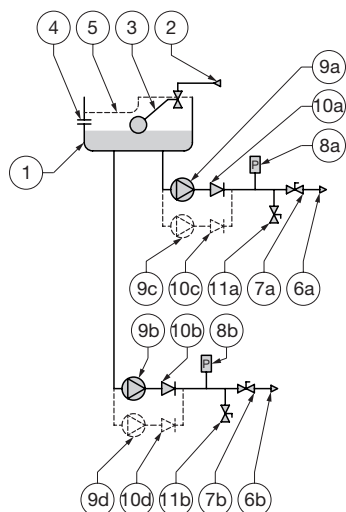
PressDS



PressDS Plus



Flexfiller Twin



Number	Description
1	Break tank
2	Mains water inlet
3	Float Operated valve
4	Overflow connection
5	AB air gap backflow protection
6	Supply to sealed system
7 (7a/7b)	Isolation valve
8 (8a/8b)	Pressure transmitter
8s	Pressure sensor (system)
8c	Pressure sensor (cylinder)
9 (9a/9b)	Pump(s)
10 (10a/10b)	Non Return valve
11 (11a/11b)	Drain valve
12	Water balancing valve
13	Additive balancing valve
14	Additive tank
15	Automatic air vent
16	Variable bypass valve
17	Reducing valve
18(18a/18b)	Solenoid valve
20	Cylinder
PS	Pressure switch
H/L	High/Low switch (boiler control)

Pressurization Units Pump Details

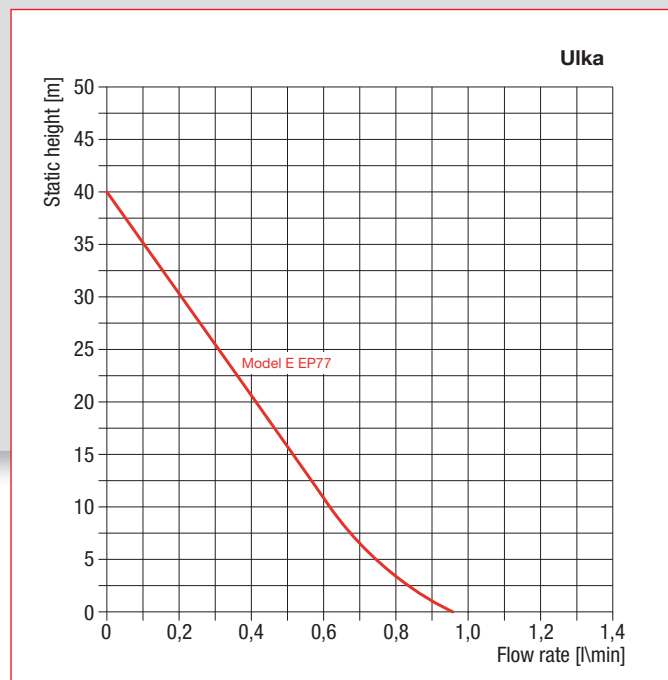
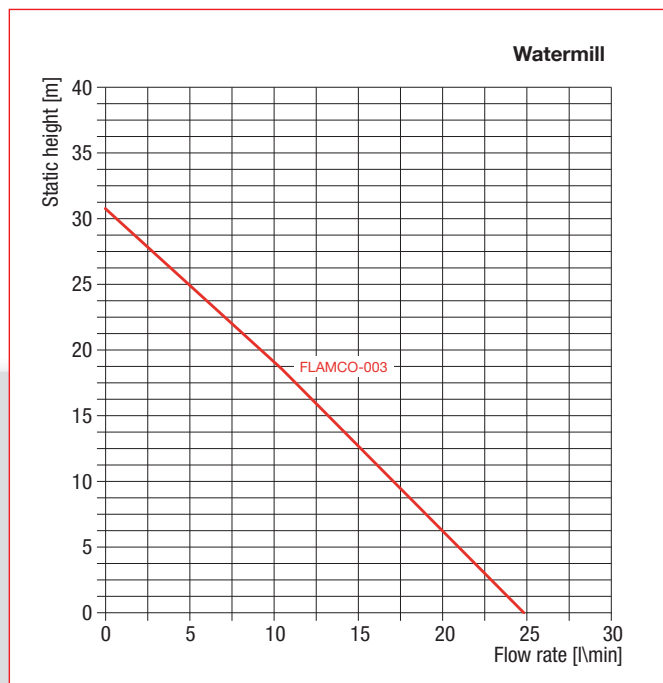
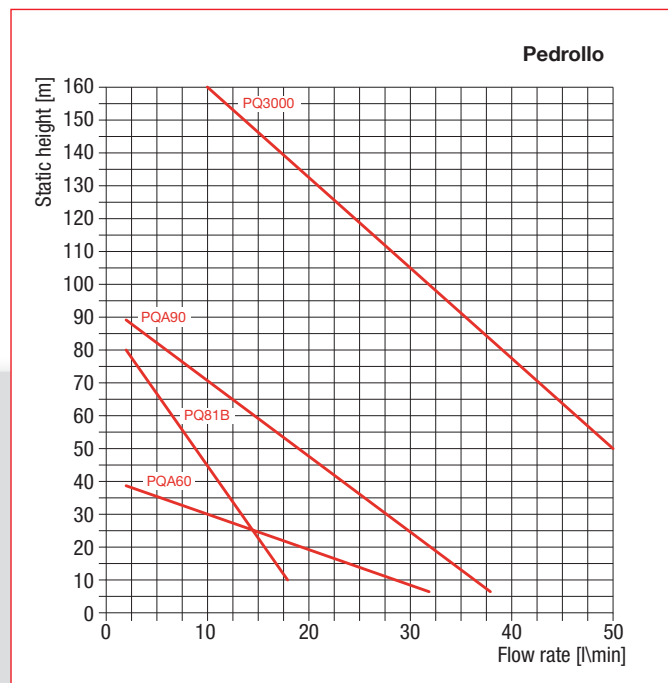
Before pumps are introduced to Flamco equipment, they are subjected to rigorous testing. Each pump is run for 744 hours (1 month, day and night) and then checked that the delivery pressure is within the design parameters.

Pump Characteristics

Type		Pump Qty	Pump Type	Pump Body	Impeller	Insulation Class	IP rating
Flexfiller	125D	1	Pedrollo PQA60	Ryton	Brass	F	IPX4
	225D	2	Pedrollo PQA60	Ryton	Brass	F	IPX4
	150D	1	Pedrollo PQ81B	Brass	Brass	F	IPX4
	250D	2	Pedrollo PQ81B	Brass	Brass	F	IPX4
	180D	1	Pedrollo PQA90	Ryton	Brass	F	IPX4
	280D	2	Pedrollo PQA90	Ryton	Brass	F	IPX4
	2160D	2	Pedrollo PQ3000	Cast Iron	Bronze	H	IPX5
Flexfiller 60Hz	125D - 60Hz	1	Pedrollo PQA60 - 60Hz	Ryton	Brass	F	IPX4
	225D - 60Hz	2	Pedrollo PQA60 - 60Hz	Ryton	Brass	F	IPX4
	150D - 60Hz	1	Pedrollo PQ81B - 60Hz	Brass	Brass	F	IPX4
	250D - 60Hz	2	Pedrollo PQ81B - 60Hz	Brass	Brass	F	IPX4
	180D - 60Hz	1	Pedrollo PQA90 - 60Hz	Ryton	Brass	F	IPX4
	280D - 60Hz	2	Pedrollo PQA90 - 60Hz	Ryton	Brass	F	IPX4
	2160D - 60Hz	2	Pedrollo PQ3000 - 60Hz	Cast Iron	Bronze	H	IPX5
Flexfiller Midi + Flexfiller IP66	125D	1	Pedrollo PQA60	Ryton	Brass	F	IPX4
	225D	2	Pedrollo PQA60	Ryton	Brass	F	IPX4
	150D	1	Pedrollo PQ81B	Brass	Brass	F	IPX4
	250D	2	Pedrollo PQ81B	Brass	Brass	F	IPX4
Flexfiller Mini Digital	130D	1	Ulka Model E EP77	Metal	Plastic	F	IPX2
	230D	2	Ulka Model E EP77	Metal	Plastic	F	IPX2
Digifiller	0.5	1	Watermill Flamco-003	Brass	Brass	F	IPX2
	1.0	1	Watermill Flamco-003	Brass	Brass	F	IPX2
	1.5	1	Watermill Flamco-003	Brass	Brass	F	IPX2
	2.0	1	Watermill Flamco-003	Brass	Brass	F	IPX2
Twin System	2 x 125D	1 per sys	Pedrollo PQA60	Ryton	Brass	F	IPX4
	2 x 225D	2 per sys	Pedrollo PQA60	Ryton	Brass	F	IPX4
	2 x 250D	2 per sys	Pedrollo PQ81B	Brass	Brass	F	IPX4
PressDS	225	2	Pedrollo PQA60	Ryton	Brass	F	IPX4
	250	2	Pedrollo PQ81B	Brass	Brass	F	IPX4
	280	2	Pedrollo PQA90	Brass	Brass	F	IPX4
PressDS Plus	250	2	Pedrollo PQ81B	Brass	Brass	F	IPX4
	280	2	Pedrollo PQA90	Brass	Brass	F	IPX4
	2160	2	Pedrollo PQ3000	Cast Iron	Bronze	H	IPX5
Flexfiller Plus	Midifill	1	Pedrollo PQ81B	Brass	Brass	F	IPX4
	250D	2	Pedrollo PQ81B	Brass	Brass	F	IPX4
	280D	2	Pedrollo PQA90	Ryton	Brass	F	IPX4
	2160D	2	Pedrollo PQ3000	Cast Iron	Bronze	H	IPX5

Pump Graphs

Characteristics curves and operating range of the pumps used in Flamco Pressurization units.



PRESSURISATION PRODUCT RANGE

Compact and totally enclosed digital pressurisation units with electronic pressure transducer and user-friendly microprocessor for use on sealed system in order to provide a minimum system pressure requirement.

System Volume (Guide): < 300,000 litres - Flexfiller / Flexfiller Twin System / PressDS

System Volume (Guide): < 50,000 litres - Flexfiller Midi / Digifiller / Flexfiller IP66

System Volume (Guide): < 2,600 litres - Flexfiller Mini Digital

Product Features:

- MODBUS RTU Communication Protocol.
- Password protected.
- Sequential programming menu.
- Pressure setting in 0.1 bar increments.
- Pump pulse option.
- Flood Protection (Pump Runtime Limiter, Excessive Start Alarm).
- Event logging: Alarm activations, Pump Run counter (activations per pump), Cumulative run timer (hours per pump), Electrical interruption.
- Volt free contacts: Common Alarm (N/C), High Pressure Alarm (N/O), Low Pressure Alarm (N/O), Sensor Health (N/O), Pump 1 Health (N/O), Pump 2 Health (N/O).

Certifications and Standards Applied:

- PED 2014/68/EU Sound Engineering Practice.
- IEE - Electrical Safety Guidance.
- EMC 2004/108/EC.
- BS 7074 Parts 1 to 3.
- Machinery Directive 2006/42/EC.
- Electronic Components have been tested and comply with the EMC Directives.
- EN 61000-6-1: Generic Standards – Immunity standard for industrial environments.
- EN 61000-6-2: Generic Standards – Immunity standard for industrial environments.
- EN 61000-6-3: Generic Standards – Emission standard for residential, commercial and light industrial environment.
- CE marked components, where applicable.
- WRAS approved float valve to BS1212.
- IP54 (BS EN60529) rated controller.

Material of Construction:

- Cabinet: Mild steel CR4 Powder Coated.
- Float: WRAS approved.
- Break Tank: Polypropylene.
- Connection: Brass / Polypropylene.
- Pipework: Braided Flexhose / EPDM / Copper.
- Finish: Powder coated.
- Valves: Brass / PTFE.



Flexfiller

The Flexfiller is a floor standing, flow rate (up to 18 l/min) top-up pressurisation unit with 18 litre internal break tank. Ideal for Industrial, commercial or large domestic applications. Available in single or twin pump configuration.

Application:

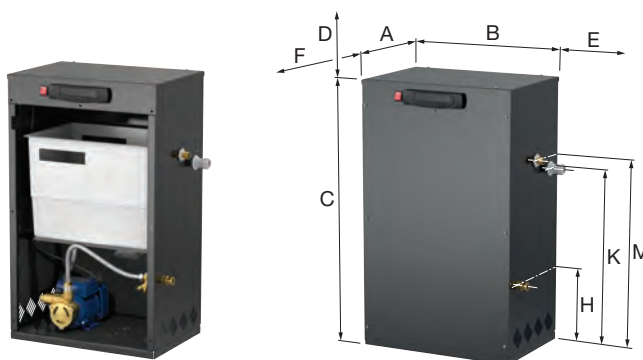
- Commercial, Industrial and Residential.


Product Features:

- For system volumes up to 300,000 litres.
- Fluid Protection Category 5 (AB Weir Overflow).
- System fill mode.
- Onscreen Service Reminder - 12 Months.
- Electric pump, 230V 50Hz 1ph (2160D: 415V 50Hz 3ph).
- Colour: Black (RAL 9005).

Operating Conditions:

- System temperature range at point of connection: 5 °C / 85 °C.
- Ambient temperature range: 5 °C / 40 °C.
- Pressure rating: PN 10.
- Relative humidity 95% non-condensing.
- Noise Rating Data: < 75 dBA.



Type	Pump quantity	Connections			Max. Delivery Pressure [bar]	Power Consumption [kW]	Full Load Current [A]	Weight [kg]		Order Code
		System [mm]	Mains Supply [mm]	Over-flow [mm]						
Flexfiller 125D	1	15 (1/2" M)	15 (1/2" M)	22	3.0	0.37	2.6	29	1	17395
Flexfiller 150D	1	15 (1/2" M)	15 (1/2" M)	22	6.0	0.5	3.4	31	1	17396
Flexfiller 225D	2	15 (1/2" M)	15 (1/2" M)	22	3.0	2 x 0.37	2.6	35	1	17397
Flexfiller 250D	2	15 (1/2" M)	15 (1/2" M)	22	6.0	2 x 0.50	3.4	39	1	17398
Flexfiller 180D	1	15 (1/2" M)	15 (1/2" M)	22	8.0	0.75	5.6	34	1	45049
Flexfiller 280D	2	15 (1/2" M)	15 (1/2" M)	22	13.6	2 x 0.75	5.6	45	1	17394
Flexfiller 2160D	2	15 (1/2" M)	15 (1/2" M)	22	16.0	2 x 2.2	6.6	67	1	17393



Dimensions Flexfiller

Type	Dimensions								
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	H [mm]	K [mm]	M [mm]
Flexfiller 125D - 280D	330	480	760	500	150	800	220	520	580
Flexfiller 2160D	660	470	1090	500	150	800	370	690	740

Flexfiller Midi

The Flexfiller Midi is a wall mounted, flow rate (up to 12 l/min) top-up pressurisation unit with 4 litre internal break tank. Ideal for Industrial, commercial or large domestic applications. Available in single or twin pump configuration.

Application:

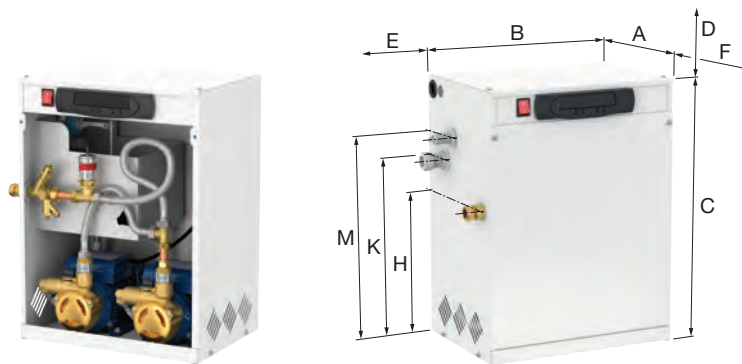
- Commercial, Industrial and Residential.


Product Features:

- For system volumes up to 50,000 litres.
- Fluid Protection Category 5 (AB Weir Overflow).
- System fill mode.
- Onscreen Service Reminder - 12 Months.
- Electric pump, 230V 50Hz 1ph.
- Colour: White (RAL 9003).

Operating Conditions:

- System temperature range at point of connection: 5 °C / 85 °C.
- Ambient temperature range: 5 °C / 40 °C.
- Pressure rating: PN 10.
- Relative humidity 95% non-condensing.
- Noise Rating Data: < 75 dBA.



Type	Pump quantity	Connections			Max. Delivery Pressure [bar]	Power Consumption [kW]	Full Load Current [A]	Weight [kg]		Order Code
		System [mm]	Mains Supply [mm]	Over-flow [mm]						
Flexfiller Midi 125D	1	15 (1/2" M)	15 (1/2" M)	22	3	0.37	2.6	17.0	1	17460
Flexfiller Midi 150D	1	15 (1/2" M)	15 (1/2" M)	22	6	0.5	3.4	32.5	1	17461
Flexfiller Midi 225D	2	15 (1/2" M)	15 (1/2" M)	22	3	2 x 0.37	2 x 2.6	25.5	1	17462
Flexfiller Midi 250D	2	15 (1/2" M)	15 (1/2" M)	22	6	2 x 0.5	2 x 3.4	42.0	1	17463



Dimensions Flexfiller Midi

Type	Dimensions								
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	H [mm]	K [mm]	M [mm]
Flexfiller Midi 125D	230	240	480	500	150	800	270	340	380
Flexfiller Midi 150D - 250D	260	360	480	500	150	800	270	340	380

Flexfiller IP66

The Flexfiller IP66 is a wall mounted, flow rate (up to 12 l/min) top-up pressurisation unit with 4 litre internal break tank. Ideal for Industrial, commercial or large domestic applications. Available in single or twin pump configuration.

Application:

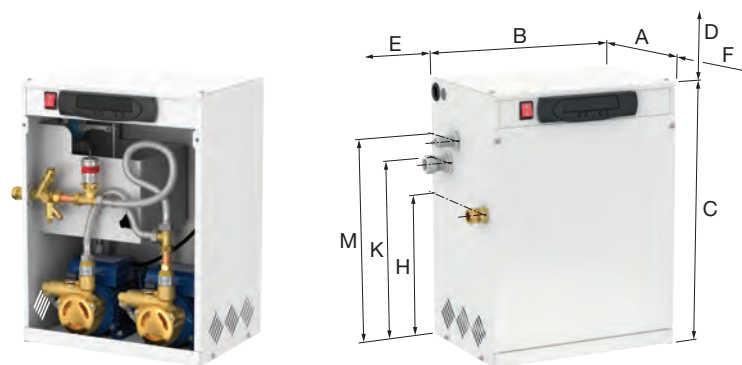
- Commercial, Industrial and Residential.


Product Features:

- For system volumes up to 50,000 litres.
- Fluid Protection Category 5 (AB Weir Overflow).
- AB air gap to EN13077:2008.
- WRAS approved break tank and float valve.
- IP66 rated cabinet.
- Internal thermostat & heater.
- Neon power indicator.
- System fill mode.
- Onscreen Service Reminder - 12 Months.
- Electric pump, 230V 50Hz 1ph.
- Colour: White (RAL 9003).

Operating Conditions:

- System temperature range at point of connection: 5 °C / 85 °C.
- Ambient temperature range: -10 °C / 40 °C.
- Pressure rating: PN 10.
- Relative humidity 95% non-condensing.
- Noise Rating Data: < 75 dBA.



Type	Pump quantity	Connections			Max. Delivery Pressure [bar]	Power Consumption [kW]	Full Load Current [A]	Weight [kg]		Order Code
		System [mm]	Mains Supply [mm]	Over-flow [mm]						
Flexfiller IP66 125D	1	15 (1/2" M)	15 (1/2" M)	22	3	0.37	2.6	28	1	45090
Flexfiller IP66 225D	2	15 (1/2" M)	15 (1/2" M)	22	3	2 x 0.37	2 x 2.6	34	1	45091
Flexfiller IP66 250D	2	15 (1/2" M)	15 (1/2" M)	22	6	2 x 0.5	2 x 3.4	36	1	45124

Dimensions Flexfiller IP66

Type	Dimensions								
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	H [mm]	K [mm]	M [mm]
Flexfiller IP66 125D - 250D	230	240	480	500	150	800	330	335	380

Flexfiller Mini Digital

The Flexfiller Mini Digital is a slim wall mounted, low flow rate (0.4 l/min) top-up pressurisation unit with 2 litre internal break tank. Ideal for small commercial or large domestic applications. For use on heating systems utilising a 300 litre expansion vessel or less, or chilled systems utilising a 50 litre expansion vessel or less. Available in single or twin pump configuration.

Application

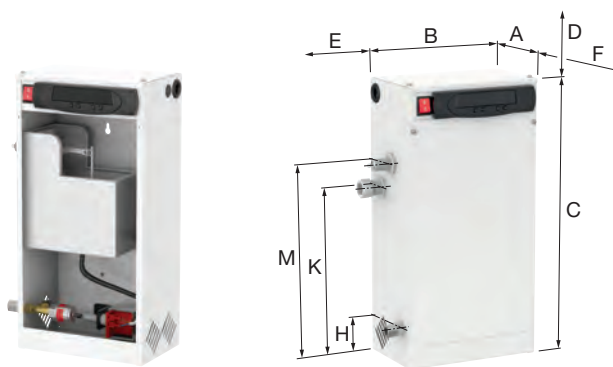
- Commercial and Residential.


Product Features:

- For system volumes up to 2,600 litres.
- Fluid Protection Category 5 (AB Weir Overflow).
- Onscreen Service Reminder - 12 Months.
- Electric pump, 230V 50Hz 1ph.
- Colour: White (RAL 9003).

Operating Conditions:

- System temperature range at point of connection: 5 °C / 85 °C.
- Ambient temperature range: 5 °C / 40 °C.
- Pressure rating: PN 10.
- Relative humidity 95% non-condensing.
- Noise Rating Data: < 75 dBA.



Type	Pump quantity	Connections			Max. Delivery Pressure [bar]	Power Consumption [kW]	Full Load Current [A]	Weight [kg]		Order Code
		System [mm]	Mains Supply [mm]	Over-flow [mm]						
Flexfiller Mini 130D	1	8 (1/4" M)	15 (1/2" M)	22	3	0.051	0.3	7	1	17455
Flexfiller Mini 230D	2	8 (1/4" M)	15 (1/2" M)	22	3	2 x 0.051	2 x 0.3	8	1	17456

kiwa 

Dimensions Flexfiller Mini Digital

Type	Dimensions								
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	H [mm]	K [mm]	M [mm]
Flexfiller Mini 130D/230D	150	240	480	500	150	800	70	300	350

Digifiller

The Digifiller is a wall mounted, flow rate (up to 12 l/min) top-up pressurisation unit with 4 litre internal break tank. Self venting pumps and preset options to remove the need for conventional commissioning of the Pressurisation Unit. Ideal for Industrial, commercial or large domestic applications. Available preset to 0.5 bar, 1.0 bar, 1.5 bar or 2.0 bar topup (Delivery) pressure.

Application:

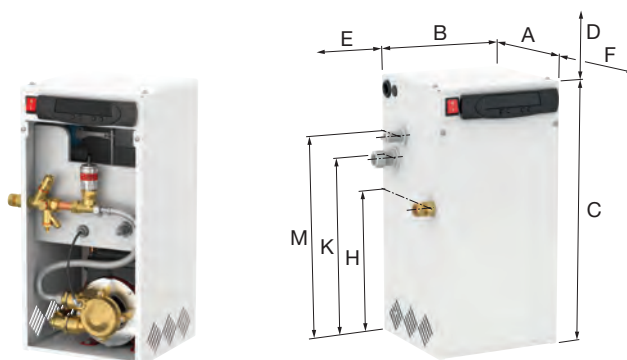
- Commercial, Industrial and Residential.


Product Features:

- For system volumes up to 50,000 litres.
- Fluid Protection Category 5 (AB Weir Overflow).
- Pre-commissioned.
- Pre-set (Bar).
- Plug & play, but easily adjustable on site if required.
- Self-bleed pump.
- System fill mode.
- Onscreen Service Reminder - 12 Months.
- Electric pump, 230V 50Hz 1ph.
- Colour: White (RAL 9003).

Operating Conditions:

- System temperature range at point of connection: 5 °C / 85 °C.
- Ambient temperature range: 5 °C / 40 °C.
- Pressure rating: PN 10.
- Relative humidity 95% non-condensing.
- Noise Rating Data: < 75 dBA.



Type	Pump quantity	Connections			Max. Delivery Pressure [bar]	Power Consumption [kW]	Full Load Current [A]	Preset Settings			Weight [kg]		Order Code
		System [mm]	Mains Supply [mm]	Over-flow [mm]				Cold Fill	Low Alarm	High Alarm			
Digifiller 0.5	1	15 (1/2" M)	15 (1/2" M)	22	2.5	0.41	2.6	0.5	0.2	2.7	17	1	45115
Digifiller 1.0	1	15 (1/2" M)	15 (1/2" M)	22	2.5	0.41	2.6	1.0	0.5	2.7	17	1	45034
Digifiller 1.5	1	15 (1/2" M)	15 (1/2" M)	22	2.5	0.41	2.6	1.5	1.0	2.7	17	1	45035
Digifiller 2.0	1	15 (1/2" M)	15 (1/2" M)	22	2.5	0.41	2.6	2.0	1.5	2.7	17	1	45036

Dimensions Digifiller

Type	Dimensions									
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	H [mm]	K [mm]	M [mm]	
Digifiller 0.5 - 2.0	230	240	480	500	150	800	270	340	380	

Flexfiller Twin System

The Flexfiller Twin System is a floor standing unit, ideal where space restrictions make it beneficial to locate two systems in a single enclosure. The system combines two high flow rate (<18 l/min) top-up pressurisation units and two controllers with a single 18 litre break tank.

Application:

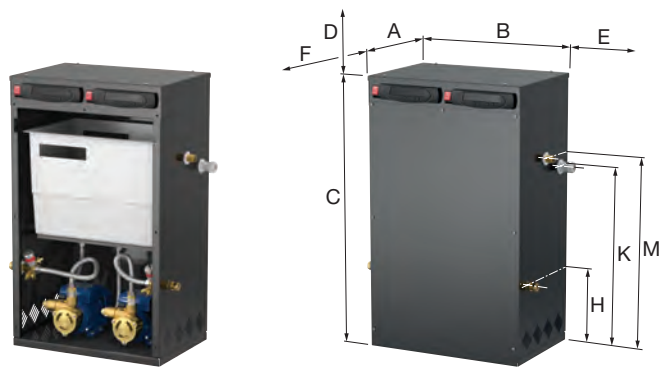
- Commercial, Industrial and Residential.


Product Features:

- For system volumes up to 300,000 litres per system.
- Fluid Protection Category 5 (AB Weir Overflow).
- System fill mode.
- Onscreen Service Reminder - 12 Months.
- Electric pump, 230V 50Hz 1ph.
- Colour: Black (RAL 9005).

Operating Conditions:

- System temperature range at point of connection: 5 °C / 85 °C.
- Ambient temperature range: 5 °C / 40 °C.
- Pressure rating: PN 10.
- Relative humidity 95% non-condensing.
- Noise Rating Data: < 75 dBA.



Type	Pump quantity	Connections			Max. Delivery Pressure [bar]	Power Consumption [kW]	Full Load Current [A]	Weight [kg]		Order Code
		System [mm]	Mains Supply [mm]	Over-flow [mm]						
Twin System 2 x 125D	2 *	2 x 15 (1/2" M)	15 (1/2" M)	22	3	2 x 0.37	2 x 2.6	29	1	17425
Twin System 2 x 225D	4 **	2 x 15 (1/2" M)	15 (1/2" M)	22	3	4 x 0.37	2 x 2.6	35	1	45062
Twin System 2 x 150D	2 *	2 x 15 (1/2" M)	15 (1/2" M)	22	6	2 x 0.5	2 x 3.4	31	1	17426
Twin System 2 x 250D	4 **	2 x 15 (1/2" M)	15 (1/2" M)	22	6	4 x 0.5	2 x 3.4	39	1	45063

* 1 pump for each system.

** 2 pumps for each system.

kiwa 

Dimensions Flexfiller Twin System

Type	Dimensions								
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	H [mm]	K [mm]	M [mm]
Twin System 2 x 125D - 2 x 150D	330	480	760	500	150	800	220	520	580
Twin System 2 x 225D- 2 x 250D	330	480	760	500	150	800	220	520	580

PressDS

The PressDS (Pressurisation/Dosing System) is a floor standing, additive top-up mixing pressurisation unit with a 4 litre break tank to be connected to the mains supply. 18 litre tank for additive storage. Each time the unit tops-up the system with water, it also automatically adds additive from a dedicated tank at a predetermined rate, reducing intervention and maximising system protection. The correct fluid mix is blended on demand at the time of system top-up. Available with double pump (for duty/standby configuration).

Application

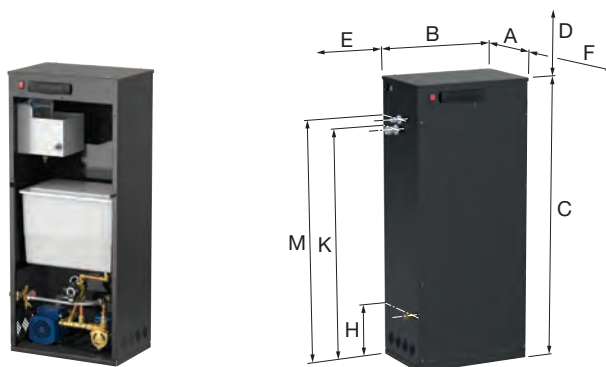
- Commercial and Industrial.


Product Features:

- For system volumes up to 300,000 litres.
- Fluid Protection Category 5 (AB Weir Overflow).
- Mix ratios from 1% to 50% user configurable balancing valves.
- Top-up pressurisation unit (<18.0 l/min).
- System fill mode.
- Onscreen Service Reminder - 12 Months. Onscreen message when additive tank is empty.
- Electric pump, 230V 50Hz 1ph.
- Colour: Black (RAL 9005)

Operating Conditions:

- System temperature range at point of connection: 5 °C / 85 °C.
- Ambient temperature range: 5 °C / 40 °C.
- Pressure rating: PN 10.
- Relative humidity 95% non-condensing.
- Noise Rating Data: < 75 dBA.



Type	Pump quantity	Connections			Max. Delivery Pressure [bar]	Power Consumption [kW]	Full Load Current [A]	Weight [kg]		Order Code
		System [mm]	Mains Supply [mm]	Over-flow [mm]						
PressDS 225D	2	15 (1/2" M)	15 (1/2" M)	22	3	2 x 0.37	2.6	35	1	45046
PressDS 250D	2	15 (1/2" M)	15 (1/2" M)	22	6	2 x 0.5	3.5	39	1	45047
PressDS 280D	2	15 (1/2" M)	15 (1/2" M)	22	8	2 x 0.75	5.6	45	1	17392

Dimensions PressDS

Type	Dimensions								
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	H [mm]	K [mm]	M [mm]
PressDS 225D - 250D	320	480	1180	500	150	800	230	930	1030
PressDS 280D	660	470	1090	500	150	800	370	690	740

Pro PU

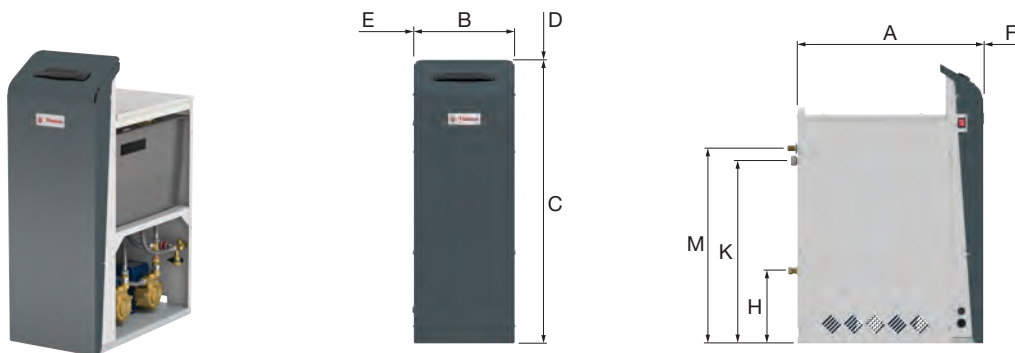
The Pro PU is a floor standing, flow rate (up to 18 l/min) top-up pressurisation unit with 18 litre internal break tank. Ideal for Industrial, commercial or large domestic applications. Available in single or twin pump configuration.


Product Features

- For system volumes up to 300,000 litres.
- Pressure setting in 0.1 bar increments.
- Dry Run Protection.
- Anti-Seize Routine (Pump is pulsed for 2 seconds if inactive for 60 days, must be enabled at time of commissioning).
- Electric pump, 230V 50Hz 1ph.
- Colour: Grey (RAL 7016).

Operating Conditions:

- System temperature range at point of connection: 5 °C / 85 °C.
- Ambient temperature range: 5 °C / 40 °C.
- Pressure rating: PN 10.
- Relative humidity 95% non-condensing.
- Noise Rating Data: < 75 dBA.



Type	Pump quantity	Connections			Max. Delivery Pressure [bar]	Power Consumption [kW]	Full Load Current [A]	Weight [kg]		Order Code
		System [mm]	Mains Supply [mm]	Overflow [mm]						
Pro PU 131 / 1-3	1	15 (1/2")	15 (1/2")	22	3	0.37	2.6	29	1	21600
Pro PU 161 / 1-6	1	15 (1/2")	15 (1/2")	22	6	0.5	3.4	31	1	21601
Pro PU 181 / 1-8	1	15 (1/2")	15 (1/2")	22	8	0.75	5.6	34	1	21602
Pro PU 231 / 1-3	2	15 (1/2")	15 (1/2")	22	3	2 x 0.37	5.2	35	1	21603
Pro PU 261 / 1-6	2	15 (1/2")	15 (1/2")	22	6	2 x 0.5	6.8	39	1	21604
Pro PU 281 / 1-8	2	15 (1/2")	15 (1/2")	22	8	2 x 0.75	11.2	45	1	21605

Dimensions Pro PU

Type	Dimensions								
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	H [mm]	K [mm]	M [mm]
Pro PU 131 - 181	609	325	915	500	150	500	235	587	627
Pro PU 231 - 281	609	325	915	500	150	500	235	587	627

Pro PUm

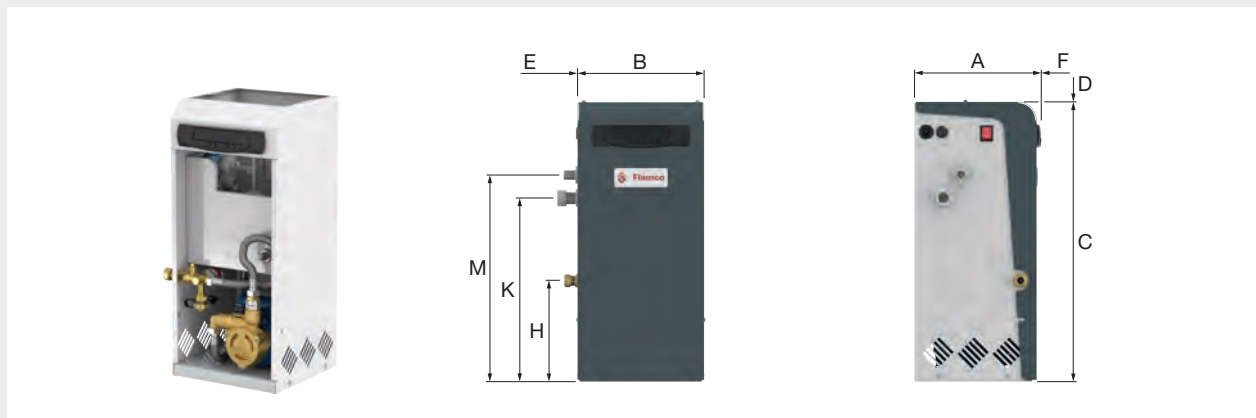
The Pro PUm is a wall mounted, flow rate (up to 12 l/min) top-up pressurisation unit with 4 litre internal break tank. Ideal for Industrial, commercial or large domestic applications. Available in single or twin pump configuration.


Product Features

- For system volumes up to 50,000 litres.
- Pressure setting in 0.1 bar increments.
- Dry Run Protection.
- Anti-Seize Routine (Pump is pulsed for 2 seconds if inactive for 60 days, must be enabled at time of commissioning).
- Electric pump, 230V 50Hz 1ph.
- Colour: Grey (RAL 7016).

Operating Conditions:

- System temperature range at point of connection: 5 °C / 85 °C.
- Ambient temperature range: 5 °C / 40 °C.
- Pressure rating: PN 10.
- Relative humidity 95% non-condensing.
- Noise Rating Data: < 75 dBA.



Type	Pump quantity	Connections			Max. Delivery Pressure [bar]	Power Consumption [kW]	Full Load Current [A]	Weight [kg]		Order Code
		System [mm]	Mains Supply [mm]	Overflow [mm]						
Pro PUm 131 / 1-3	1	15 (1/2")	15 (1/2")	22	3	0.37	2.6	17	1	21611
Pro PUm 161 / 1-6	1	15 (1/2")	15 (1/2")	22	6	0.5	3.4	19	1	21612
Pro PUm 231 / 1-3	2	15 (1/2")	15 (1/2")	22	3	2 x 0.37	5.2	38	1	21613
Pro PUm 261 / 1-6	2	15 (1/2")	15 (1/2")	22	6	2 x 0.5	6.8	42	1	21614

Dimensions Pro Pum

Type	Dimensions								
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	H [mm]	K [mm]	M [mm]
Pro PUm 131 - 161	240	248	547	500	150	500	280	359	404
Pro PUm 231 - 261	270	368	547	500	150	500	294	359	404

Pro PDm

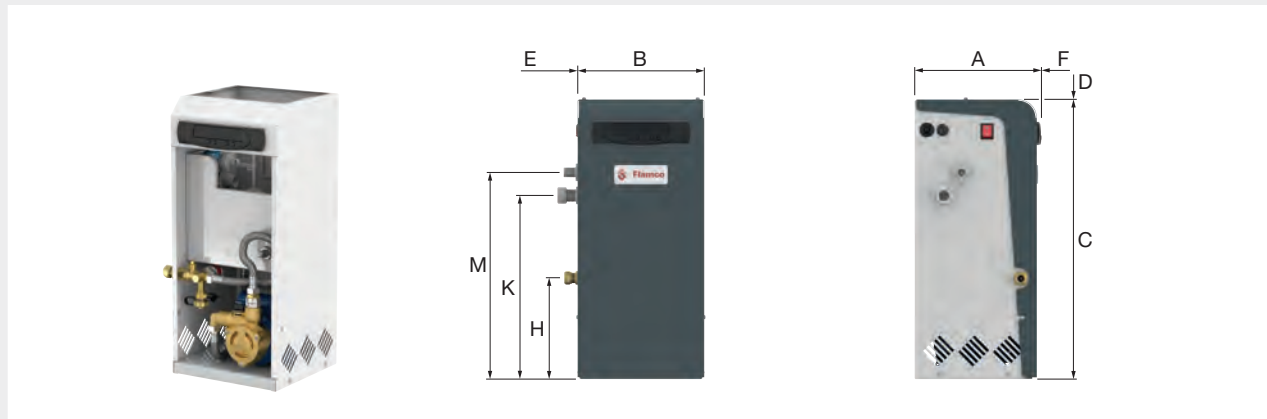
The Pro PDm is a wall mounted, flow rate (up to 12 l/min) top-up pressurisation unit with 4 litre internal break tank. Ideal for Industrial, commercial or large domestic applications. Available preset to 1.0 bar, 1.5 bar, 2.0 bar or 2.5 bar topup (Delivery pressure).


Product Features

- For system volumes up to 50,000 litres.
- Dry Run Protection.
- Anti-Seize Routine (Pump is pulsed for 2 seconds if inactive for 60 days, must be enabled at time of commissioning).
- Pressure setting in 0.1 bar increments.
- Self venting pumps and preset options to remove the need for conventional commissioning of the Pressurisation Unit.
- Preset to facilitate a plug and play installation.
- Electric pump, 230V 50Hz 1ph.
- Colour: Grey (RAL 7016).

Operating Conditions:

- System temperature range at point of connection: 5 °C / 85 °C.
- Ambient temperature range: 5 °C / 40 °C.
- Pressure rating: PN 10.
- Relative humidity 95% non-condensing.
- Noise Rating Data: < 75 dBA.



Type	Pump quantity	Connections		Over-flow [mm]	Max. Delivery Pressure [bar]	Power Consumption [kW]	Preset Settings			Weight [kg]		Order Code
		System [mm]	Mains Supply [mm]				Cold Fill [bar]	Low Alarm [bar]	High Alarm [bar]			
Pro PDm 1.0	1	15 (1/2")	15 (1/2")	22	2.5	0.41	1.0	0.5	2.7	17	1	21617
Pro PDm 1.5	1	15 (1/2")	15 (1/2")	22	2.5	0.41	2.0	1.0	3.5	17	1	21618
Pro PDm 2.0	1	15 (1/2")	15 (1/2")	22	2.5	0.41	1.5	1.0	3.0	17	1	21619
Pro PDm 2.5	1	15 (1/2")	15 (1/2")	22	2.5	0.41	2.5	2.0	4.0	17	1	21620

Dimensions Pro PDm

Type	Dimensions								
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	H [mm]	K [mm]	M [mm]
Pro PDM 1.0 - 2.5	240	250	550	800	150	500	200	360	400

Pro PDS

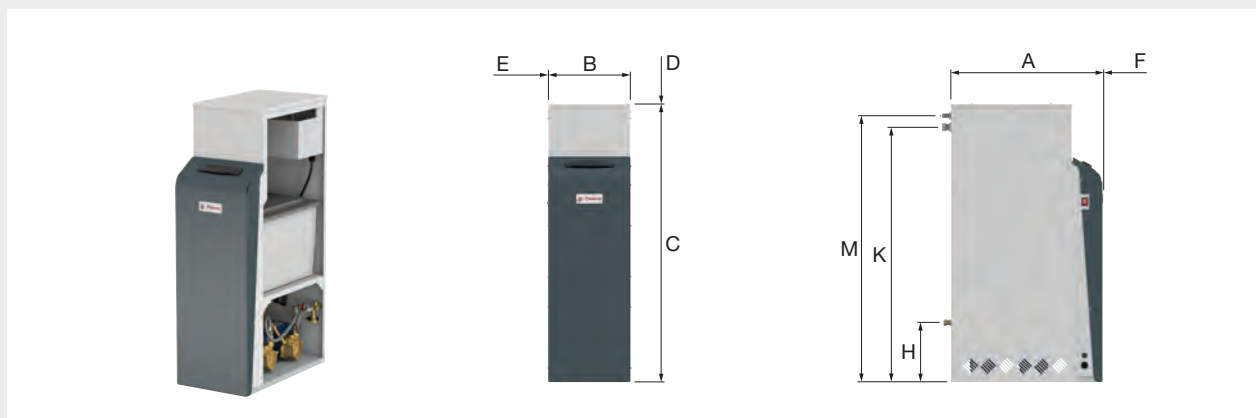
The Pro PDS (Pressurisation/Dosing System) is a floor standing, additive top-up mixing pressurisation unit with a 4 litre break tank to be connected to the mains supply. 18 litre tank for additive storage. Each time the unit tops-up the system with water, it also automatically adds additive from a dedicated tank at a predetermined rate, reducing intervention and maximising system protection. Available with double pump (for duty/standby configuration).


Product Features

- For system volumes up to 300,000 litres.
- Dry Run Protection.
- Anti Seize Routine (Pump is pulsed for 2 seconds if inactive for 60 days, must be enabled at time of commissioning).
- Pressure setting in 0.1 bar increments.
- Electric pump, 230V 50Hz 1ph.
- Colour: Grey (RAL 7016).

Operating Conditions:

- System temperature range at point of connection: 5 °C / 70 °C.
- Ambient temperature range: 5 °C / 40 °C.
- Pressure rating: PN 10.
- Relative humidity 95% non-condensing.
- Noise Rating Data: < 75 dBA.



Type	Pump quantity	Connections			Max. Delivery Pressure [bar]	Power Consumption [kW]	Full Load Current [A]	Weight [kg]		Order Code
		System [mm]	Mains Supply [mm]	Overflow [mm]						
Pro PDS 231 / 1-3	2	15 (1/2")	15 (1/2")	22	3	2 x 0.37	5.2	35	1	21606
Pro PDS 261 / 1-6	2	15 (1/2")	15 (1/2")	22	6	2 x 0.5	6.8	39	1	21607
Pro PDS 281 / 1-8	2	15 (1/2")	15 (1/2")	22	8	2 x 0.75	11.2	45	1	21608

Dimensions Pro PDS

Type	Dimensions								
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	H [mm]	K [mm]	M [mm]
Pro PDS 231 - 281	630	324	1095	500	500	500	340	922	960

Safety Valves



P. 132

Safety Sets



P. 143

Pressure Gauges



P. 144

Safety Valves and Pressure Gauges

2



Flamco has a complete range of products to protect sealed cooling, heating and solar installations. For example, the different versions of our Prescor safety valves are used internationally to prevent overpressure situations in sealed systems. The broad Pressure Safety portfolio for potable installations protects drinking water systems and potable installations. For example, our Prescor BFP removes the risk of pollution or contamination of a drinking water network, temperature control and inlet combination valves for drinking water systems protect against exceeding the maximum pressure.

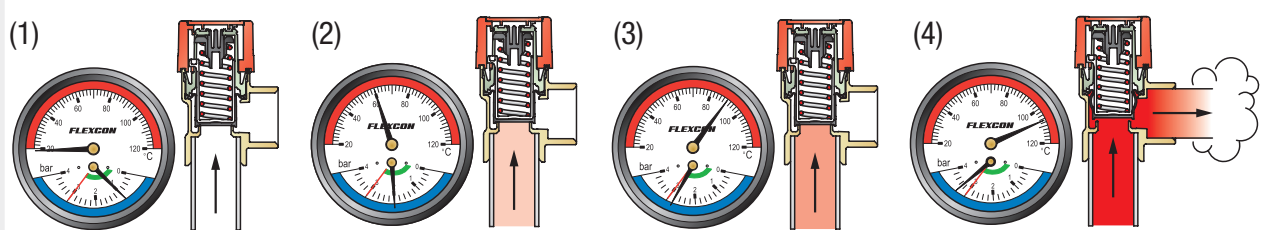
PRESCOR SAFETY VALVES HEATING

Prescor safety valves have a special shape which, not only achieves a perfect seal, but also provides a large blow off capacity. The valve seal is made of high quality rubber which is heat resistant to 140 °C and where the hardness of the rubber adjusts to the set pressure of the safety valve. In this way, the valve cannot stick to the seat.

All valves are tested before they leave our facility and are available for heating and cooling installations as well as for protection of various hot water storage appliances. For safety valves for potable water installations see "Accessories for Sanitary Installations".

How a Prescor works

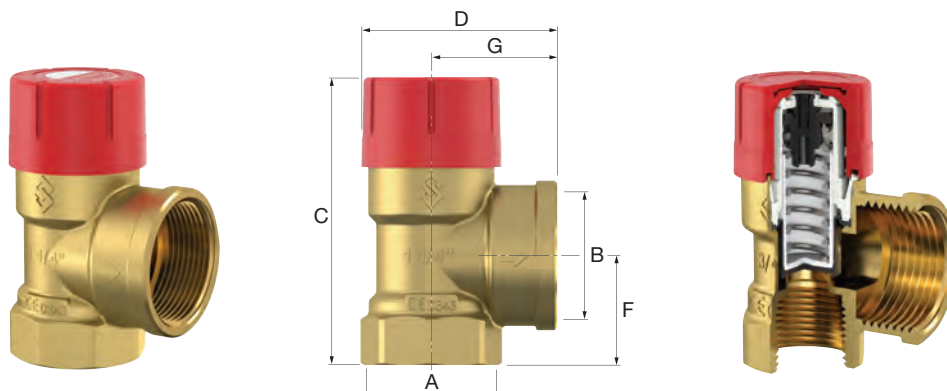
- (1) The sealed system is cold.
- (2) When the system heats up, the water inside will expand.
- (3) The pressure in the system rises.
- (4) When the pressure exceeds the set pressure of the Prescor valve it opens and the excess pressure is discharged.





Prescor

For sealed central heating and chilled water (cooling) installations. The valve opens when the pressure increases excessively.

- Specially designed pop action for full discharge at opening pressure to reduce the pressure quickly.
- High quality materials and state-of-the-art design features guarantee a high degree of safety.
- CE-conformity mark (PED 2014/68/EU), for application areas according to Pressure Equipment Directive.
- The opening pressure of all valves is individually tested.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Minimum/Maximum working temperature: -10 °C / 120 °C.
- Peak load: 140 °C.
- Operational tolerance is -5% to +5% on set pressure (NF certified valves have a tolerance of -0% to +10%).



Type	Set pressure [bar]	Connection		Dimensions				Heating capacity [kW]		Order Code
		A	B	C [mm]	D [mm]	F [mm]	G [mm]			
Prescor 1/2 - 1.5 bar	1.5	Rp 1/2"	Rp 1/2"	68.7	47.2	21.5	28.5	85	50	27608
Prescor 1/2 - 1.8 bar	1.8	Rp 1/2"	Rp 1/2"	68.7	47.2	21.5	28.5	95	50	27602
Prescor 1/2 - 3.0 bar	3.0	Rp 1/2"	Rp 1/2"	68.7	47.2	21.5	28.5	125	50	27665
Prescor 1/2 - 4.0 bar	4.0	Rp 1/2"	Rp 1/2"	68.7	47.2	21.5	28.5	155	50	27606
Prescor 1/2 M - 3.0 bar	3.0	R 1/2"	Rp 1/2"	81.2	47.2	19	28.5	125	50	27675
Prescor 1/2 - 2.5 bar *	2.5	Rp 1/2"	Rp 3/4"	74.7	53.2	26.5	34.5	50	50	27630
Prescor 1/2 - 3.0 bar *	3.0	Rp 1/2"	Rp 3/4"	74.7	53.2	26.5	34.5	50	50	27634
Prescor 1/2 NF - 3.0 bar	3.0	Rp 1/2"	Rp 1/2"	68.7	47.2	21.5	28.5	125	50	27609
Prescor 3/4 - 1.5 bar	1.5	Rp 3/4"	Rp 3/4"	70.9	49.2	23.5	30.5	115	50	27023
Prescor 3/4 - 1.8 bar	1.8	Rp 3/4"	Rp 3/4"	70.9	49.2	23.5	30.5	125	50	27021
Prescor 3/4 - 2.5 bar	2.5	Rp 3/4"	Rp 3/4"	70.9	49.2	23.5	30.5	150	50	27026
Prescor 3/4 M - 2.5 bar	2.5	R 3/4"	Rp 3/4"	85.3	49.1	38	30.5	150	40	27030
Prescor 3/4 - 3.0 bar	3.0	Rp 3/4"	Rp 3/4"	70.9	49.2	23.5	30.5	165	50	27025
Prescor 3/4 - 4.0 bar	4.0	Rp 3/4"	Rp 3/4"	70.9	49.2	23.5	30.5	200	50	27028
Prescor 3/4 - 3.0 bar *	3.0	Rp 3/4"	Rp 1"	76.8	55.2	29.5	36.5	100	40	27024
Prescor 3/4 - 2.5 bar *	2.5	Rp 3/4"	Rp 1"	76.8	55.2	29.5	36.5	100	40	27020
Prescor 3/4 - 2.0 bar	2.0	Rp 3/4"	Rp 3/4"	70.9	49.2	23.5	30.5	135	50	28280
Prescor 3/4 M x K 22 - 1.5 bar	1.5	R 3/4"	K 22	85.4	58.6	38	40	105	40	28330
Prescor 3/4 M x K 22 - 2.0 bar	2.0	R 3/4"	K 22	85.4	58.6	38	40	120	40	28331
Prescor 3/4 M x K 22 - 2.5 bar	2.5	R 3/4"	K 22	85.4	58.6	38	40	135	40	28332
Prescor 3/4 M x K 22 - 3.0 bar	3.0	R 3/4"	K 22	85.4	58.6	38	40	150	40	28333
Prescor 1 - 1.5 bar	1.5	Rp 1"	Rp 1 1/4"	100.5	73.2	36	47	275	16	27042
Prescor 1 - 2.0 bar	2.0	Rp 1"	Rp 1 1/4"	100.5	73.2	36	47	320	16	27043
Prescor 1 - 2.5 bar	2.5	Rp 1"	Rp 1 1/4"	100.5	73.2	36	47	355	16	27034
Prescor 1 - 3.0 bar	3.0	Rp 1"	Rp 1 1/4"	100.5	73.2	36	47	395	16	27045
Prescor 1 - 3.5 bar	3.5	Rp 1"	Rp 1 1/4"	100.5	73.2	36	47	445	16	27047
Prescor 1 - 4.0 bar	4.0	Rp 1"	Rp 1 1/4"	100.5	73.2	36	47	485	16	27040
Prescor 1 - 5.0 bar	5.0	Rp 1"	Rp 1 1/4"	100.5	73.2	36	47	580	16	27049
Prescor 1 - 3.0 bar *	3.0	Rp 1"	Rp 1 1/4"	100.5	73.2	36	47	200	16	27048
Prescor 1 - 2.5 bar *	2.5	Rp 1"	Rp 1 1/4"	100.5	73.2	36	47	200	16	27044

Type	Set pressure [bar]	Connection		Dimensions				Heating capacity [kW]		Order Code
		A	B	C [mm]	D [mm]	F [mm]	G [mm]			
Prescor 1 1/4 - 3.0 bar	3.0	Rp 1 1/4"	Rp 1 1/2"	108.5	73.5	41	47	580	16	27056
Prescor 1 1/4 - 4.0 bar	4.0	Rp 1 1/4"	Rp 1 1/2"	108.5	73.5	41	47	710	16	27037
Prescor 1 1/4 - 5.0 bar	5.0	Rp 1 1/4"	Rp 1 1/2"	108.5	73.5	41	47	845	16	27039
Prescor 1 1/4 - 2.5 bar *	2.5	Rp 1 1/4"	Rp 1 1/2"	108.5	73.5	41	47	350	16	27055
Prescor 1 1/4 - 3.0 bar *	3.0	Rp 1 1/4"	Rp 1 1/2"	108.5	73.5	41	47	350	16	27057

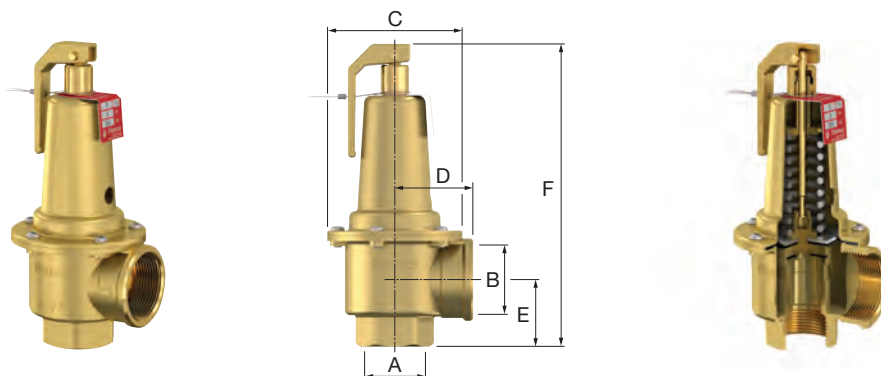
* Manufactured according to TRD directives.




Prescor S

For sealed central heating and chilled water (cooling) installations.

- Ideal safeguard for larger systems.
- More than one Prescor S safety valve may be fitted to a system so that it can meet the required capacity if the applicable regulations allow.
- With diaphragm that protects the spring, preventing water leakage via the spindle.
- Minimum/Maximum working temperature: -10 °C / 120 °C.
- Suitable for addition of glycol-based anti-freeze up to 50%.



Type	Set pressure [bar]	Connection		Dimensions				Heating capacity [kW]		Order Code
		A	B	C [mm]	D [mm]	E [mm]	F [mm]			
Prescor S 700 1 1/4 - 3.0 bar	3.0	1 1/4" F	1 1/2" F	95	55	47	213	810	1	29203
Prescor S 700 1 1/4 - 3.5 bar	3.5	1 1/4" F	1 1/2" F	95	55	47	213	911	1	29204
Prescor S 700 1 1/4 - 4.0 bar	4.0	1 1/4" F	1 1/2" F	95	55	47	213	1013	1	29205
Prescor S 700 1 1/4 - 4.5 bar	4.5	1 1/4" F	1 1/2" F	95	55	47	213	1117	1	29206
Prescor S 700 1 1/4 - 5.0 bar	5.0	1 1/4" F	1 1/2" F	95	55	47	213	1220	1	29207
Prescor S 700 1 1/4 - 6.0 bar	6.0	1 1/4" F	1 1/2" F	95	55	47	213	1426	1	29208
Prescor S 700 1 1/4 - 7.0 bar	7.0	1 1/4" F	1 1/2" F	95	55	47	213	1632	1	29209
Prescor S 700 1 1/4 - 8.0 bar	8.0	1 1/4" F	1 1/2" F	95	55	47	213	1839	1	29210
Prescor S 700 1 1/4 - 10.0 bar	10.0	1 1/4" F	1 1/2" F	95	55	47	213	2252	1	29211
Prescor S 960 1 1/2 - 2.8 bar	2.8	G 1 1/2" F	G 2" F	95	60	47	220	1084	1	29220
Prescor S 960 1 1/2 - 3.0 bar	3.0	G 1 1/2" F	G 2" F	95	60	47	220	1120	1	29223
Prescor S 960 1 1/2 - 3.5 bar	3.5	G 1 1/2" F	G 2" F	95	60	47	220	1289	1	29224
Prescor S 960 1 1/2 - 4.0 bar	4.0	G 1 1/2" F	G 2" F	95	60	47	220	1435	1	29225
Prescor S 960 1 1/2 - 4.5 bar	4.5	G 1 1/2" F	G 2" F	95	60	47	220	1581	1	29226
Prescor S 960 1 1/2 - 5.0 bar	5.0	G 1 1/2" F	G 2" F	95	60	47	220	1727	1	29227
Prescor S 960 1 1/2 - 6.0 bar	6.0	G 1 1/2" F	G 2" F	95	60	47	220	2019	1	29228
Prescor S 960 1 1/2 - 7.0 bar	7.0	G 1 1/2" F	G 2" F	95	60	47	220	2312	1	29229
Prescor S 960 1 1/2 - 8.0 bar	8.0	G 1 1/2" F	G 2" F	95	60	47	220	2604	1	29230
Prescor S 960 1 1/2 - 10.0 bar	10.0	G 1 1/2" F	G 2" F	95	60	47	220	3188	1	29231
Prescor S 1700 2 - 3.0 bar	3.0	G 2" F	G 2 1/2" F	127	85	76	293	1980	1	29243
Prescor S 1700 2 - 3.5 bar	3.5	G 2" F	G 2 1/2" F	127	85	76	293	2259	1	29244
Prescor S 1700 2 - 4.0 bar	4.0	G 2" F	G 2 1/2" F	127	85	76	293	2515	1	29245
Prescor S 1700 2 - 4.5 bar	4.5	G 2" F	G 2 1/2" F	127	85	76	293	2772	1	29246
Prescor S 1700 2 - 5.0 bar	5.0	G 2" F	G 2 1/2" F	127	85	76	293	3028	1	29247
Prescor S 1700 2 - 6.0 bar	6.0	G 2" F	G 2 1/2" F	127	85	76	293	3540	1	29248
Prescor S 1700 2 - 7.0 bar	7.0	G 2" F	G 2 1/2" F	127	85	76	293	4053	1	29249
Prescor S 1700 2 - 8.0 bar	8.0	G 2" F	G 2 1/2" F	127	85	76	293	4565	1	29250
Prescor S 1700 2 - 10.0 bar	10.0	G 2" F	G 2 1/2" F	127	85	76	293	5590	1	29251
Prescor S 600 1 1/2 - 3.0 bar *	3.0	G 1 1/2" F	G 2" F	95	60	47	220	600	1	29521
Prescor S 900 2 - 3.0 bar *	3.0	G 2" F	G 2 1/2" F	95	80	61	278	900	1	29531

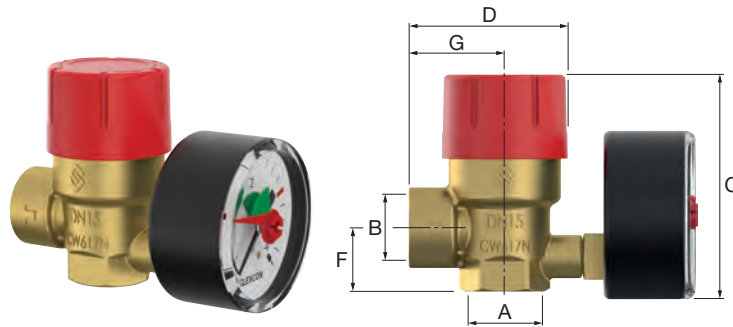
* Produced according to TRD directives.




Prescomano

Safety valves with pressure gauge for sealed central heating and chilled water (cooling) installations.

- Suitable for addition of glycol-based anti-freeze up to 50%.
- Minimum/Maximum working temperature: -10 °C / 120 °C.
- Peak load: 140 °C.
- Operational tolerance is -5% to +5% on set pressure (NF certified valves have a tolerance of -0% to +10%).



Type	Set pressure [bar]	Connection		Dimensions				Heating capacity [kW]		Order Code
		A	B	C [mm]	D [mm]	F [mm]	G [mm]			
Prescomano 1/2 - 2.5 bar *	2.5	Rp 1/2"	Rp 3/4"	74.7	54	26.5	34.5	50	20	27687
Prescomano 1/2 - 3.0 bar *	3.0	Rp 1/2"	Rp 3/4"	74.7	54	26.5	34.5	50	20	27686
Prescomano 1/2 - 3.0 bar - Rotatable	3.0	Rp 1/2"	Rp 3/4"	76.0	54	27.0	35.0	120	20	27688
Prescomano 1/2 - 3.0 bar	3.0	Rp 1/2"	Rp 1/2"	68.7	48	21.5	28.5	125	20	27683
Prescomano 1/2 NF - 3.0 bar	3.0	Rp 1/2"	Rp 1/2"	68.7	48	21.5	28.5	125	20	27684
Prescomano 3/4 - 3.0 bar	3.0	Rp 3/4"	Rp 3/4"	70.9	50	23.5	30.5	165	20	27090

* Produced according to TRD directives.



PRESCOR SAFETY VALVES WATER HEATERS

For protecting water heaters and potable water systems.

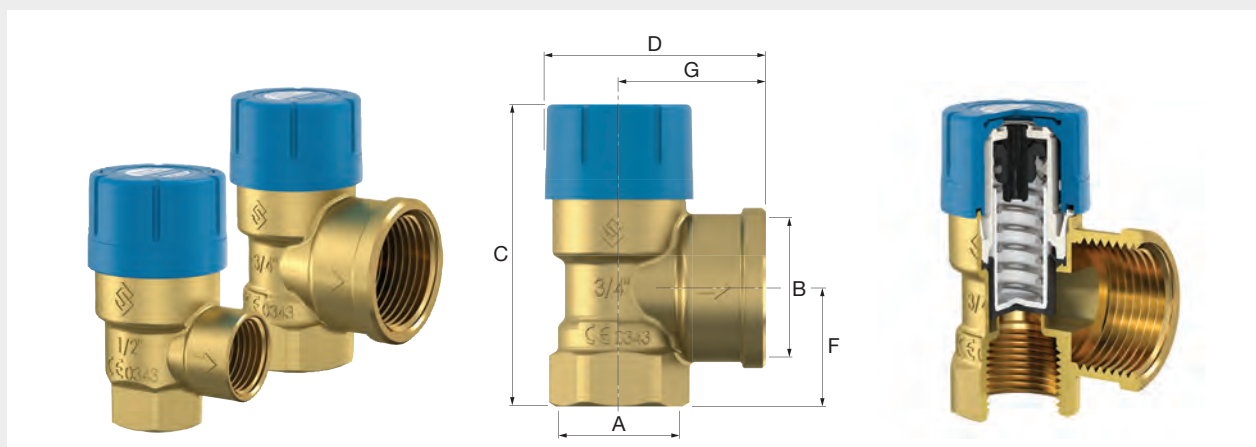
When the system pressure reaches the set pressure, the Prescor B boiler valve begins to vent, whereby the pressure stops rising. If, due to specific circumstances, the pressure rapidly rises over the set pressure, the Prescor B boiler valve will open fully, creating a large blow off capacity. This is a permanent, reliable safeguard against overpressure. Venting can be prevented by installing a suitably sized Airfix expansion vessel for sanitary systems.


The seating of Prescor boiler valves is designed so that it not only makes a perfect seal but can also achieve a large blow-off capacity. The hardness of the rubber is adapted according to the set pressure of the safety valve. Due to this combination of a specifically designed seating and special rubber it is possible to achieve optimum safety.


- Wide range so that the correct valve can be selected appropriate to the application.
- Can be used in combination with any storage boiler system.
- Because of the "pop" effect these valves have a high blow-off capacity.
- Solid brass housing.
- Valve seat with silicon free rubber seal.
- Anti-ageing steel spring maintains the set pressure accurately.
- With silicon free diaphragm that prevents moisture and dirt from getting into the moving parts.
- Construction and choice of materials are your guarantee of accuracy and safety.
- In accordance with PED 2014/68/EU and EN 12516-3.

Prescor B

- Minimum/Maximum working temperature: 0 °C / 95 °C.
- Peak load: 140 °C.



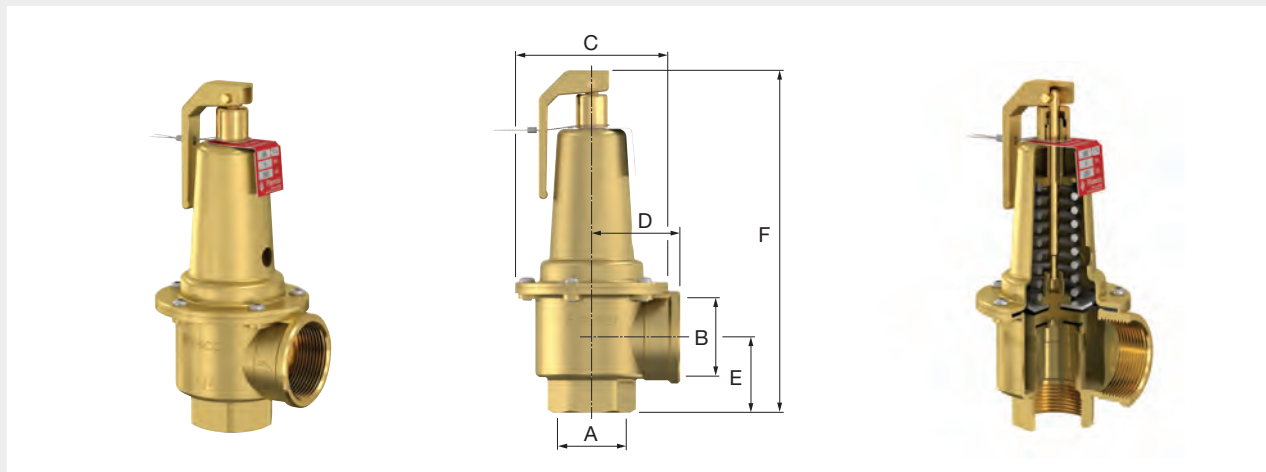
Type	Set pressure [bar]	Connection		Dimensions				Capacity [kW]		Order Code
		A	B	C [mm]	D [mm]	F [mm]	G [mm]			
Prescor B 1/2 - 6.0 bar	6.0	Rp 1/2"	Rp 1/2"	68.7	47.2	21.5	28.5	75	50	27100
Prescor B 1/2 - 7.0 bar	7.0	Rp 1/2"	Rp 1/2"	68.7	47.2	21.5	28.5	75	50	27103
Prescor B 1/2 - 8.0 bar	8.0	Rp 1/2"	Rp 1/2"	68.7	47.2	21.5	28.5	75	50	27101
Prescor B 1/2 - 10.0 bar	10.0	Rp 1/2"	Rp 1/2"	68.7	47.2	21.5	28.5	75	50	27102
Prescor B 3/4 - 6.0 bar	6.0	Rp 3/4"	Rp 1"	76.8	55.2	29.5	36.5	150	40	27110
Prescor B 3/4 M - 6.0 bar	6.0	R 3/4"	Rp 3/4"	85.3	49.1	38	30.5	150	40	27113
Prescor B 3/4 M - 10.0 bar	10.0	R 3/4"	Rp 3/4"	85.3	49.1	38	30.5	150	40	27114
Prescor B 3/4 - 6.0 bar	6.0	Rp 3/4"	Rp 3/4"	70.9	49.2	23.5	30.5	150	50	27115
Prescor B 3/4 - 8.0 bar	8.0	Rp 3/4"	Rp 3/4"	70.9	49.2	23.5	30.5	150	50	27116
Prescor B 3/4 - 10.0 bar	10.0	Rp 3/4"	Rp 3/4"	70.9	49.2	23.5	30.5	150	50	27117
Prescor B 3/4 - 7.0 bar	7.0	Rp 3/4"	Rp 3/4"	70.9	49.2	23.5	30.5	150	40	28233
Prescor B 3/4 - 8.0 bar	8.0	Rp 3/4"	Rp 1"	76.8	55.2	29.5	36.5	150	40	27111
Prescor B 3/4 - 10.0 bar	10.0	Rp 3/4"	Rp 1"	76.8	55.2	29.5	36.5	150	40	27112
Prescor B 1 - 6.0 bar	6.0	Rp 1"	Rp 1 1/4"	100.5	73.2	36.0	47.0	250	16	29005


Type	Set pressure [bar]	Connection		Dimensions				Capacity [kW]		Order Code
		A	B	C [mm]	D [mm]	F [mm]	G [mm]			
Prescor B 1 - 7.0 bar	7.0	Rp 1"	Rp 1 1/4"	100.5	73.2	36.0	47.0	250	16	28993
Prescor B 1 - 8.0 bar	8.0	Rp 1"	Rp 1 1/4"	100.5	73.2	36.0	47.0	250	16	29006
Prescor B 1 - 10.0 bar	10.0	Rp 1"	Rp 1 1/4"	100.5	73.2	36.0	47.0	250	16	29007
Prescor B 1/2 M x K 15 - 6.0 bar	6.0	R 1/2"	K 15	81.2	60.5	37.0	42.0	75	40	28283
Prescor B 1/2 M x K 15 - 9.0 bar	9.0	R 1/2"	K 15	81.2	60.5	37.0	42.0	75	40	28281
Prescor B 1/2 M x K 15 - 10.0 bar	10.0	R 1/2"	K 15	81.2	60.5	37.0	42.0	75	40	28282



Prescor SB

- Minimum/Maximum working temperature: 0 °C / 95 °C.
- Peak load: 140 °C.



Type	Set pressure [bar]	Connection		Dimensions				Capacity [kW]		Order Code
		A	B	C [mm]	D [mm]	E [mm]	F [mm]			
Prescor SB 1 1/4 - 6.0 bar	6.0	G 1 1/4" F	G 1 1/2" F	95	55	47	213	350	1	29008
Prescor SB 1 1/4 - 8.0 bar	8.0	G 1 1/4" F	G 1 1/2" F	95	55	47	213	350	1	29009
Prescor SB 1 1/4 - 10.0 bar	10.0	G 1 1/4" F	G 1 1/2" F	95	55	47	213	350	1	29010
Prescor SB 1 1/2 - 6.0 bar	6.0	G 1 1/2" F	G 2" F	95	60	47	220	600	1	29011
Prescor SB 1 1/2 - 8.0 bar	8.0	G 1 1/2" F	G 2" F	95	60	47	220	600	1	29012
Prescor SB 1 1/2 - 10.0 bar	10.0	G 1 1/2" F	G 2" F	95	60	47	220	600	1	29013
Prescor SB 2 - 6.0 bar	6.0	G 2" F	G 2 1/2" F	95	80	61	278	900	1	29015
Prescor SB 2 - 8.0 bar	8.0	G 2" F	G 2 1/2" F	95	80	61	278	900	1	29016
Prescor SB 2 - 10.0 bar	10.0	G 2" F	G 2 1/2" F	95	80	61	278	900	1	29017

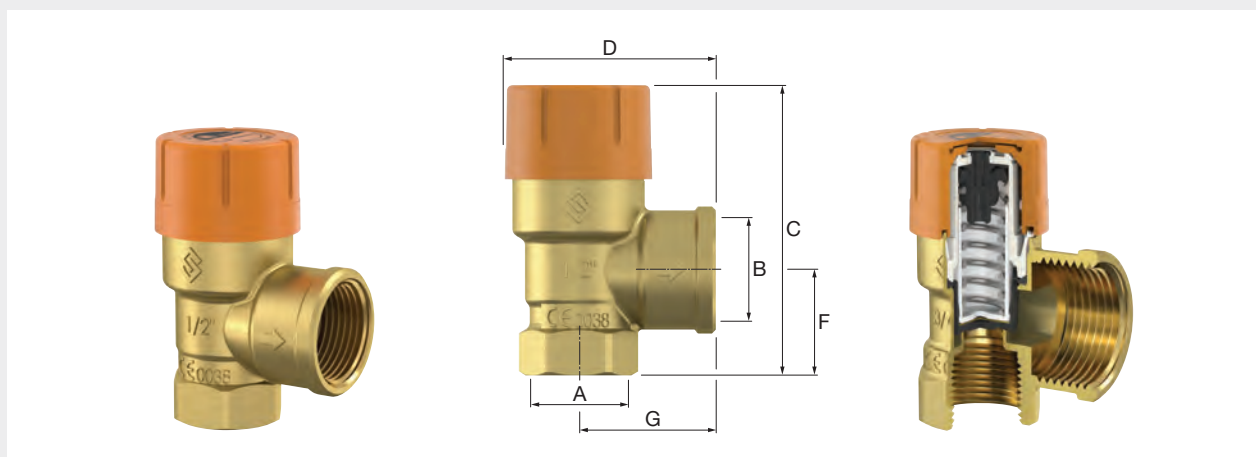



PRESCOR SAFETY VALVES SOLAR

Prescor Solar

Specially designed for sealed solar installations.

- Suitable for addition of glycol-based anti-freeze up to 50%.
- Minimum/Maximum working temperature: -30 °C / 120 °C.
- Peak load: 160 °C.



Type	Set pressure [bar]	Connection		Dimensions				Heating capacity [kW]		Order Code
		A	B	C [mm]	D [mm]	F [mm]	G [mm]			
Prescor Solar 1/2 - 3.0 bar	3.0	Rp 1/2"	Rp 3/4"	75	54	26.5	34.5	50	40	28310
Prescor Solar 1/2 - 6.0 bar	6.0	Rp 1/2"	Rp 3/4"	75	54	26.5	34.5	50	40	28311
Prescor Solar 1/2 - 8.0 bar	8.0	Rp 1/2"	Rp 3/4"	75	54	26.5	34.5	50	40	28312
Prescor Solar 3/4 - 6.0 bar	6.0	Rp 3/4"	Rp 1"	77	56	29.5	36.5	100	40	28316
Prescor Solar 3/4 - 8.0 bar	8.0	Rp 3/4"	Rp 1"	77	56	29.5	36.5	100	40	28317
Prescor Solar 1 - 6.0 bar	6.0	Rp 1"	Rp 1 1/4"	101	74	36.0	47	200	16	28321
Prescor Solar 1 - 8.0 bar	8.0	Rp 1"	Rp 1 1/4"	101	74	36.0	47	200	16	28322
Prescor Solar 3/4 - 10.0 bar	10.0	Rp 3/4"	Rp 1"	77	56	29.5	36.5	100	40	28318

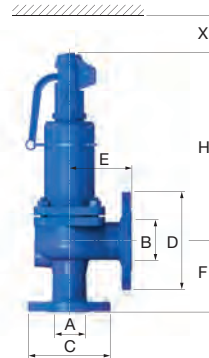



FULL-STROKE SAFETY VALVES

Full-stroke safety valve

For heating installations according to DIN EN 12828.

- Produced according to TRD directives.
- Cast iron body (PN 10).
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Maximum working temperature: 120 °C.



Type		Set pres- sure [bar]	Connection		Dimensions						Weight [kg]		Order Code
			A [DN]	B [DN]	C [mm]	D [mm]	E [mm]	F [mm]	H [mm]	X [mm]			
Full-stroke safety valve	32 - specify	*	32	50	140	165	110	115	330	200	13.5	1	27082
Full-stroke safety valve	40 - specify	*	40	65	150	185	115	140	390	250	20	1	27083
Full-stroke safety valve	50 - specify	*	50	80	165	200	120	150	435	300	26	1	27084
Full-stroke safety valve	65 - specify	*	65	100	185	220	140	170	545	350	39	1	27085
Full-stroke safety valve	80 - specify	*	80	125	200	250	160	195	610	400	53	1	27086
Full-stroke safety valve	100 - specify	*	100	150	220	285	180	220	690	500	82	1	27087

* Specify set-pressure when ordering between 1.0 bar and 10.0 bar.



Selection Table for full-stroke safety valve

Set-pressure [bar]	Connection (A)							
	DN 20 [kW]	DN 25 [kW]	DN 32 [kW]	DN 40 [kW]	DN 50 [kW]	DN 65 [kW]	DN 80 [kW]	DN 100 [kW]
1.0	124	193	321	495	774	1310	1980	3095
1.5	164	257	427	658	1030	1740	2630	4110
2.0	183	285	474	731	1140	1930	2920	4570
2.5	217	340	565	870	1360	2300	3480	5440
3.0	250	391	649	1000	1560	2640	4000	6250
3.5	283	442	735	1130	1770	2990	4530	7070
4.0	312	488	810	1250	1950	3300	5000	7800
4.5	341	533	885	1350	2130	3600	5460	8520
5.0	370	578	960	1480	2310	3900	5910	9240
5.5	398	622	1030	1590	2490	4200	6370	9950
6.0	426	666	1100	1700	2660	4500	6820	10600
6.5	454	709	1180	1810	2840	4790	7260	11300
7.0	481	752	1250	1930	3000	5080	7700	12000
7.5	509	795	1320	2030	3180	5370	8140	12700
8.0	536	837	1390	2140	3350	5660	8580	13400
9.0	590	921	1630	2360	3685	6230	9435	14740
10.0	643	1000	1670	2570	4010	6790	10300	16000

PRESCOR T&P VALVE

The Prescor T&P temperature and pressure relief valves control and limit the temperature and pressure of the hot water contained in a domestic water heater or storage vessel and prevent it from being able to reach temperatures that are too high. On reaching the settings, the valve discharges a sufficient amount of water into the atmosphere so that the temperature and pressure return within the system's operating limits.

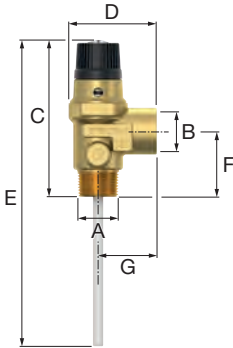

The valve opens the outlet on reaching the settings for:


- **Temperature:** the thermostat compound inside the temperature sensor, submerged in the hot water storage heater, expands as the temperature increases. This expansion causes a thrust pin to move and act on the obturator, opening the valve.
- **Pressure:** The obturator, opposed by a set spring, raises on reaching the pressure setting and opens the outlet completely. The pressure setting is chosen according to the maximum permissible pressure in the system.

As the temperature and pressure decrease, the opposite action occurs with the valve subsequently reclosing within the set tolerances.

Prescor T&P

- Opening temperature: 89 °C / 96 °C.
- Minimum/Maximum working temperature: -10 °C / 120 °C.
- Peak load: 140 °C.

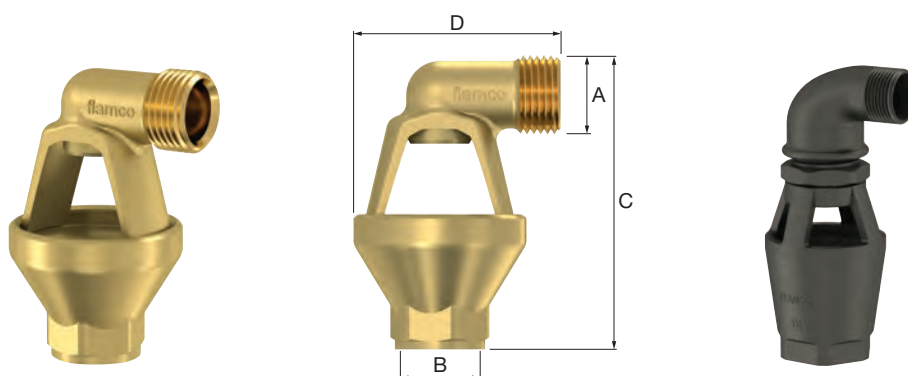



Type	Set pressure [bar]	Connection		Dimensions					Heating capacity [kW]		Order Code
		A	B	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]			
Prescor T&P - 3.5 bar	3.5	22 mm	22 mm	110		198	51	47	23	1	27135
Prescor T&P - 7 bar	7.0	R 3/4"	G 3/4" F	101		198	42	38	23	1	27146

TUNDISH

Tundish

Open 90° tundish, fitted between the Prescor safety valve and the discharge pipe. It enables you to check through the opening whether the safety valve is discharging excess water.



Type	Connection		Application	Dimensions			Order Code
	A	B		C [mm]	D [mm]		
Tundish 1/2 (brass)	R 1/2"	Rp 1/2"	Prescor 1/2", Prescomano 1/2", Prescor B 1/2"	80	58	1	27350
Tundish 3/4 (brass)	R 3/4"	Rp 1"	Prescor B 1/2", Prescor 3/4", Prescomano 3/4", Prescor Solar 1/2"	94	76	1	27360
Tundish 1 (cast iron)	1" M	1 1/2" F	Prescor 3/4" TRD, Prescor Solar 3/4"	185	95	1	27325
Tundish 1 1/4 (cast iron)	1 1/4" M	1 1/2" F	Prescor 1", Prescor Solar 1"	195	100	1	27330
Tundish 1 1/2 (cast iron)	1 1/2" M	1 1/2" F	Prescor 1 1/4", Prescor S 1 1/4"	205	105	1	27340


SAFETY SETS

Flexcon KSG Ecoplus




A Flexcon KSG boiler connection assembly is suitable for venting and safeguarding sealed heating or cooling systems including those with glycol-based additives (maximum 50%).

- The Flexcon KSG boiler connection assembly inclusive of EPP insulation.
- With a Flexvent automatic air vent, with valve sleeve, Flamco safety valve, pressure gauge with valve sleeve.
- Minimum/Maximum working temperature: -10 °C / 90 °C (peak: 120 °C).
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Safety valve: 1/2" x 3/4", 2.5 bar (110 kW).
- Flexvent 3/8" with shut-off valve.
- Pressure gauge: Ø 61 mm, 6.0 bar with shut-off valve.
- Insulation: material EPP - color: black.

Type	Set pressure [bar]	Connection	Heating capacity [kW]		Order Code
Flexcon KSG 3/4" EcoPlus	2.5	Rp 3/4"	110	6	27930

Safety Set KSG




Type	Set pressure [bar]	Connection	Heating capacity [kW]		Order Code
Safety Set 3/4" KSG	2.5	3/4"	90	1	27926
Safety Set 3/4" KSG	2.5	3/4"	50	1	27922

Safety Set SG



Including pressure gauge, safety valve and air remove screw.


Type	Set pressure [bar]	Connection		Order Code
Safety Set SG 3/4" - 1.5 bar	1.5	G 3/4" F	1	27919
Safety Set SG 3/4" x 22mm - 1.5 bar	1.5	G 3/4" F x 22 mm	1	27917
Safety Set SG 3/4" x 22mm - 2.0 bar	2.0	G 3/4" F x 22 mm	1	27932
Safety Set SG 3/4" x 22mm - 2.5 bar	2.5	G 3/4" F x 22 mm	1	27933

Flexcon KSG



Supplied complete with 2 safety valves, pressure gauge (Ø 61 mm) and Flexvent automatic airvent.

- Suitable for addition of glycol-based anti-freeze up to 50%.

Type	Set pressure [bar]	Connection	Heating capacity [kW]		Order Code
Safety set 1 1/4"	2.5	1 1/4"	460	1	27973

Safety Set Armature




Type	Connection		Order Code
Safety Set Armature	G 3/4" F	1	27918

PRESSURE GAUGES

Pressure Gauges

The pressure in the installation is indicated by the pressure gauge.




Type	Connection	Pressure range [bar]	Marking [bar]	Shut-off valve		Order Code
Pr. gauge Ø 40 ax. for Prescomano	DN 10 (1/8) ax.	0 - 4	1.5 - 2.5	no	1	27260
Pr. gauge Ø 63 rad. / 4.0b.	1/4 rad.	0 - 4	1.5 - 3.0	no	1	27205
Pr. gauge Ø 63 rad. / 3.0b.	3/8 rad.	0 - 4	1.5 - 3.0	no	1	27200
Pr. gauge Ø 63 rad. / 1.5 - 4.0b.	3/8 rad.	0 - 4	1.5 - 4.0	no	1	27203
Pr. gauge Ø 63 rad. / 2.0 - 4.0b.	3/8 rad.	0 - 4	2.0 - 4.0	no	1	27208
Pr. gauge Ø 63 rad. / 2.5 - 4.0b.	3/8 rad.	0 - 4	2.5 - 4.0	no	1	27204
Pr. gauge Ø 63 rad. / 3.0 - 4.0b.	3/8 rad.	0 - 4	3.0 - 4.0	no	1	27202
Pr. gauge Ø 63 rad. / 2.5b.	3/8 rad.	0 - 4	1.5 - 2.5	no	1	27201
Pr. gauge Ø 63 ax. / 1.5 - 4.0b.	3/8 ax.	0 - 4	1.5 - 4.0	no	1	27213
Pr. gauge Ø 63 ax. / 3.0b.	1/4 ax.	0 - 4	1.5 - 3.0	no	1	27210
Pr. gauge Ø 80 rad. / 3.0b.	1/4 rad.	0 - 4	1.5 - 3.0	1/4" x 1/2"	1	27220
Pr. gauge Ø 80 ax. / 3.0b.	1/4 ax.	0 - 4	1.5 - 3.0	1/4" x 1/2"	1	27230
Pr. gauge Ø 80 rad. / 3.0b.	1/2 rad.	0 - 4	1.5 - 3.0	no	1	27222

Thermo Pressure Gauges

The combined pressure/thermo gauge shows not only the pressure, but also the temperature.




Type	Connection	Range	Marking [bar]	Ø [mm]		Order Code
Thermo pressure gauge ax. (with shut-off valve)	R 1/2" M	20 - 120 °C / 0 - 4 bar	3	80	20	27250
Thermo pressure gauge ax. (with shut-off valve)	R 1/2"	20 - 120 °C / 0 - 4 bar	3	63	1	27248

Shut-off Valves




- For pressure gauges.
- Self sealing by means of a PTFE ring.

Type	Connection		Order Code
Shut-off valve 1/4 x 1/2	1/4" x 1/2"	150	27912
Shut off valve M18 x 1/2	M 18 x 1/2"	1	27905

Manometer - Pressure gauge push button valve



- Push button valve for pressure-free connection of the manometer.
- Material: Brass (CW617N), Nickel Plated.
 - Max. Working pressure: 25 bar (PN25).

Type	Connection		Order Code
Push button valve 1/2 x 1/2 pn25	1/2" x 1/2"	1	27270

Air Vents



P. 148

XStream Air and Dirt Separators



P. 153

Smart Air and Dirt Separators



P. 157

SideFlow Clean Dirt Separators



P. 178

Air Separator for Solar



P. 180

Accessories for Venting Range and Dirt Separators



P. 181

Degassers



P. 186

Dosing pots



P. 207

Air / Dirt Separation and Dosing Solutions

3



Installations in which the water has been properly degassed, and are free from all kinds of dirt particles, use less energy, produce less noise and have a longer service life. Flamco products provide these sustainable solutions. In our products we use established principles combined with new technologies, such as with the XStream series of air and dirt separators, optimised to separate air and dirt particles from the system water in installations. In addition we offer solutions to easily introduce additives and cleaners to the system.

FLEXVENT AUTOMATIC AIR VENTS

The compact, proven design has high efficiency and guaranteed operation for heating and air conditioning. The water within the installation contains air which can form corrosion and reduce the thermal transfer. A Flexvent is fitted at places where the air collects.

Flexvent float vents are made of brass. Most types are equipped with a shut-off valve for easy fitting and dismantling.

A Flexvent float vent is easy to fit in any installation due to its very small dimensions. The relatively large air cushion at the top of each type of Flexvent float vent protects the valve seat sufficiently against contamination so that the Flexvent will not leak.

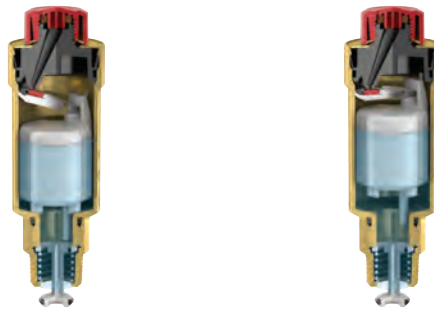
To guarantee top quality, we test all Flexvents before they leave our factory.



How a Flexvent works

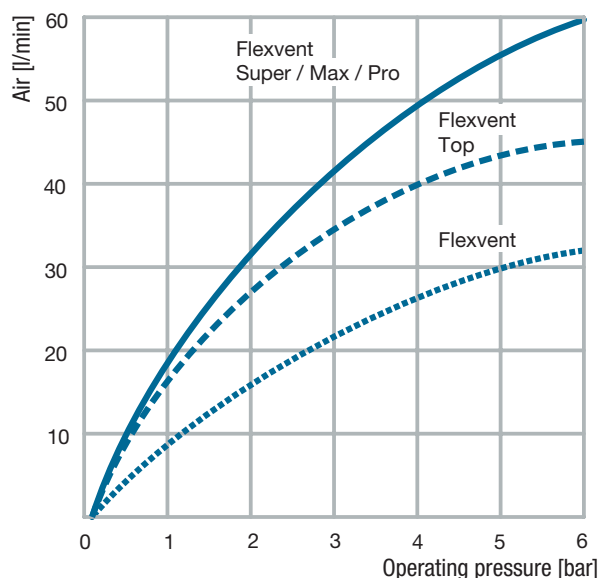
Float operated, the air is collected in the Flexvent causing the float to drop and open the air release valve. The water pressure then pushes the air out, the float rises and closes the valve.

The air cushion in the upper part of each Flexvent protects the valve seat against contamination.



Flexvent capacity graph


The amount of air that is allowed to escape through the Flexvent float vent depends on the system pressure. The graph shows the relationship between the amount of air in litres/min at 15 °C and the system pressure.



Flexvent

- With protective cap including expansion sealer rings to prevent leaks.
- Most types are equipped with a shut-off valve for easy fitting and dismantling.
- Substantial distance between the water and the closing mechanism, reducing the chance of contamination.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Minimum/Maximum working temperature: -10 °C / 90 °C (peak load: 120 °C).
- Minimum/Maximum working pressure: 0.2 / 10.0 bar (functional: 6.0 bar).




Type	Dimensions		Connection	Shut-off valve		Order Code
	Ø [mm]	H. [mm]				
Flexvent 1/8 without shut-off valve	30	67	R 1/8"	no	1	27775
Flexvent 3/8	30	78	R 3/8"	yes	1	27750
Flexvent 3/8 without shut-off valve	30	66	G 3/8"	no	1	27725
Flexvent 1/8 - 3/8	30	86 - 75.5	R 1/8" / R 3/8"	yes	1	27780
Flexvent 1/2	30	75.5	R 1/2"	yes	1	27740
Flexvent 1/2 - White with bubble breaker	31	71	G 1/2"	no	1	27743
Flexvent 1/2 - Nickel plated	30	80	R 1/2"	yes	1	27742
Flexvent 3/4	30	74.5	R 3/4"	yes	1	27735

Flexvent H



The Flexvent H has a 1/2" 90°-angled connection which means it can be mounted directly on one of the radiator ports.


- With protective cap including expansion sealer rings to prevent leaks.
- Substantial distance between the water and the closing mechanism, reducing the chance of contamination.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Minimum/Maximum working temperature: -10 °C / 90 °C (peak load: 120 °C).
- Minimum/Maximum working pressure: 0.2 / 10.0 bar (functional: 6.0 bar).

Type	Dimensions			Connection	Shut-off valve		Order Code
	Ø [mm]	Ø conn. inc. [mm]	H. [mm]				
Flexvent H 1/2 Nickel plated	31	50.5	70	R 1/2"	no	50	27710
Flexvent H 1/2 White	31	50.5	70	R 1/2"	no	50	27711

Flexvent Top



- Suitable for addition of glycol-based anti-freeze up to 50%.
- Minimum/Maximum working temperature: -10 °C / 120 °C.
- Minimum/Maximum working pressure: 0.2 / 10.0 bar.

Type	Dimensions		Con- nection	Shut-off valve		Order Code
	Ø [mm]	H. [mm]				
Flexvent Top	54	86	Rp 1/2"	no	20	28515
Flexvent Top White	54	86	R 3/8"	yes	20	28510

Flexvent Top Aqua




Suitable for use in potable water installations where ACS applies.

To be installed at places where the air collects. Float operated, collected air in the Flexvent causing the float to drop and open the air release valve.

- Guaranteed operation in potable water installations, ACS approved.
- Lower chance of corrosion and therefore more comfort against less costs.
- Proven design with high efficiency.
- Compact, so easy to fit in any installation.
- Large air cushion protects the valve seat against contamination this prevent leakages.
- To guarantee top quality, we test all Flexvents before they leave our facility!

Technical specifications:

- Minimum/Maximum working temperature: -10 °C / 120 °C.
- Minimum/Maximum working pressure: 0.2 / 10.0 bar.


Type	Dimensions		Con- nection	Shut-off valve		Order Code
	Ø [mm]	H. [mm]				
Flexvent Top Aqua	51	87	Rp 1/2"	no	20	28508

Flexvent Solar



Manually operated vent valve for solar systems with glycol based solutions.


- Manual, key operated (not included), without shut off valve.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Minimum/Maximum working temperature: -10 °C / 200 °C.
- Maximum working pressure: 10 bar.

Type	Dimensions		Con- nection	Shut-off valve		Order Code
	Ø [mm]	H. [mm]				
Flexvent Solar 3/8"	30	75.5	R 3/8"	no	1	27785

Flexvent Top Solar

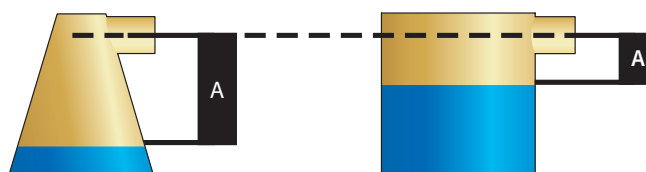



- With ball valve.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Minimum/Maximum working temperature: -30 °C / 180 °C.
- Minimum/Maximum working pressure: 0.2 / 10.0 bar.

Type	Dimensions		Con- nection	Shut-off valve		Order Code
	Ø [mm]	H. [mm]				
Flexvent Top Solar 3/8"	54	131	G 3/8" M	no	20	28505

Flexvent Super

- The cap of the Flexvent Super is conical in shape. The advantage of this construction is that the clearance between the water level and venting valve is maximized.
- The air escape duct can be opened or closed with an adjusting screw.
- The venting valve forms an integral part of the cap, so that it is impossible to damage the float vent mechanism from outside.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Minimum/Maximum working temperature: -10 °C / 120 °C.
- Minimum/Maximum working pressure: 0.2 / 10.0 bar.




Type	Dimensions		Connection	Shut-off valve		Order Code
	Ø [mm]	H. [mm]				
Flexvent Super 1/2	73	119	G 1/2" F	no	1	28520
Shut-off valve Flexvent Super	-	-	1/2"	-	1	28525

Flexvent Pro




- Equipped with bubble breaker.
- Outlet: G 3/4" M.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Minimum/Maximum working temperature: -10 °C / 120 °C.
- Minimum/Maximum working pressure: 0.2 / 10.0 bar.

Type	Dimensions		Connection	Shut-off valve		Order Code
	Ø [mm]	H. [mm]				
Flexvent Pro	63	110	Rp 1/2"	no	1	28519

Flexvent Max



- Suitable for addition of glycol-based anti-freeze up to 50%.
- Minimum/Maximum working temperature: -10 °C / 120 °C.
- Minimum/Maximum working pressure: 0.2 / 25.0 bar.

Type	Dimensions		Connection	Shut-off valve		Order Code
	Ø [mm]	H. [mm]				
Flexvent Max 3/4	77	120	Rp 3/4"	no	1	28550


AIR ACCUMULATORS

LTA Air Accumulator



The LTA air accumulator is mounted on riser pipes in supply or return lines. In the air pot the water returns to a non-turbulent state and the free air can collect in the upper part. The air can be released from the Flexvent mounted on top of the air pot. The LTA air accumulator can also be provided with a vent line and manually vented.

- Trouble-free and economic operation by avoiding air problems.
- Easy construction.
- Asymmetrical connections.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Maximum working temperature: 120 °C.
- Maximum working pressure: 10 bar.

Type	Capacity [l]	Dimensions		Connection		Weight [kg]		Order Code
		Ø [mm]	H. [mm]	Air-vent	Sys-tem			
LTA 1	1.0	110	185	Rp 3/8"	Rp 1/2"	1.3	1	27581
LTA 2	1.6	110	233	Rp 3/8"	Rp 1/2"	1.7	1	27582
LTA 5	5.0	196	221	Rp 1/2"	Rp 1/2"	4.0	1	27585


AIR INTAKE PREVENTER

Air intake preventer



Prevents air from entering the heating system in case of negative pressure. Replaces the standard cap of the Flexvent.

- Integrated spring rings protect against possible leaks caused by contamination.

Type	Dimensions		Connection		Order Code
	Ø [mm]	H. [mm]			
Air intake preventer	16	28	M 12 x 1	25	27755


METAL VENTILATION KEY

Metal Ventilation Key



Square ventilation key for radiator plugs.

- Material: Nickel-plated metal

Type	Dimension [mm]		Article no.
Ventilation Key	5	100/1000	F11202

XSTREAM AIR, DIRT AND COMBINED AIR AND DIRT SEPARATORS

Flamco XStream separators ensure lower energy consumption, less wear and tear, fewer breakdowns, a longer lifespan and thus a higher efficiency of heating and cooling installations.

- With an unique ECO/ MAX mode.
In the ECO mode a part of the system water (partial flow) is led through the Flamco XStream.
In the MAX mode all the system water is led through the Flamco XStream.
- Up to 15% less energy consumption of the heating system. *
- Up to 6% more efficiency of the heating system. *
- The unit is 360 degree rotatable for ease of installation.
- No account needs to be taken of the flow direction of the installation. This prevents installation errors.
- Insulation is an integral part of the design of the Flamco XStream. This reduces heat losses to a minimum.
- The intergrated service indicator indicates when the system was last flushed/vented in the MAX mode.
- Minimum/Maximum working pressure: 0.2 / 10 bar.
- Minimum/Maximum working temperature: -10 °C / 120 °C.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Minimum/Maximum flow velocity: 0.2 / 3 m/s.
- Medium pH: 5 / 10.
- Material: EPP insulation. λ : 0.036 W/m.
- Average thickness insulation: 20 mm.

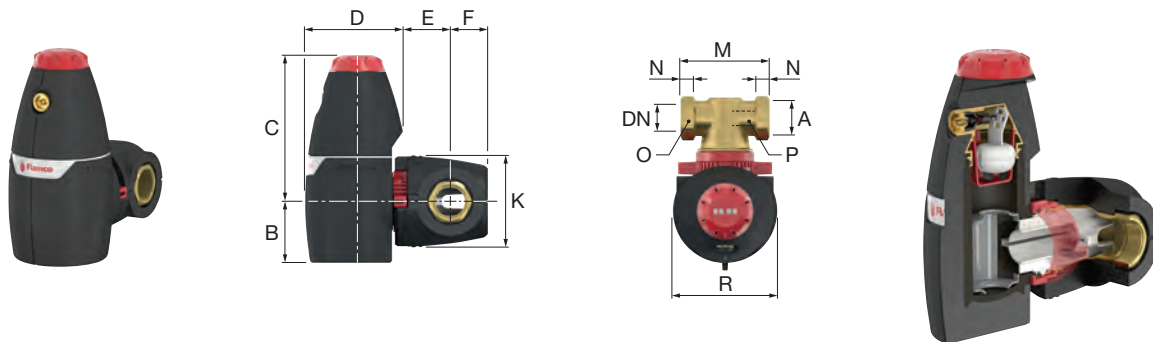
* Calculated according to the Hysopt method in a system with a gas boiler and manually operated radiator valves.




Flamco XStream Vent

More comfort, more efficiency.

The Flamco XStream Vent ensures that air in the installation is separated quickly and efficiently. The result: more comfort, less corrosion, less noise and more efficiency of the heating system.



Type	Connection		K _v * [m³/h] (ECO)	K _v * [m³/h] (MAX)	Weight [kg]		Order Code
	[DN]	(A)					
XStream Vent 22	20	22 mm	15.6	4.1	1.0	1	11011
XStream Vent 3/4 F	20	G 3/4" F	15.6	4.1	0.9	1	11001
XStream Vent 1 M	20	G 1" M	15.6	4.1	0.9	1	11021
XStream Vent 1 F	25	G 1" F	26.7	7.8	1.3	1	11002
XStream Vent 1 1/4 M	25	G 1 1/4" M	26.7	7.8	1.3	1	11022
XStream Vent 1 1/4 F	32	G 1 1/4" F	38.5	10.6	1.5	1	11003
XStream Vent 1 1/2 F	40	G 1 1/2" F	63.0	14.8	2.2	1	11004
XStream Vent 2 F	50	G 2" F	85.0	19.8	2.6	1	11005

* $K_v = Q / \sqrt{\Delta P}$ Q: Flow [m³/h] ΔP: Pressure loss over the product (1 bar)

Flow factor K_v: Rate of flow [m³/h] which results in a 1 bar pressure drop across the product. This is different then the maximum allowed flow rate of the product.

Flamco XStream Vent - Dimensions

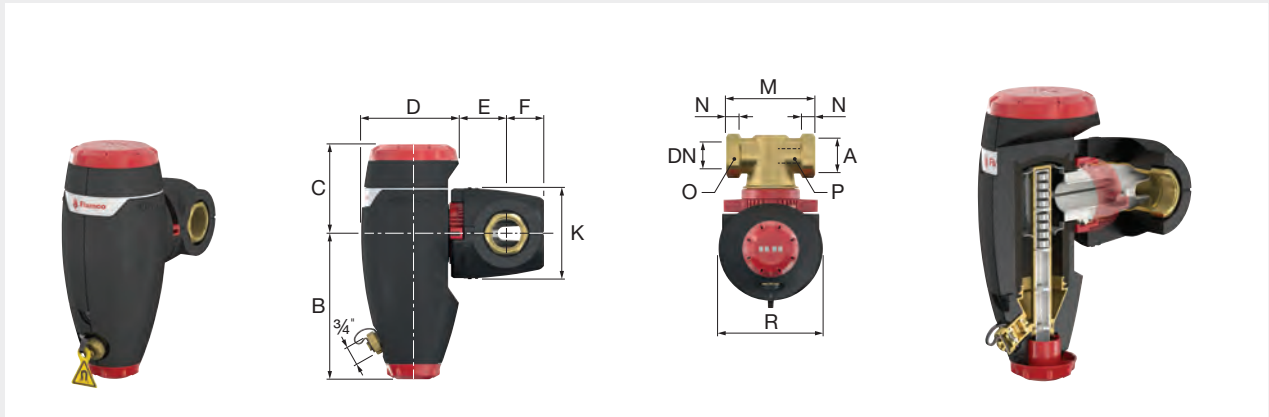
Type	Dimensions										
	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]	M [mm]	N [mm]	O [mm]	P [mm]	R [mm]
XStream Vent 22	59	149	106	44	41	102	119	24	32	24	114
XStream Vent 3/4 F	59	149	106	44	41	102	100	14	32	-	114
XStream Vent 1 M	59	149	106	44	41	102	100	13	-	27	114
XStream Vent 1 F	76	181	121	53	45	114	110	16	41	-	130
XStream Vent 1 1/4 M	76	181	121	53	45	114	110	14	-	34	130
XStream Vent 1 1/4 F	76	181	125	57	48	114	110	18	50	-	130
XStream Vent 1 1/2 F	86	208	139	62	51	132	129	18	55	-	145
XStream Vent 2 F	86	208	139	65	58	132	140	23	70	-	145


Flamco XStream Clean

Less wear, less maintenance.

The Flamco XStream Clean ensures optimal separation of dirt and magnetite. The result: less heat losses, less wear, less maintenance and a heating system that lasts longer.

Thanks to the powerful internal magnet, the Flamco XStream Clean and the Vent-Clean have a great attraction to magnetite.



Type	Connection		K _v * [m³/h] (ECO)	K _v * [m³/h] (MAX)	Weight [kg]		Order Code
	[DN]	(A)					
XStream Clean 22	20	22 mm	15.6	4.1	1.3	1	11041
XStream Clean 3/4 F	20	G 3/4" F	15.6	4.1	1.2	1	11031
XStream Clean 1 M	20	G 1" M	15.6	4.1	1.2	1	11051
XStream Clean 1 F	25	G 1" F	26.7	7.8	1.8	1	11032
XStream Clean 1 1/4 M	25	G 1 1/4" M	26.7	7.8	1.7	1	11052
XStream Clean 1 1/4 F	32	G 1 1/4" F	38.5	10.6	1.9	1	11033
XStream Clean 1 1/2 F	40	G 1 1/2" F	63.0	14.8	2.8	1	11034
XStream Clean 2 F	50	G 2" F	85.0	19.8	3.2	1	11035

* $K_v = Q / \sqrt{\Delta P}$ Q: Flow [m³/h] ΔP: Pressure loss over the product (1 bar)

Flow factor K_v: Rate of flow [m³/h] which results in a 1 bar pressure drop across the product. This is different then the maximum allowed flow rate of the product.

Flamco XStream Clean - Dimensions

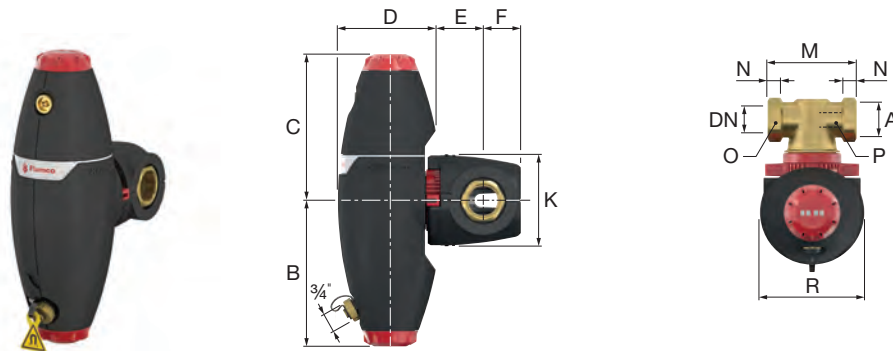
Type	Dimensions										
	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]	M [mm]	N [mm]	O [mm]	P [mm]	R [mm]
XStream Clean 22	149	98	106	44	41	102	119	24	32	24	114
XStream Clean 3/4 F	149	98	106	44	41	102	100	14	32	-	114
XStream Clean 1 M	149	98	106	44	41	102	100	13	-	27	114
XStream Clean 1 F	181	110	121	53	45	114	110	16	41	-	130
XStream Clean 1 1/4 M	181	110	121	53	45	114	110	14	-	34	130
XStream Clean 1 1/4 F	181	110	125	57	48	114	110	18	50	-	130
XStream Clean 1 1/2 F	208	124	139	62	51	132	129	18	55	-	145
XStream Clean 2 F	208	124	139	65	58	132	140	23	70	-	145


Flamco XStream Vent-Clean

An effective combination.

From an installation perspective, it is always preferable to install a separate air and dirt separator. In installations where it is difficult to install both a Flamco XStream Vent and a Clean, the Flamco XStream Vent-Clean is the ideal solution.

Thanks to the powerful internal magnet, the Flamco XStream Clean and the Vent-Clean have a great attraction to magnetite.



Type	Connection		K _v * [m³/h] (ECO)	K _v * [m³/h] (MAX)	Weight [kg]		Order Code
	[DN]	(A)					
XStream Vent-Clean 22	20	22 mm	15.6	4.1	1.5	1	11071
XStream Vent-Clean 3/4 F	20	G 3/4" F	15.6	4.1	1.5	1	11061
XStream Vent-Clean 1 M	20	G 1" M	15.6	4.1	1.4	1	11081
XStream Vent-Clean 1 F	25	G 1" F	26.7	7.8	2.0	1	11062
XStream Vent-Clean 1 1/4 M	25	G 1 1/4" M	26.7	7.8	2.0	1	11082
XStream Vent-Clean 1 1/4 F	32	G 1 1/4" F	38.5	10.6	2.1	1	11063
XStream Vent-Clean 1 1/2 F	40	G 1 1/2" F	63.0	14.8	3.3	1	11064
XStream Vent-Clean 2 F	50	G 2" F	85.0	19.8	3.6	1	11065

* K_v = Q / √ΔP Q: Flow [m³/h] ΔP: Pressure loss over the product (1 bar)

Flow factor K_v: Rate of flow [m³/h] which results in a 1 bar pressure drop across the product. This is different then the maximum allowed flow rate of the product.

Flamco XStream Vent-Clean - Dimensions

Type	Dimensions										
	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]	M [mm]	N [mm]	O [mm]	P [mm]	R [mm]
XStream Vent-Clean 22	149	149	106	44	41	102	119	24	32	24	114
XStream Vent-Clean 3/4 F	149	149	106	44	41	102	100	14	32	-	114
XStream Vent-Clean 1 M	149	149	106	44	41	102	100	13	-	27	114
XStream Vent-Clean 1 F	181	181	121	53	45	114	110	16	41	-	130
XStream Vent-Clean 1 1/4 M	181	181	121	53	45	114	110	14	-	34	130
XStream Vent-Clean 1 1/4 F	181	181	125	57	48	114	110	18	50	-	130
XStream Vent-Clean 1 1/2 F	208	208	139	62	51	132	129	18	55	-	145
XStream Vent-Clean 2 F	208	208	139	65	58	132	140	23	70	-	145

SMART SEPARATORS

Flamcovent Smart / Flamco Clean Smart / Flamcovent Clean Smart - How it works

The separation element combined with the return flow ensures excellent air and dirt separation and at the same time saves energy because of the negligible flow resistance. An exceptional rate of at least 40% of the air and dirt is separated per cycle while using only 10% extraction of the main flow.

Inside the chamber of the separator the water velocity is heavily reduced down to less than 1% of the main flow. This efficiently separates microbubbles by allowing the air particles to automatically rise to the air release valve at the top and allows the dirt particles to sink to the bottom to the dirt collector. A supermagnet additionally contributes in trapping ferrous particles.

Double thrust function

Two thrust functions ensure efficient deaeration of the system water

A: The first function is achieved by the separating element in the path of the main flow through the unit, diverting contaminated water into the entrapment chamber.

B: The second effect is achieved by bringing back the clean return flow of water in the centre, upstream of the separating element. This forces the air and dirt particles present in the main flow outwards and into the chambers of the separator to be removed.

SMART AIR SEPARATORS

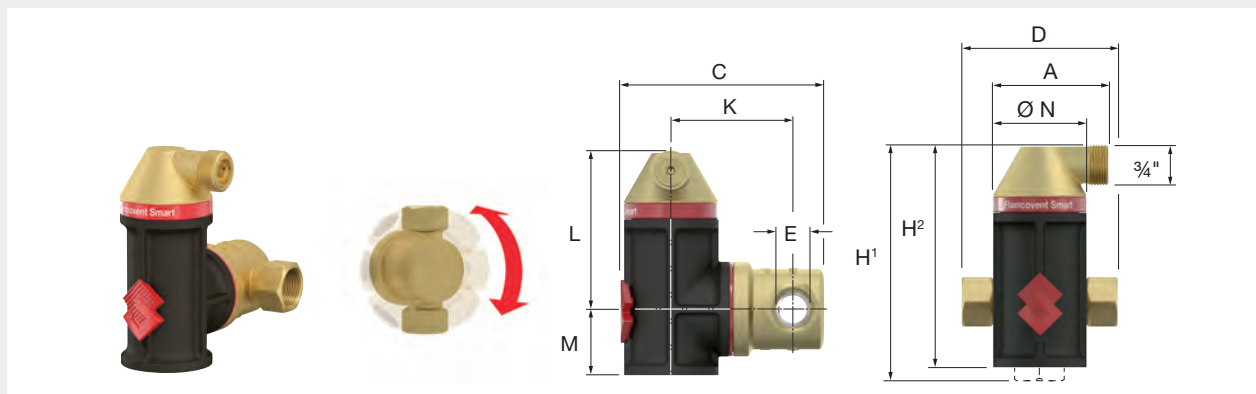
Flamcovent Smart


More compact, lighter, cleaner and even more efficient.

The Flamcovent Smart air separators remove even the smallest microbubbles from the system water. They are virtually maintenance-free and the flow resistance is negligibly low.

- 60% better performance compared to conventional separators.
- Flow velocity up to 3 m/s.
- Can be used with all kinds of pipework.
- Compact dimensions, light weight.
- Extremely low flow resistance and low loss of energy.
- Consistent performance throughout its service life.

- Minimum/Maximum working temperature: -10 °C / 120 °C.
- Maximum working pressure: 10 bar.
- Suitable for addition of glycol-based anti-freeze up to 50%.

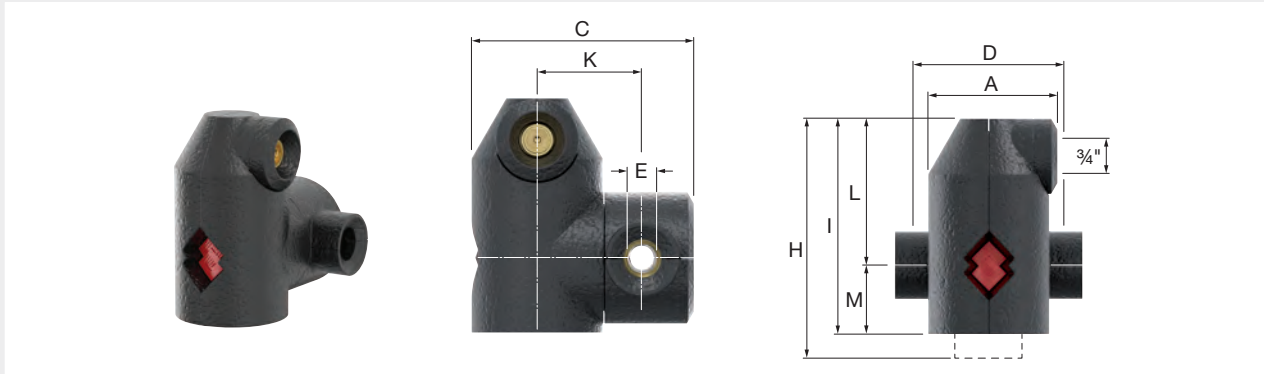



Type	Con- nection (E)	Dimensions									Weight [kg]		Order Code
		A [mm]	C [mm]	D [mm]	K [mm]	L [mm]	M [mm]	H/H1 [mm]	H2 [mm]	Ø N [mm]			
Flamcovent Smart 22	22 mm	74	134	120	78	101	37	161	138	60	0.95	1	30002
Flamcovent Smart 3/4	Rp 3/4"	74	132	100	78	101	37	151	138	60	0.90	1	30001
Flamcovent Smart 1	Rp 1"	82	155	106	91	139	45	192	184	75	1.12	1	30003
Flamcovent Smart 1 1/4	Rp 1 1/4"	82	165	110	96	139	45	194	184	75	1.27	1	30004
Flamcovent Smart 1 1/2	Rp 1 1/2"	94	193	129	109	173	54	238	227	92	1.73	1	30005
Flamcovent Smart 2	Rp 2"	94	206	140	117	173	54	243	227	92	2.16	1	30006

Flamcovent Smart EcoPlus

Similar to the Flamcovent Smart but with an EPP insulation mantle included.

- EPP insulation thickness: 20 mm.
- Insulation value (λ): 0.036 W/mK.



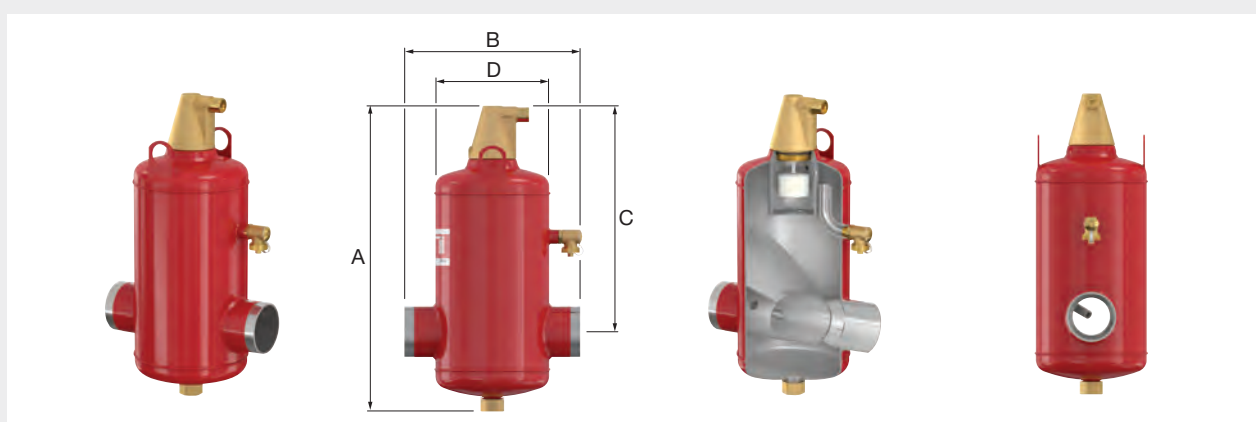
Type	Con- nection (E)	Dimensions								Weight [kg]		Order Code
		A [mm]	C [mm]	D [mm]	K [mm]	L [mm]	M [mm]	H [mm]	I [mm]			
Flamcovent Smart EcoPlus 22	22 mm	104	164	120	78	118	56	194	174	1.0	1	30012
Flamcovent Smart EcoPlus 3/4	G 3/4" F	104	164	100	78	118	56	194	174	1.0	1	30011
Flamcovent Smart EcoPlus 1	G 1" F	117	189	106	91	157	63	233	220	1.2	1	30013
Flamcovent Smart EcoPlus 1 1/4	G 1 1/4" F	117	199	110	96	157	63	233	220	1.4	1	30014
Flamcovent Smart EcoPlus 1 1/2	G 1 1/2" F	134	224	129	109	191	72	279	263	1.9	1	30015
Flamcovent Smart EcoPlus 2	G 2" F	134	237	140	117	191	72	279	263	2.3	1	30016


Flamcovent Smart S - 10.0 bar

Optimum deaeration combined with energy retention.

The new steel Flamcovent Smart air separators remove even the tiniest micro-bubbles from the installation water. The Flamcovent Smart performs 60% better than conventional air separators whilst the flow resistance has been reduced to a negligible level.

- Up to 60% better performance compared to conventional air separators.
- Extremely low flow resistance resulting in less energy consumption.
- Standard flow speed up to 3 m/s.
- Constant performance during the entire lifespan.
- Low maintenance.
- Including a welding connection.
- Maximum working pressure: 10 bar.
- Suitable for systems with a maximum flow temperature of 120 °C.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- In accordance with Pressure Equipment Directive 2014/68/EU.



Type	Capacity [l]	Connection		Dimensions				K _v * [m³/h] (ΔP = 1 bar)	Weight [kg]		Order Code
		[DN]	[mm]	A [mm]	B [mm]	C [mm]	D [mm]				
Flamcovent Smart 50 S	8	50	60.3	472	260	338	175	93	9	1	31101
Flamcovent Smart 65 S	8	65	76.1	472	260	338	175	140	10	1	31102
Flamcovent Smart 80 S	25	80	88.9	612	370	435	270	209	17	1	31103
Flamcovent Smart 100 S	25	100	114.3	612	370	435	270	311	20	1	31104
Flamcovent Smart 125 S	59	125	139.7	740	525	510	360	459	36	1	31105
Flamcovent Smart 150 S	60	150	168.3	740	525	510	360	675	37	1	31106
Flamcovent Smart 200 S	123	200	219.1	975	650	670	450	1340	57	1	31107

* $K_v = Q / \sqrt{\Delta P}$ Q: Flow [m³/h] ΔP: Pressure loss over the product (1 bar)

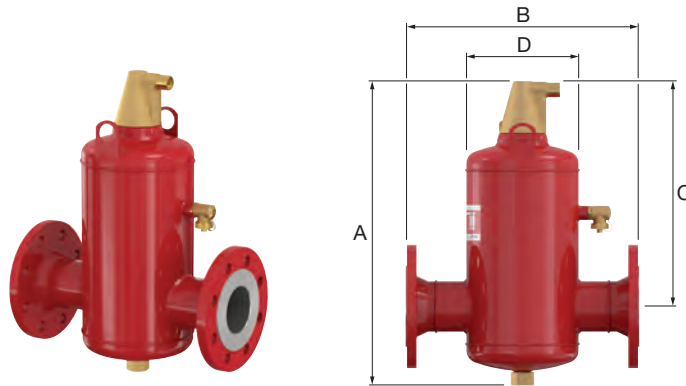
Flow factor K_v: Rate of flow [m³/h] which results in a 1 bar pressure drop across the product. This is different then the maximum allowed flow rate of the product.




Flamcovent Smart F - 10.0 bar

Similar to the Flamcovent Smart S but with flanged connection according to EN 1092-1 PN16.

- Maximum working pressure: 10 bar.
- Models with a maximum working pressure of 25 bar are available upon request.



Type	Capacity [l]	Connection		Dimensions				K _v * [m³/h] (ΔP = 1 bar)	Weight [kg]		Order Code
		[DN]	[mm]	A [mm]	B [mm]	C [mm]	D [mm]				
Flamcovent Smart 50 F	8	50	60.3	472	350	338	175	93	14	1	31001
Flamcovent Smart 65 F	8	65	76.1	472	350	338	175	140	16	1	31002
Flamcovent Smart 65 F **	8	65	76.1	472	350	338	175	140	16	1	31003
Flamcovent Smart 80 F	25	80	88.9	612	470	435	270	209	25	1	31004
Flamcovent Smart 100 F	25	100	114.3	612	470	435	270	311	29	1	31005
Flamcovent Smart 125 F	59	125	139.7	740	635	510	360	459	48	1	31006
Flamcovent Smart 150 F	60	150	168.3	740	635	510	360	675	52	1	31007
Flamcovent Smart 200 F	123	200	219.1	975	774	670	450	1340	80	1	31008
Flamcovent Smart 250 F	287	250	273.0	1290	990	892	600	1952	158	1	31009
Flamcovent Smart 300 F	333	300	323.9	1452	1006	1032	600	2830	184	1	31010
Flamcovent Smart 350 F	646	350	355.6	1600	1214	1109	800	4084	321	1	31011
Flamcovent Smart 400 F	731	400	406.4	1770	1220	1252	800	5866	348	1	31012
Flamcovent Smart 500 F	1384	500	508.0	2096	1580	1470	1000	8387	635	1	31013
Flamcovent Smart 600 F	2390	600	610.0	2492	1870	1760	1200	11939	963	1	31014

* $K_v = Q / \sqrt{\Delta P}$ Q: Flow [m³/h] ΔP: Pressure loss over the product (1 bar)

Flow factor K_v: Rate of flow [m³/h] which results in a 1 bar pressure drop across the product. This is different then the maximum allowed flow rate of the product.

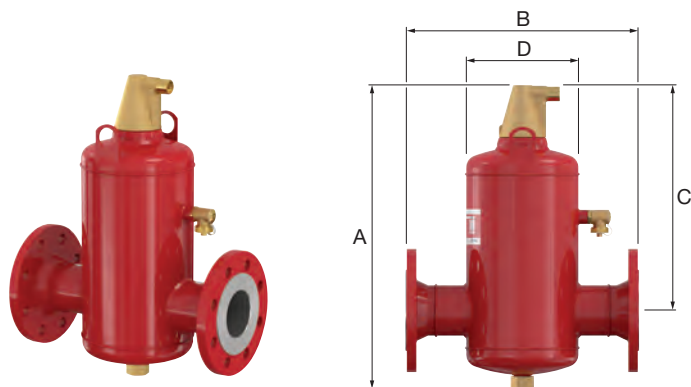
** 4 hole flanged version.




Flamcovent Smart F - 16.0 bar

Similar to the Flamcovent Smart S but with flanged connection according to EN 1092-1 PN16.

- Maximum working pressure: 16 bar.
- Models with a maximum working pressure of 25 bar are available upon request.



Type	Capacity [l]	Connection		Dimensions				K _v * [m³/h] (ΔP = 1 bar)	Weight [kg]		Order Code
		[DN]	[mm]	A [mm]	B [mm]	C [mm]	D [mm]				
Flamcovent Smart 50 F **	8	50	60.3	472	350	338	175	93	17	1	31061
Flamcovent Smart 65 F **	8	65	76.1	472	350	338	175	140	18	1	31062
Flamcovent Smart 80 F	25	80	88.9	612	470	435	270	209	26	1	31063
Flamcovent Smart 100 F	25	100	114.3	612	470	435	270	311	30	1	31064
Flamcovent Smart 125 F	59	125	139.7	740	635	515	360	459	67	1	31065
Flamcovent Smart 150 F	60	150	168.3	740	635	510	360	675	70	1	31066
Flamcovent Smart 200 F	123	200	219.1	975	774	670	450	1340	103	1	31067
Flamcovent Smart 250 F	287	250	273.0	1290	990	892	600	1952	200	1	31068
Flamcovent Smart 300 F	333	300	323.9	1452	1006	1032	600	2830	239	1	31069
Flamcovent Smart 350 F	646	350	355.6	1600	1214	1109	800	4084	387	1	31070
Flamcovent Smart 400 F	731	400	406.4	1770	1220	1252	800	5866	416	1	31071
Flamcovent Smart 500 F	1384	500	508.0	2096	1580	1470	1000	8387	777	1	31072
Flamcovent Smart 600 F	2390	600	610.0	2492	1870	1760	1200	11939	1465	1	31073

* K_v = Q / √ΔP Q: Flow [m³/h] ΔP: Pressure loss over the product (1 bar)

Flow factor K_v: Rate of flow [m³/h] which results in a 1 bar pressure drop across the product. This is different then the maximum allowed flow rate of the product.

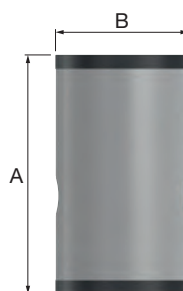
** CE Marked.




Flamcovent IsoPlus

This insulation set for Flamcovent (Smart) can be easily attached and consists of two halves that lock into each other by means of hook fasteners and deep-drawn synthetic caps. The melamine insulation foam (thickness 50 mm) is glued to the polystyrene outer jacket (thickness 1 mm).

- Fire class B2 according to DIN 4102.
- Suitable for retrospective installation.
- 100% recyclable.
- Insulation value (λ): 0.035 W/mK.
- Colour: aluminium coloured (RAL 9006).



Type	Dimensions		Weight [kg]		Order Code
	A [mm]	B [mm]			
Flamcovent IsoPlus 50	500	280	1.3	1	28160
Flamcovent IsoPlus 65	500	280	1.4	1	28161
Flamcovent IsoPlus 80	650	380	2.2	1	28162
Flamcovent IsoPlus 100	650	380	2.3	1	28163
Flamcovent IsoPlus 125	790	470	3.4	1	28164
Flamcovent IsoPlus 150	790	470	3.5	1	28165
Flamcovent IsoPlus 200	1000	560	5.0	1	28166

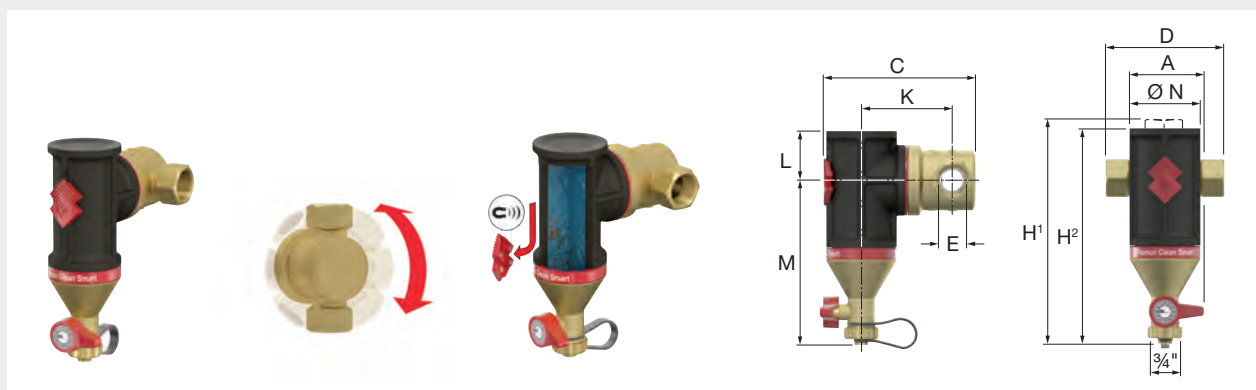
SMART DIRT SEPARATORS


Flamco Clean Smart

More compact, lighter, cleaner and even more efficient.

The Flamco Clean Smart dirt separators remove even minuscule dirt particles from the system water. They are virtually maintenance-free and the flow resistance is negligibly low.

- 60% better performance compared to conventional separators.
- Flow velocity up to 3 m/s.
- Four neodymium supermagnets are incorporated into the logo.
- Can be used with all kinds of pipework.
- Compact dimensions, light weight.
- Extremely low flow resistance and low loss of energy.
- Consistent performance throughout its service life.
- Minimum/Maximum working temperature: -10 °C / 120 °C.
- Maximum working pressure: 10 bar.
- Suitable for addition of glycol-based anti-freeze up to 50%.

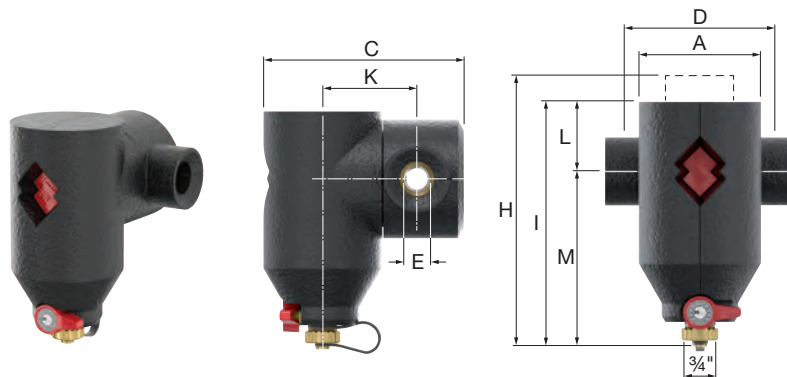



Type	Con- nection (E)	Dimensions									Weight [kg]		Order Code
		A [mm]	C [mm]	D [mm]	K [mm]	L [mm]	M [mm]	H/H1 [mm]	H2 [mm]	Ø N [mm]			
Flamco Clean Smart 22	22 mm	63	136	120	78	37	140	200	177	60	0.98	1	30022
Flamco Clean Smart ¾	Rp ¾"	63	133	100	78	37	140	190	177	60	0.94	1	30021
Flamco Clean Smart 1	Rp 1"	76	155	106	91	44	179	231	223	75	1.11	1	30023
Flamco Clean Smart 1 ¼	Rp 1 ¼"	76	165	110	96	44	179	233	223	75	1.26	1	30024
Flamco Clean Smart 1 ½	Rp 1 ½"	94	193	129	109	54	212	277	266	92	1.72	1	30025
Flamco Clean Smart 2	Rp 2"	94	206	140	117	54	212	282	266	92	2.15	1	30026

Flamco Clean Smart EcoPlus

Similar to the Flamco Clean Smart but with an EPP insulation mantle included.

- EPP insulation thickness: 20 mm.
- Insulation value (λ): 0.036 W/mK.




Type	Con- nection (E)	Dimensions								Weight [kg]		Order Code
		A [mm]	C [mm]	D [mm]	K [mm]	L [mm]	M [mm]	H [mm]	I [mm]			
Flamco Clean Smart EcoPlus 22	22 mm	97	164	120	78	56	140	216	196	1.05	1	30032
Flamco Clean Smart EcoPlus 3/4	G 3/4" F	97	164	100	78	56	140	216	196	1.01	1	30031
Flamco Clean Smart EcoPlus 1	G 1" F	112	189	106	91	63	178	255	241	1.21	1	30033
Flamco Clean Smart EcoPlus 1 1/4	G 1 1/4" F	112	199	110	96	63	178	255	241	1.37	1	30034
Flamco Clean Smart EcoPlus 1 1/2	G 1 1/2" F	131	224	129	109	73	212	300	285	1.88	1	30035
Flamco Clean Smart EcoPlus 2	G 2" F	131	237	285	117	73	212	300	285	2.32	1	30036

Magnets Smart 22 mm - 2"

- Set of five magnets per bag.



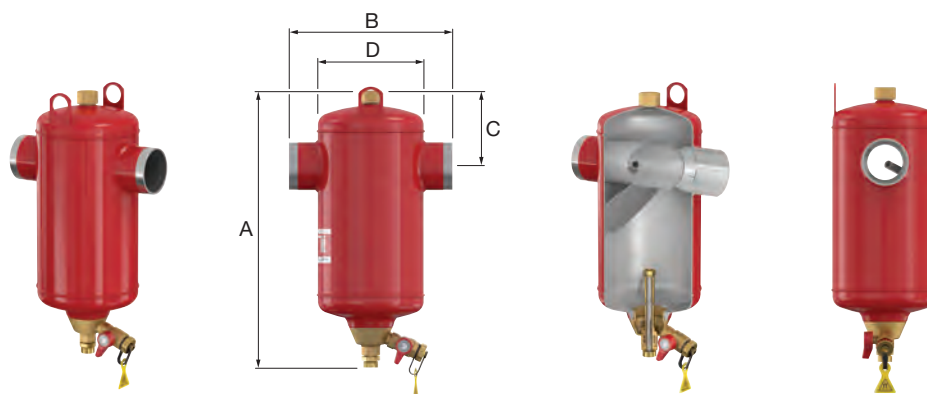
Type	Suitable for		Order Code
Magnets	Flamco(vent) Clean Smart (EcoPlus) 22 mm - 2"	1	40007


Flamco Clean Smart S - 10.0 bar

Optimum dirt separation combined with energy efficiency.

The new steel Flamco Clean Smart dirt separators remove even the most miniscule dirt particles from the installation water. The Flamco Clean Smart performs 60% better than conventional dirt separators whilst the flow resistance has been reduced to a negligible level.

- Up to 60% better performance compared to conventional dirt separators.
- Extremely low flow resistance resulting in less energy consumption.
- Standard flow speed up to 3 m/s.
- Twenty-five neodymium supermagnets are incorporated into the dirt scraper.
- Constant performance during the entire lifespan.
- Low maintenance.
- Including a welding connection.
- Maximum working pressure: 10 bar.
- Suitable for systems with a maximum flow temperature of 120 °C.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- In accordance with Pressure Equipment Directive 2014/68/EU.



Type	Capacity [l]	Connection		Dimensions				K _v * [m³/h] (ΔP = 1 bar)	Weight [kg]		Order Code
		[DN]	[mm]	A [mm]	B [mm]	C [mm]	D [mm]				
Flamco Clean Smart 50 S	8	50	60.3	475	260	129	175	93	9	1	31121
Flamco Clean Smart 65 S	8	65	76.1	475	260	129	175	140	10	1	31122
Flamco Clean Smart 80 S	25	80	88.9	620	370	172	270	209	17	1	31123
Flamco Clean Smart 100 S	25	100	114.3	620	370	172	270	311	20	1	31124
Flamco Clean Smart 125 S	59	125	139.7	790	525	219	360	459	36	1	31125
Flamco Clean Smart 150 S	60	150	168.3	790	525	224	360	675	37	1	31126
Flamco Clean Smart 200 S	123	200	219.1	970	650	361	450	1340	57	1	31127

* $K_v = Q / \sqrt{\Delta P}$ Q: Flow [m³/h] ΔP: Pressure loss over the product (1 bar)

Flow factor K_v: Rate of flow [m³/h] which results in a 1 bar pressure drop across the product. This is different then the maximum allowed flow rate of the product.

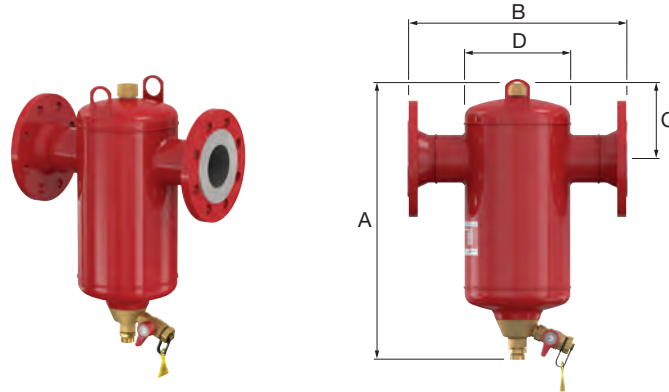
** 4 hole flanged version.




Flamco Clean Smart F - 10.0 bar

Similar to the Flamco Clean Smart S but with flanged connection according to EN 1092-1 PN16.

- Maximum working pressure: 10 bar.
- Models with a maximum working pressure of 25 bar are available upon request.



Type	Capacity [l]	Connection		Dimensions				K _v * [m³/h] (ΔP = 1 bar)	Weight [kg]		Order Code
		[DN]	[mm]	A [mm]	B [mm]	C [mm]	D [mm]				
Flamco Clean Smart 50 F	8	50	60.3	475	350	129	175	93	14	1	31021
Flamco Clean Smart 65 F	8	65	76.1	475	350	129	175	140	16	1	31022
Flamco Clean Smart 65 F **	8	65	76.1	475	350	129	175	140	16	1	31023
Flamco Clean Smart 80 F	25	80	88.9	620	470	172	270	209	25	1	31024
Flamco Clean Smart 100 F	25	100	114.3	620	470	172	270	311	29	1	31025
Flamco Clean Smart 125 F	59	125	139.7	790	635	219	360	459	48	1	31026
Flamco Clean Smart 150 F	60	150	168.3	790	635	224	360	675	52	1	31027
Flamco Clean Smart 200 F	123	200	219.1	970	774	361	450	1340	80	1	31028
Flamco Clean Smart 250 F	287	250	273.0	1272	990	395	600	1952	158	1	31029
Flamco Clean Smart 300 F	333	300	323.9	1437	1006	420	600	2830	184	1	31030
Flamco Clean Smart 350 F	646	350	355.6	1581	1214	487	800	4084	321	1	31031
Flamco Clean Smart 400 F	731	400	406.4	1754	1220	517	800	5866	348	1	31032
Flamco Clean Smart 500 F	1384	500	508.0	2081	1580	627	1000	8387	635	1	31033
Flamco Clean Smart 600 F	2390	600	610.0	2477	1870	785	1200	11939	963	1	31034

* $K_v = Q / \sqrt{\Delta P}$ Q: Flow [m³/h] ΔP: Pressure loss over the product [bar].

** 4 hole flanged version.

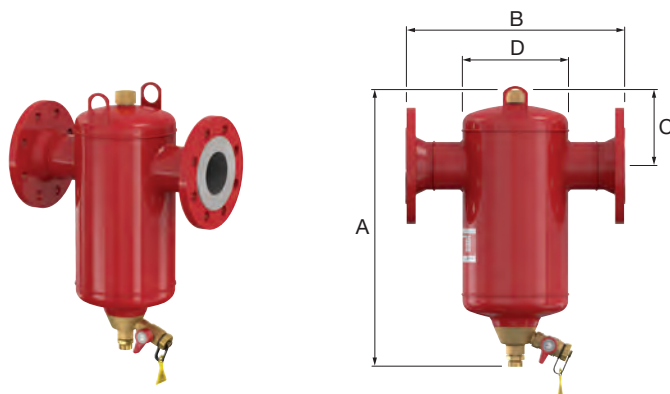
Flow factor K_v: Rate of flow [m³/h] which results in a 1 bar pressure drop across the product. This is different then the maximum allowed flow rate of the product.




Flamco Clean Smart F - 16.0 bar

Similar to the Flamco Clean Smart S but with flanged connection according to EN 1092-1 PN16.

- Maximum working pressure: 16 bar.
- Models with a maximum working pressure of 25 bar are available upon request.



Type	Capacity [l]	Connection		Dimensions				K _v * [m³/h] (ΔP = 1 bar)	Weight [kg]		Order Code
		[DN]	[mm]	A [mm]	B [mm]	C [mm]	D [mm]				
Flamco Clean Smart 50 F **	8	50	60.3	452	350	129	175	93	17	1	31081
Flamco Clean Smart 65 F **	8	65	76.1	452	350	129	175	140	18	1	31082
Flamco Clean Smart 80 F	25	80	88.9	592	470	172	270	209	26	1	31083
Flamco Clean Smart 100 F	25	100	114.3	592	470	172	270	311	30	1	31084
Flamco Clean Smart 125 F	59	125	139.7	719	635	219	360	459	67	1	31085
Flamco Clean Smart 150 F	60	150	168.3	719	635	224	360	675	70	1	31086
Flamco Clean Smart 200 F	123	200	219.1	951	774	361	450	1340	103	1	31087
Flamco Clean Smart 250 F	287	250	273.0	1272	990	395	600	1952	199	1	31088
Flamco Clean Smart 300 F	333	300	323.9	1437	1006	420	600	2830	238	1	31089
Flamco Clean Smart 350 F	646	350	355.6	1581	1214	487	800	4084	386	1	31090
Flamco Clean Smart 400 F	731	400	406.4	1754	1220	517	800	5866	415	1	31091
Flamco Clean Smart 500 F	1384	500	508.0	2081	1580	627	1000	8387	776	1	31092
Flamco Clean Smart 600 F	2390	600	610.0	2477	1870	785	1200	11939	1464	1	31093

* $K_v = Q / \sqrt{\Delta P}$ Q: Flow [m³/h] ΔP: Pressure loss over the product (1 bar)

Flow factor K_v: Rate of flow [m³/h] which results in a 1 bar pressure drop across the product. This is different then the maximum allowed flow rate of the product.

** CE Marked.



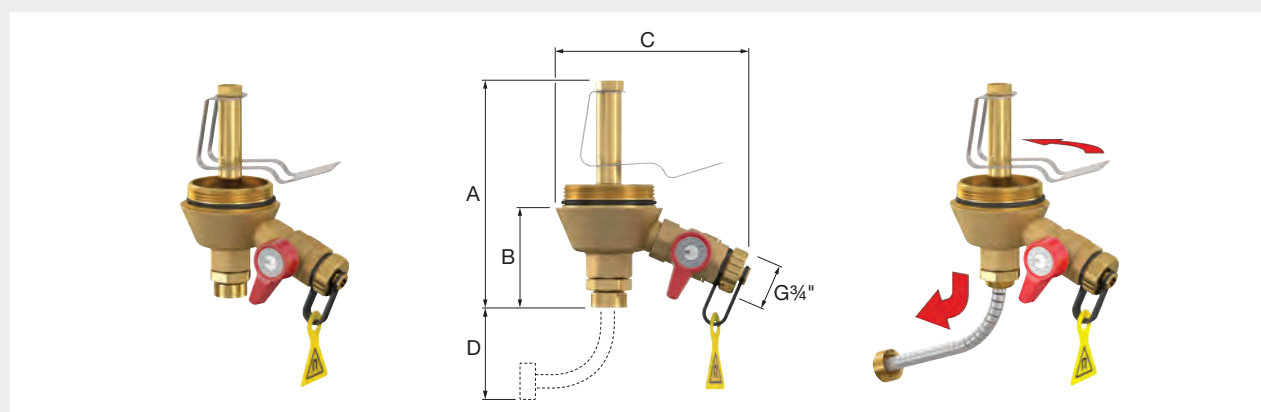
Dirt collector


Removable dirt collector for Flamco Clean (Smart) and Flamcovent Clean Smart consisting of several parts:

- A double scraper - one at the bottom of the collection vessel and one in the cone of the dirt scraper.
- Magnet holder with 25 neodymium super magnets.
- Drain valve with operating lever and maintenance label.

By pulling the magnet downwards the magnetite particles are attracted to the bottom side of the dirt scraper. There they can be removed easily via the drain valve.

The removable magnet is designed in such a manner that minimum space is needed under the dirt separator in order to remove it.

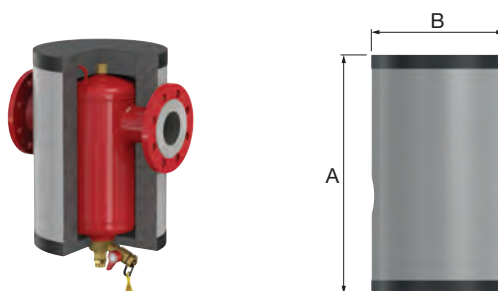



Type	Connection	Dimensions				Weight [kg]		Order Code
		A [mm]	B [mm]	C [mm]	D [mm]			
Dirt Collector	G 2" M	148	66	128	60	0.9	1	31250

Flamco Clean IsoPlus

This insulation set for Flamco Clean (Smart) can be easily attached and consists of two halves that lock into each other by means of hook fasteners and deep-drawn synthetic caps. The melamine insulation foam (thickness 50 mm) is glued to the polystyrene outer jacket (thickness 1 mm).

- Fire class B2 according to DIN 4102.
- Suitable for retrospective installation.
- 100% recyclable.
- Insulation value (λ): 0.035 W/mK.
- Colour: aluminium coloured (RAL 9006).



Type	Dimensions		Weight [kg]		Order Code
	A [mm]	B [mm]			
Flamco Clean IsoPlus 50	460	280	1.3	1	28870
Flamco Clean IsoPlus 65	460	280	1.4	1	28871
Flamco Clean IsoPlus 80	615	380	2.2	1	28872
Flamco Clean IsoPlus 100	615	380	2.3	1	28873
Flamco Clean IsoPlus 125	755	470	3.5	1	28874
Flamco Clean IsoPlus 150	755	470	3.5	1	28875
Flamco Clean IsoPlus 200	965	560	5.0	1	28876

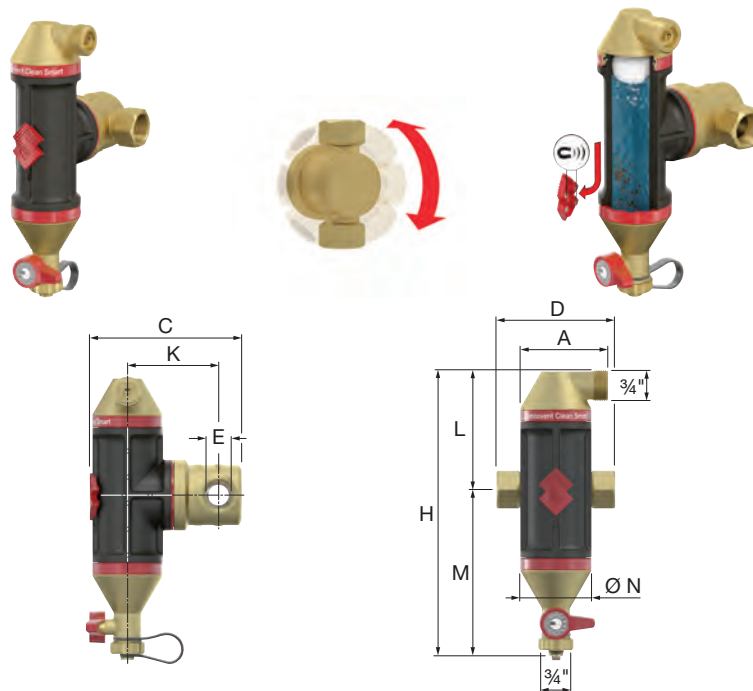
SMART COMBINED SEPARATORS


Flamcovent Clean Smart

More compact, lighter, cleaner and even more efficient.

The Flamcovent Clean Smart air and dirt separators remove even the smallest microbubbles and minuscule dirt particles from the system water. They are virtually maintenance-free and the flow resistance is negligibly low.

- 60% better performance compared to conventional separators.
 - Flow velocity up to 3 m/s.
 - Four neodymium supermagnets are incorporated into the logo.
 - Can be used with all kinds of pipework.
 - Compact dimensions, light weight.
 - Extremely low flow resistance and low loss of energy.
 - Consistent performance throughout its service life.
- Maximum working pressure: 10 bar.
 - Minimum/Maximum working temperature: -10 °C / 120 °C.
 - Suitable for addition of glycol-based anti-freeze up to 50%.

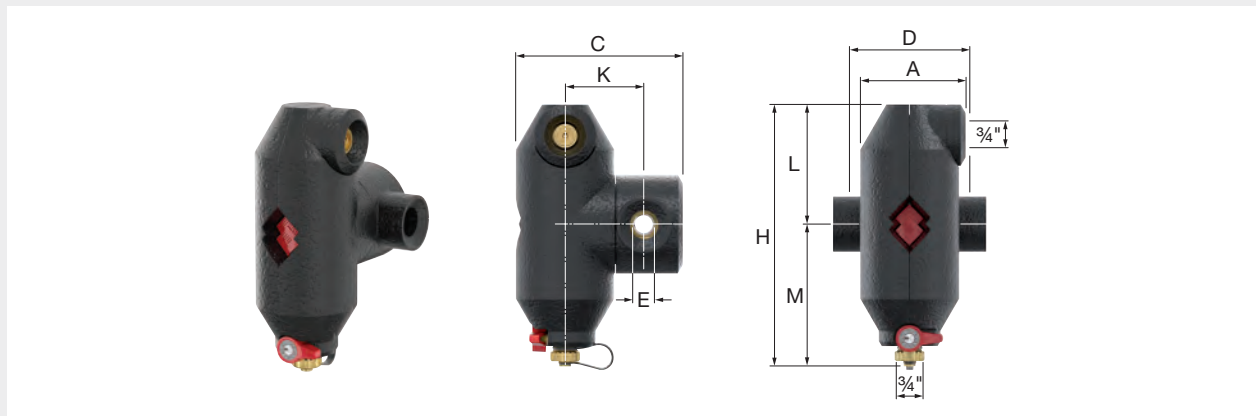



Type	Connection (E)	Dimensions								Weight [kg]		Order Code
		A [mm]	C [mm]	D [mm]	K [mm]	L [mm]	M [mm]	H/H1 [mm]	Ø N [mm]			
Flamcovent Clean Smart 22	22 mm	74	136	120	78	101	140	241	60	1.2	1	30042
Flamcovent Clean Smart 3/4	Rp 3/4"	74	133	100	78	101	140	241	60	1.2	1	30041
Flamcovent Clean Smart 1	Rp 1"	82	155	106	91	139	179	318	75	1.5	1	30043
Flamcovent Clean Smart 1 1/4	Rp 1 1/4"	82	165	110	96	139	179	318	75	1.6	1	30044
Flamcovent Clean Smart 1 1/2	Rp 1 1/2"	94	193	129	109	173	212	385	92	2.2	1	30045
Flamcovent Clean Smart 2	Rp 2"	94	206	140	117	173	212	385	92	2.6	1	30046

Flamcovent Clean Smart EcoPlus

Similar to the Flamcovent Clean Smart but with an EPP insulation mantle included.

- EPP insulation thickness: 20 mm.
- Insulation value (λ): 0.036 W/mK.




Type	Con- nection (E)	Dimensions							Weight [kg]		Order Code
		A [mm]	C [mm]	D [mm]	K [mm]	L [mm]	M [mm]	H [mm]			
Flamcovent Clean Smart EcoPlus 22	22 mm	104	164	120	78	118	140	258	1.3	1	30052
Flamcovent Clean Smart EcoPlus 3/4	G 3/4" F	104	164	100	78	118	140	258	1.3	1	30051
Flamcovent Clean Smart EcoPlus 1	G 1" F	117	189	106	91	157	178	335	1.6	1	30053
Flamcovent Clean Smart EcoPlus 1 1/4	G 1 1/4" F	117	199	110	96	157	178	335	1.7	1	30054
Flamcovent Clean Smart EcoPlus 1 1/2	G 1 1/2" F	134	224	129	109	191	212	403	2.4	1	30055
Flamcovent Clean Smart EcoPlus 2	G 2" F	134	237	140	117	191	212	403	2.8	1	30056

Magnets Smart 22 mm - 2"

- Set of five magnets per bag.



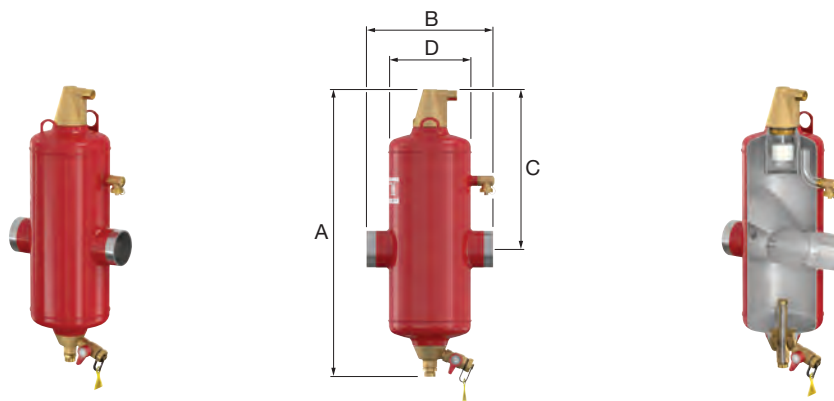
Type	Suitable for		Order Code
Magnets	Flamco(vent) Clean Smart (EcoPlus) 22 mm - 2"	1	40007


Flamcovent Clean Smart S - 10.0 bar

Optimum air and dirt separation combined with energy efficiency.

The new steel Flamcovent Clean Smart air and dirt separators remove even the tiniest microbubbles and minuscule dirt particles from the system water. The Flamco Clean Smart performs 60% better than conventional air and dirt separators whilst the flow resistance has been reduced to a negligible level.

- Up to 60% better performance compared to conventional air and dirt separators.
- Extremely low flow resistance resulting in less energy consumption.
- Standard flow speed up to 3 m/s (9.8 ft/s).
- Twenty-five neodymium supermagnets are incorporated into the dirt scraper.
- Constant performance during the entire lifespan.
- Low maintenance.
- Including a welding connection.
- Maximum working pressure: 10 bar.
- Suitable for systems with a maximum flow temperature of 120 °C.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- In accordance with Pressure Equipment Directive 2014/68/EU.



Type	Capacity [l]	Connection		Dimensions				K _v * [m³/h] (ΔP = 1 bar)	Weight [kg]		Order Code
		[DN]	[mm]	A [mm]	B [mm]	C [mm]	D [mm]				
Flamcovent Clean Smart 50 S	10	50	60.3	603	260	338	175	93	11	1	31141
Flamcovent Clean Smart 65 S	10	65	76.1	603	260	338	175	140	11	1	31142
Flamcovent Clean Smart 80 S	33	80	88.9	795	370	435	270	209	20	1	31143
Flamcovent Clean Smart 100 S	33	100	114.3	795	370	435	270	311	23	1	31144
Flamcovent Clean Smart 125 S	78	125	139.7	967	525	510	360	459	42	1	31145
Flamcovent Clean Smart 150 S	78	150	168.3	967	525	510	360	675	47	1	31146
Flamcovent Clean Smart 200 S	158	200	219.1	1280	650	705	450	1340	63	1	31147

* K_v = Q / √ΔP Q: Flow [m³/h] ΔP: Pressure loss over the product (1 bar)

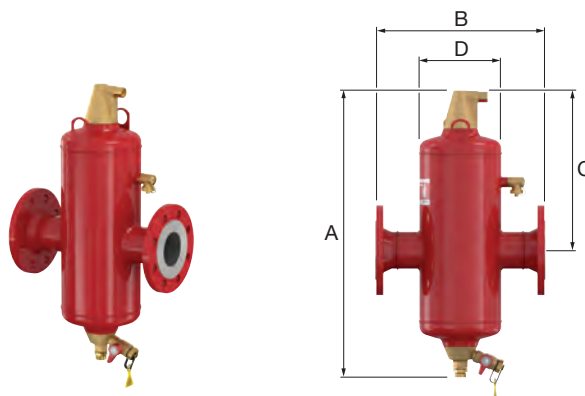
Flow factor K_v: Rate of flow [m³/h] which results in a 1 bar pressure drop across the product. This is different then the maximum allowed flow rate of the product.




Flamcovent Clean Smart F - 10.0 bar

Similar to the Flamcovent Clean Smart S but with flanged connection according to EN 1092-1 PN16.

- Maximum working pressure: 10 bar.
- Models with a maximum working pressure of 25 bar are available upon request.



Type	Capacity [l]	Connection		Dimensions				K _v * [m³/h] (ΔP = 1 bar)	Weight [kg]		Order Code
		[DN]	[mm]	A [mm]	B [mm]	C [mm]	D [mm]				
Flamcovent Clean Smart 50 F	8	50	60.3	603	350	338	175	93	16	1	31041
Flamcovent Clean Smart 65 F	10	65	76.1	603	350	338	175	140	17	1	31042
Flamcovent Clean Smart 65 F **	10	65	76.1	603	350	338	175	140	17	1	31043
Flamcovent Clean Smart 80 F	33	80	88.9	795	470	435	270	209	28	1	31044
Flamcovent Clean Smart 100 F	33	100	114.3	795	470	435	270	311	32	1	31045
Flamcovent Clean Smart 125 F	78	125	139.7	967	635	510	360	459	55	1	31046
Flamcovent Clean Smart 150 F	78	150	168.3	967	635	510	360	675	63	1	31047
Flamcovent Clean Smart 200 F	158	200	219.1	1280	774	705	450	1340	86	1	31048
Flamcovent Clean Smart 250 F	370	250	273.1	1620	990	892	600	1952	165	1	31049
Flamcovent Clean Smart 300 F	415	300	323.9	1784	1006	1032	600	2830	200	1	31050
Flamcovent Clean Smart 350 F	840	350	355.6	2028	1214	1109	800	4084	350	1	31051
Flamcovent Clean Smart 400 F	927	400	406.4	2201	1220	1252	800	5866	385	1	31052
Flamcovent Clean Smart 500 F	1768	500	508.0	2628	1580	1470	1000	8387	745	1	31053
Flamcovent Clean Smart 600 F	3056	600	610.0	3124	1870	1757	1200	11939	1075	1	31054

* $K_v = Q / \sqrt{\Delta P}$ Q: Flow [m³/h] ΔP: Pressure loss over the product (1 bar)

Flow factor K_v: Rate of flow [m³/h] which results in a 1 bar pressure drop across the product. This is different then the maximum allowed flow rate of the product.

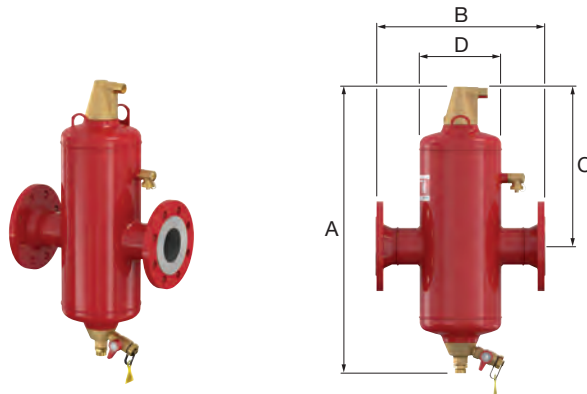
** 4 hole flanged version.




Flamcovent Clean Smart F - 16.0 bar

Similar to the Flamcovent Clean Smart S but with flanged connection according to EN 1092-1 PN16.

- Maximum working pressure: 16 bar.
- Models with a maximum working pressure of 25 bar are available upon request.



Type	Capacity [l]	Connection		Dimensions				K _v * [m³/h] (ΔP = 1 bar)	Weight [kg]		Order Code
		[DN]	[mm]	A [mm]	B [mm]	C [mm]	D [mm]				
Flamcovent Clean Smart 50 F **	8	50	60.3	603	350	333	175	93	19	1	31074
Flamcovent Clean Smart 65 F **	10	65	76.1	603	350	333	175	140	20	1	31075
Flamcovent Clean Smart 80 F	33	80	88.9	795	470	435	270	209	30	1	31076
Flamcovent Clean Smart 100 F	33	100	114.3	795	470	435	270	311	34	1	31077
Flamcovent Clean Smart 125 F	78	125	139.7	967	635	515	360	459	77	1	31078
Flamcovent Clean Smart 150 F	78	150	168.3	967	635	515	360	675	80	1	31079
Flamcovent Clean Smart 200 F	158	200	219.1	1280	774	705	450	1340	118	1	31080
Flamcovent Clean Smart 250 F	370	250	273.1	1620	990	892	600	1952	228	1	31094
Flamcovent Clean Smart 300 F	415	300	323.9	1784	1006	1032	600	2830	267	1	31095
Flamcovent Clean Smart 350 F	840	350	355.6	2028	1214	1109	800	4084	451	1	31096
Flamcovent Clean Smart 400 F	927	400	406.4	2201	1220	1252	800	5866	480	1	31097
Flamcovent Clean Smart 500 F	1768	500	508.0	2628	1580	1470	1000	8387	877	1	31098
Flamcovent Clean Smart 600 F	3056	600	610.0	3124	1870	1757	1200	11939	1679	1	31099

* K_v = Q / √ΔP Q: Flow [m³/h] ΔP: Pressure loss over the product (1 bar)

Flow factor K_v: Rate of flow [m³/h] which results in a 1 bar pressure drop across the product. This is different then the maximum allowed flow rate of the product.

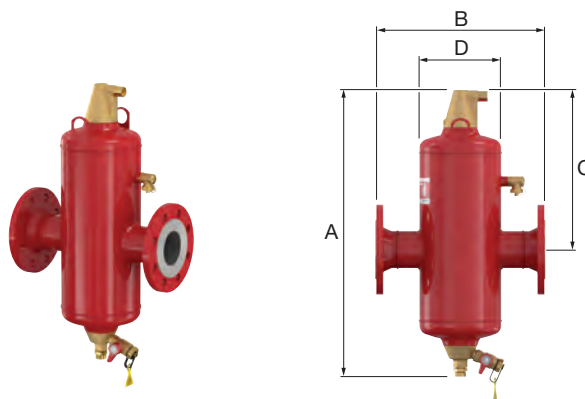
** CE Marked.




Flamcovent Clean Smart F - ANSI flanges

Similar to the Flamcovent Clean Smart S but with ANSI flange connection sizes (4 hole).

- Minimum/Maximum working temperature: -10 °C / 120 °C (14 °F / 248 °F).
- Maximum working pressure: 10 bar (150 Psi).
- ANSI flange connection sizes (4 hole).
- Available in ASME approved and non-ASME approved executions.



Type	Capacity [gal]	Connection		Dimensions				C _v [gal/min]	Weight [lbs]		Order Code
		[DN]	["]	A ["]	B ["]	C ["]	D ["]				
Flamcovent Clean Smart 65 F	2.6	65	2.5	23.74	13.78	13.11	6.89	162	35	1	30360
Flamcovent Clean Smart 80 F	8.7	80	3.0	31.30	18.50	17.13	10.63	242	55	1	30361
Flamcovent Clean Smart 100 F	8.7	100	4.0	31.30	18.50	17.13	10.63	360	64	1	30362
Flamcovent Clean Smart 125 F	20.6	125	5.0	38.07	25.00	20.28	14.17	531	106	1	30363
Flamcovent Clean Smart 150 F	20.6	150	6.0	38.07	25.00	20.28	14.17	780	115	1	30364
Flamcovent Clean Smart 65 F *	2.6	65	2.5	23.74	13.78	13.11	6.89	162	35	1	30370
Flamcovent Clean Smart 80 F *	8.7	80	3.0	31.30	18.50	17.13	10.63	242	55	1	30371
Flamcovent Clean Smart 100 F *	8.7	100	4.0	31.30	18.50	17.13	10.63	360	64	1	30372
Flamcovent Clean Smart 125 F *	20.6	125	5.0	38.07	25.00	20.28	14.17	531	106	1	30373
Flamcovent Clean Smart 150 F *	20.6	150	6.0	38.07	25.00	20.28	14.17	780	115	1	30374

* ASME approved.



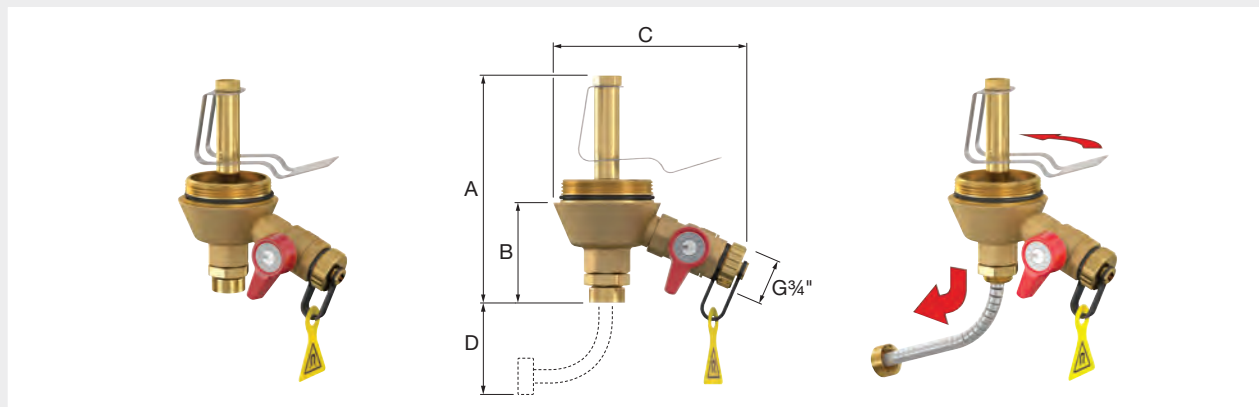
Dirt collector


Removable dirt collector for Flamco Clean (Smart) and Flamcovent Clean Smart consisting of several parts:

- A double scraper - one at the bottom of the collection vessel and one in the cone of the dirt scraper.
- Magnet holder with 25 neodymium super magnets.
- Drain valve with operating lever and maintenance label.

By pulling the magnet downwards the magnetite particles are attracted to the bottom side of the dirt scraper. There they can be removed easily via the drain valve.

The removable magnet is designed in such a manner that minimum space is needed under the dirt separator in order to remove it.

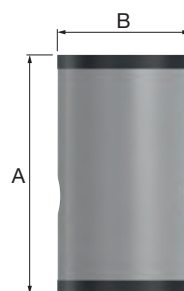



Type	Connection	Dimensions				Weight [kg]		Order Code
		A [mm]	B [mm]	C [mm]	D [mm]			
Dirt Collector	G 2" M	148	66	128	60	0.9	1	31250

Flamcovent Clean IsoPlus

This insulation set for Flamcovent Clean (Smart) can be easily attached and consists of two halves that lock into each other by means of hook fasteners and deep-drawn synthetic caps. The melamine insulation foam (thickness 50 mm) is glued to the polystyrene outer jacket (thickness 1 mm).

- Fire class B2 according to DIN 4102.
- Suitable for retrospective installation.
- 100% recyclable.
- λ -value: 0.035 W/mK.
- Colour: aluminium coloured (RAL 9006).



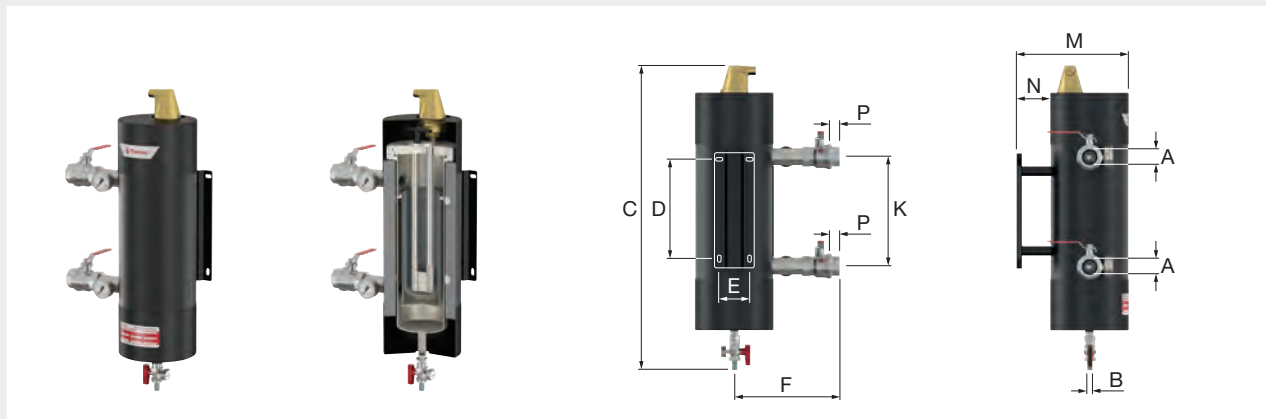
Type	Dimensions		Weight [kg]		Order Code
	A [mm]	B [mm]			
Flamcovent Clean IsoPlus 50	502	280	1.4	1	28860
Flamcovent Clean IsoPlus 65	502	280	1.5	1	28861
Flamcovent Clean IsoPlus 80	694	380	2.3	1	28862
Flamcovent Clean IsoPlus 100	694	380	2.4	1	28863
Flamcovent Clean IsoPlus 125	866	470	3.5	1	28864
Flamcovent Clean IsoPlus 150	866	470	3.6	1	28865
Flamcovent Clean IsoPlus 200	1178	560	5.5	1	28866

SIDEFLOW CLEAN

SideFlow Clean

The SideFlow Clean is a partial flow filter for continuous cleaning of the system for central heating and cooling installations. Connecting a SideFlow Clean to an installation ensures that a proportion (10%) of the main flow is filtered which means dirt and magnetite are captured through a combination of a filter bag and magnetic filtration.

- Magnetic filtration and bag filtration in one.
- Quick and easy to install and maintain.
- Simple to mount thanks to wall fastening.
- With energy-saving insulating jacket.
- Handy dosing access point for solid or liquid cleaning agents.
- The unit can be mounted for either both left hand connections or both right hand connections.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Minimum/Maximum working temperature: -10 °C / 100 °C.
- Minimum/Maximum flow velocity: 0.2 / 3 m/s.
- Material: Polyester fibre fleece insulation. λ : 0.038 W/m.
- Minimum/Maximum working pressure: 0.2 / 16 bar.
- Maximum system size: 120,000 litres.
- Flowrate (10% system flow): 1.4 l/s.
- Thickness insulation: 40 mm.



Type	Volume [l]	Connection		Weight [kg]		Order Code
		(A)	(B) [mm]			
SideFlow Clean 5.0L *	5.0	G 1 1/4" F	14.5	20.5	1	17020

* Including SideFlow Clean, Filter bag 10 micron (1x), Filter bag 25 micron (1x), Filter bag 50 micron (2x) and C-Spanner.

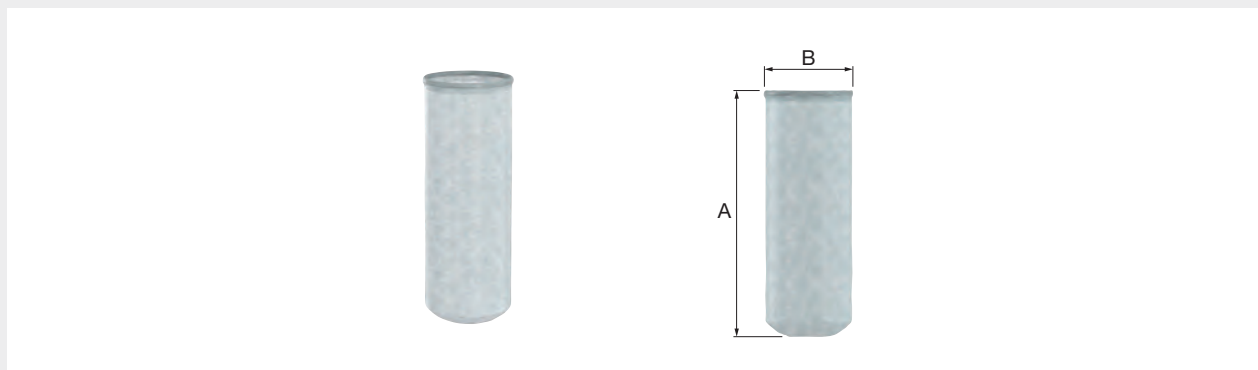



SideFlow Clean - Dimensions

Type	Dimensions							
	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]	P [mm]	M [mm]	N [mm]
SideFlow Clean 5.0L	766	250	76	260	275	20	281	85

SideFlow Clean Filter bag

Replacement filter bag for the SideFlow Clean (5 litres).




Type	Suitable for SideFlow Clean [l]	Gradings [micron]	Dimensions		Weight [kg]		Order Code
			A [mm]	B [mm]			
Filter bag 10 - 5.0L	5.0	10	280	100	0.05	5	17031
Filter bag 25 - 5.0L	5.0	25	280	100	0.05	5	17032
Filter bag 50 - 5.0L	5.0	50	280	100	0.05	5	17033

SideFlow Clean C-Spanner



Accessorie for SideFlow Clean (5 litres).

- Material: Stainless steel.

Type	Suitable for SideFlow Clean [l]		Order Code
C-Spanner - 5.0L	5.0	1	17035

AIR SEPARATOR FOR SOLAR

Flamcovent Solar


For mounting in solar installations.

In solar thermal systems, steam (vapour) may arise due to the high temperatures involved. If a float vent is in direct communication with the vapour, the float will not close off the vent (i.e. the vent floats on the water, not the vapour).

The Flamcovent Solar is a type of through-flow air separator in which the vent head cannot be disconnected from the system. That is why the Flamcovent Solar has a manual vent, so the system will not boil dry when vapour is created.

- With PALL-Ring technology.
- Manually operated, including deaeration key.
- EPP insulation included.
- Maximum flow velocity: 1.5 m/s.
- Maximum working pressure: 10.0 bar.
- Maximum working temperature: 200 °C.



Type	Connection	Capacity [l]	Dimensions*			Weight [kg]		Order Code
			Length [mm]	Width [mm]	Height [mm]			
Flamcovent Solar 22	22 mm	0.22	102	113	188	1.4	1	28062
Flamcovent Solar 3/4	G 3/4" F	0.22	102	113	188	1.4	1	28663
Flamcovent Solar 1	G 1" F	0.35	110	117	207	1.8	1	28664

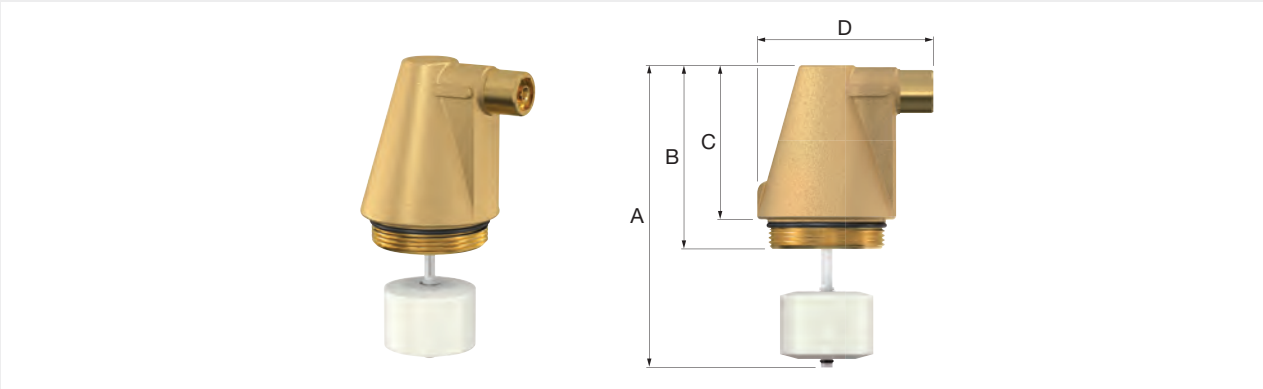
* Dimensions including insulation.


ACCESSORIES FOR VENTING RANGE AND DIRT SEPARATORS

Spare vent cap L

Cone-shaped air chamber equipped with a long float to create more distance to the vent valve. This reduces the risk of contamination of the valve seat to a minimum.

- Maximum system working pressure: 25 bar.
- Maximum working pressure: 10 bar.

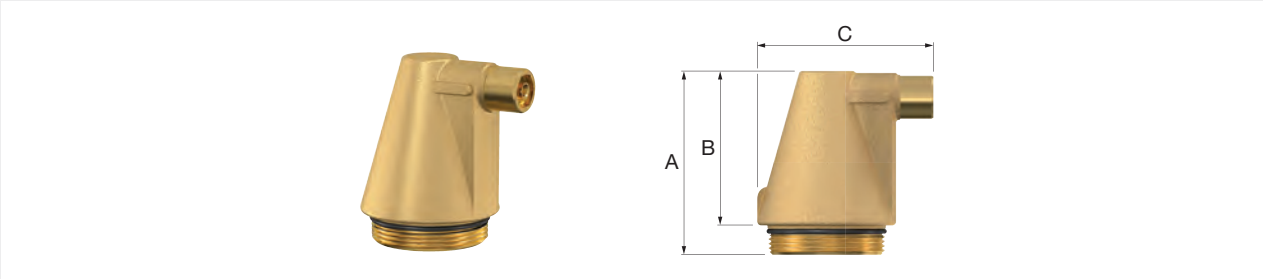


Type	Used for	Dimensions					Order Code
		A [mm]	B [mm]	C [mm]	D [mm]		
Spare vent cap L	Flamcovent (Smart) DN 50 - 600, Flamcovent Clean (Smart) DN 50 - 600, FlexBalance (Plus)	155	94	79	90	1	28555

Spare vent cap S

Cone-shaped air chamber.

- Maximum system working pressure: 25 bar.
- Maximum working pressure: 10 bar.

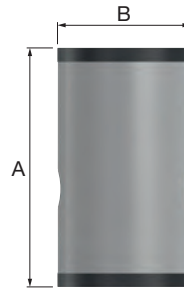



Type	Used for	Dimensions				Order Code
		A [mm]	B [mm]	C [mm]		
Spare vent cap S	Flamcovent (Clean) 22 mm - 2"	94	79	90	1	28554

Flamco Clean IsoPlus

This insulation set for Flamco Clean (Smart) can be easily attached and consists of two halves that lock into each other by means of hook fasteners and deep-drawn synthetic caps. The melamine insulation foam (thickness 50 mm) is glued to the polystyrene outer jacket (thickness 1 mm).

- Fire class B2 according to DIN 4102.
- Suitable for retrospective installation.
- 100% recyclable.
- Insulation value (λ): 0.035 W/mK.
- Colour: aluminium coloured (RAL 9006).

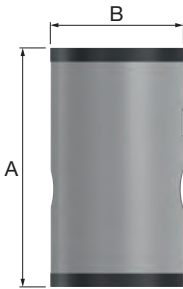



Type	Dimensions		Weight [kg]		Order Code
	A [mm]	B [mm]			
Flamco Clean IsoPlus 50	460	280	1.3	1	28870
Flamco Clean IsoPlus 65	460	280	1.4	1	28871
Flamco Clean IsoPlus 80	615	380	2.2	1	28872
Flamco Clean IsoPlus 100	615	380	2.3	1	28873
Flamco Clean IsoPlus 125	755	470	3.5	1	28874
Flamco Clean IsoPlus 150	755	470	3.5	1	28875
Flamco Clean IsoPlus 200	965	560	5.0	1	28876

Flamcovent IsoPlus

This insulation set for Flamcovent (Smart) can be easily attached and consists of two halves that lock into each other by means of hook fasteners and deep-drawn synthetic caps. The melamine insulation foam (thickness 50 mm) is glued to the polystyrene outer jacket (thickness 1 mm).

- Fire class B2 according to DIN 4102.
- Suitable for retrospective installation.
- 100% recyclable.
- Insulation value (λ): 0.035 W/mK.
- Colour: aluminium coloured (RAL 9006).

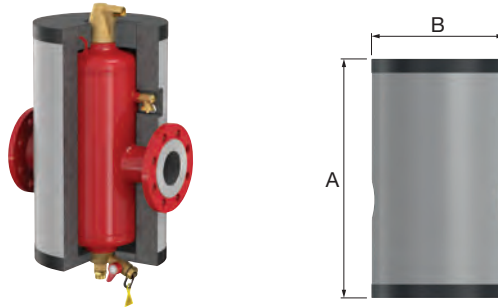



Type	Dimensions		Weight [kg]		Order Code
	A [mm]	B [mm]			
Flamcovent IsoPlus 50	500	280	1.3	1	28160
Flamcovent IsoPlus 65	500	280	1.4	1	28161
Flamcovent IsoPlus 80	650	380	2.2	1	28162
Flamcovent IsoPlus 100	650	380	2.3	1	28163
Flamcovent IsoPlus 125	790	470	3.4	1	28164
Flamcovent IsoPlus 150	790	470	3.5	1	28165
Flamcovent IsoPlus 200	1000	560	5.0	1	28166

Flamcovent Clean IsoPlus

This insulation set for Flamcovent Clean (Smart) can be easily attached and consists of two halves that lock into each other by means of hook fasteners and deep-drawn synthetic caps. The melamine insulation foam (thickness 50 mm) is glued to the polystyrene outer jacket (thickness 1 mm).

- Fire class B2 according to DIN 4102.
- Suitable for retrospective installation.
- 100% recyclable.
- λ -value: 0.035 W/mK.
- Colour: aluminium coloured (RAL 9006).



Type	Dimensions		Weight [kg]		Order Code
	A [mm]	B [mm]			
Flamcovent Clean IsoPlus 50	502	280	1.4	1	28860
Flamcovent Clean IsoPlus 65	502	280	1.5	1	28861
Flamcovent Clean IsoPlus 80	694	380	2.3	1	28862
Flamcovent Clean IsoPlus 100	694	380	2.4	1	28863
Flamcovent Clean IsoPlus 125	866	470	3.5	1	28864
Flamcovent Clean IsoPlus 150	866	470	3.6	1	28865
Flamcovent Clean IsoPlus 200	1178	560	5.5	1	28866

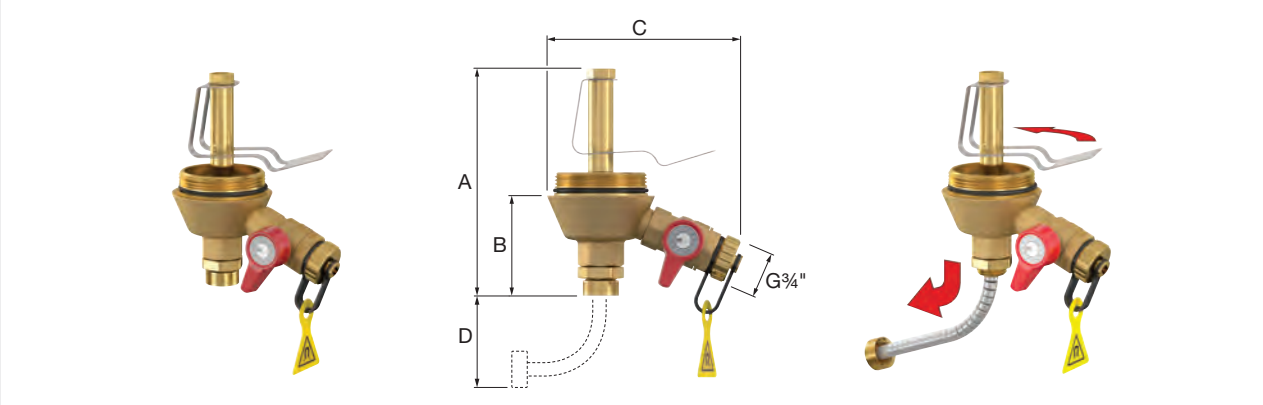
Dirt collector


Removable dirt collector for Flamco Clean (Smart) and Flamcovent Clean Smart consisting of several parts:

- A double scraper - one at the bottom of the collection vessel and one in the cone of the dirt scraper.
- Magnet holder with 25 neodymium super magnets.
- Drain valve with operating lever and maintenance label.

By pulling the magnet downwards the magnetite particles are attracted to the bottom side of the dirt scraper. There they can be removed easily via the drain valve.

The removable magnet is designed in such a manner that minimum space is needed under the dirt separator in order to remove it.




Type	Connection	Dimensions				Weight [kg]		Order Code
		A [mm]	B [mm]	C [mm]	D [mm]			
Dirt Collector	G 2" M	148	66	128	60	0.9	1	31250

Magnets Smart 22 mm - 2"

- Set of five magnets per bag.



Type	Suitable for		Order Code
Magnets	Flamco(vent) Clean Smart (EcoPlus) 22 mm - 2"	1	40007

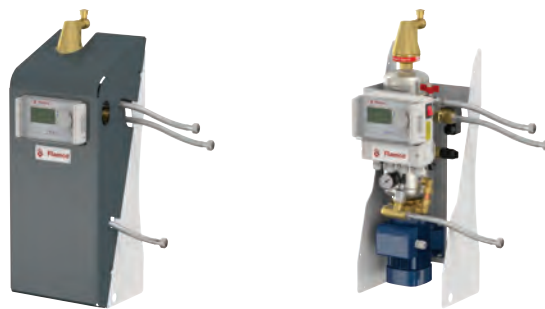
VACUMAT BASIC DEGASSING AND TOP-UP AUTOMAT


The Vacumat Basic is a vacuum degasser for sealed heating (acc. to EN12828) and chilled water (cooling) installations that uses vacuum degassing technology for highly efficient degassing of closed systems. Moreover, the Vacumat Basic ensures automatic topping-up of the system after the top-up water has been degassed.

- Compact, easy to use and reliable design.
- Fully assembled and ready to connect.
- Highly efficient degassing through vortex technology.
- Dry run protection.
- The menu of the control unit is available in 18 languages.
- Wall mounted. Floor standing optional with the Vacumat Basic Floor Console (17001).

Vacumat Basic

- Max system volume: 115 m³.
- Complies with the following guidelines:
Machinery Directive 2006/42/EC.
PED 2014/68/EU.



Type	System operating pressure [bar]	Connections			Dimensions			Weight [kg]		Order Code
		To system	From system	To supply	Width [mm]	Height [mm]	Length [mm]			
Vacumat Basic	0.8 - 3.0	G 1/2" F	G 1/2" F	G 1/2" F	260	705	255	21	1	17002



Vacumat Basic - Performance

Specifications	Vacumat Basic
Nominal pressure [PN]	10
Working pressure range [bar]	0.8 - 3.0
Max. glycol	30%
System flow temperature [°C]	3 - 120
Working temperature [°C]	3 - 70
Ambient temperature [°C]	3 - 45
Top-up temperature [°C]	3 - 30
Pressure top-up water [bar]	0.8 - 8.0
Max. top-up volume [l/h]	180
Electrical requirements [V]	1 ~ 230 V - 50/60 Hz
Power supply [kW]	0.68
IP rating	IP 54
Nominal current [A]	3.4
Noise output [dB(A)]	~64 (max.)

Vacumat Basic Floor Console



For mounting the Vacumat Basic on the floor.


Type	Height [mm]	Weight [kg]		Order Code
Vacumat Basic Floor Console	1000	8	1	17001

NFE 1 Top-up Unit



Used for direct top up from potable water supply according to DIN 1988 and DIN EN 1717.

- Consists of a backflow preventer, water meter, ball valve and non-return valve.
- Maximum working pressure: 10 bar.
- Maximum working temperature: 65 °C.

Type	L. [mm]	Connection to		K _{vs} value ** (Backflow-preventer) [m³/h]	Weight [kg]		Order Code
		Potable water	System				
NFE 1.1	300	G ¹ / ₂ " / 15mm	G ¹ / ₂ " / 15mm	2.2	3	1	23780
NFE 1.2 *	300	G ¹ / ₂ " / 15mm	G ¹ / ₂ " / 15mm	2.2	3	1	23781

* NFE 1.2 has an impulse output water meter (10 litres / impulse).

** The K_{vs} value is the K_v value in the fully opened position.

VACUMAT ECO DEGASSING AND TOP-UP AUTOMATS

The Vacumat Eco degasses extremely accurately and effectively. This pressure-temperature controlled degasser degasses faster through the much greater and fully continuous degassing capacity. Removing gases more quickly limits damage to the system as much as possible, avoids unnecessary faults and expensive repairs, and extends the life of the system.

- Degasses up to seven times quicker than comparable products.
- Is eight times more energy-efficient thanks to innovative technologies.
- Gives real-time insight into system performance.
- Automatic standby function for optimal energy saving.
- Control unit can be set to any level within a given range.
- The menu of the control unit is available in 19 languages.
- Compact and rugged design.
- Pressure- and level-controlled topping-up with a wide range of available settings.

How the Vacumat Eco works

1. Creating a vacuum

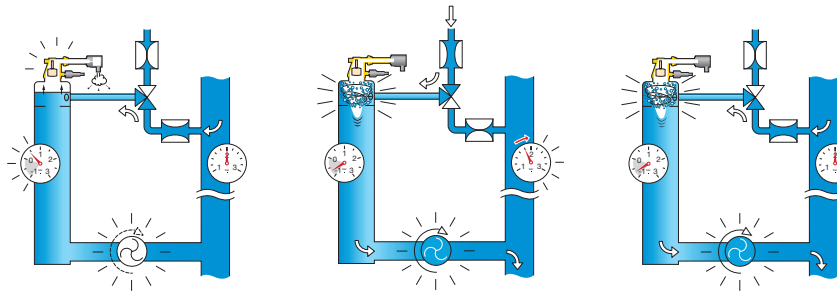
Because the pump extracts more water from the column than can flow in a vacuum is created towards the boiling point. Gas is released and collects above the water line.

2. Deaeration

The pressure in the column is briefly raised by reducing the speed of the pump so that released gases can be vented.

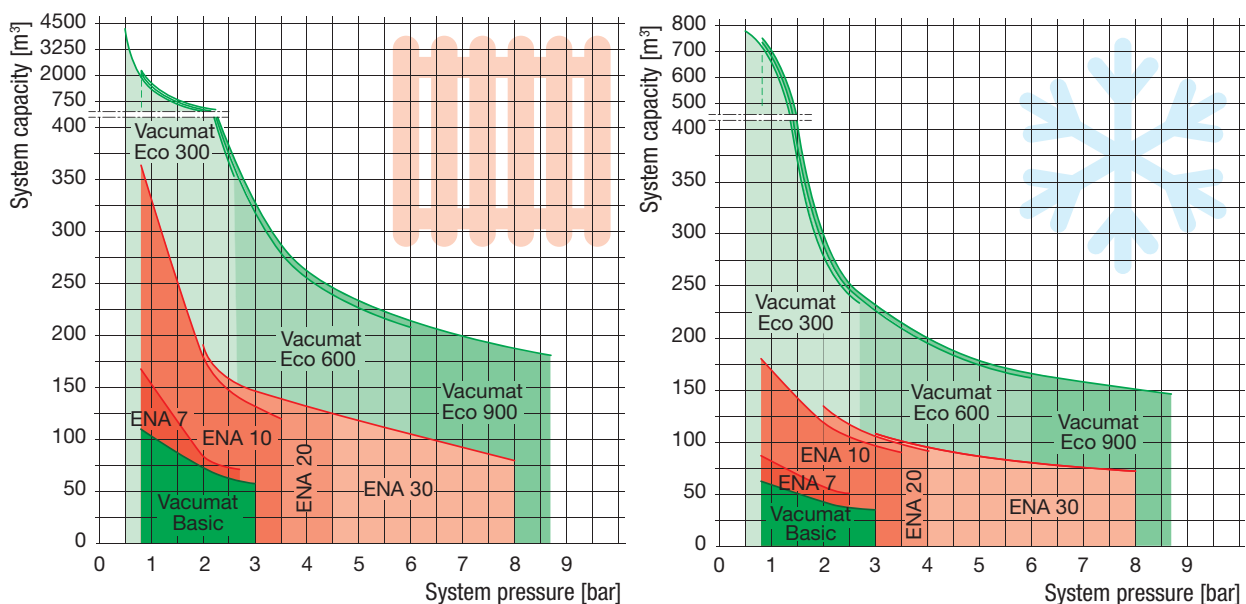
3. Topping up

If the system pressure is too low, deaerated water is added until the correct pressure is reached.



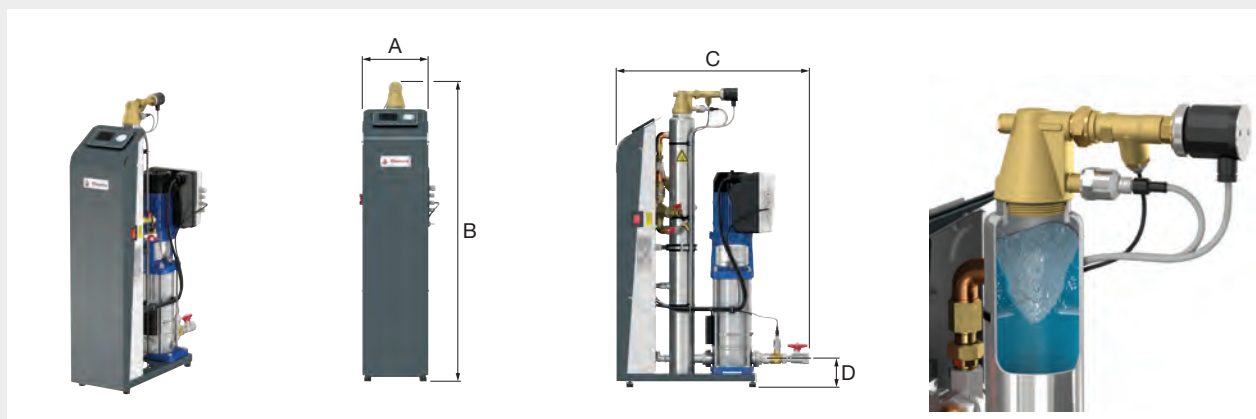
Vacumat Eco - Selection graphs heating/cooling


The Vacumat Eco can be used for a large system capacity and therefore in more situations. In contrast to the ENA series, the appliance makes use of the new technology of sensitive deaeration. This allows the process to run quickly, quietly and extremely economically.



Vacumat Eco

- Complies with the following guidelines:
Machinery Directive 2006/42/EC.
PED 2014/68/EU.



Type	System operating pressure [bar]	Connections			Dimensions				Weight [kg]		Order Code
		To system	From system	To supply	A [mm]	B [mm]	C [mm]	D [mm]			
Vacumat Eco 300	0.6 - 2.7	Rp 1"	Rp 1/2"	Rp 1/2"	260	1030	670	100	36	1	17003
Vacumat Eco 600	0.8 - 5.4	Rp 1"	Rp 1/2"	Rp 1/2"	260	1030	670	100	38	1	17006
Vacumat Eco 900	0.8 - 8.7	Rp 1"	Rp 1/2"	Rp 1/2"	260	1030	670	100	47	1	17009



Vacumat Eco - Performance

Specifications		Vacumat Eco		
		300	600	900
Nominal pressure [PN]		10	10	10
Working pressure range [bar]		0.6 - 2.7	0.8 - 5.4	0.8 - 8.7
Max. glycol		50%	50%	50%
System flow temperature [°C]		3 - 120	3 - 120	3 - 120
System water temperature range for deaeration [°C]		3 - 90	3 - 90	3 - 90
Top-up temperature [°C]		3 - 90	3 - 90	3 - 90
Ambient temperature range [°C]		3 - 45	3 - 45	3 - 45
Electrical requirements [V]		1 ~ 230 V 50/60 Hz	1 ~ 230 V 50/60 Hz	1 ~ 230 V 50/60 Hz
Power supply [kW]		0.55	0.75	0.75
Degree of protection / motor position valves		IP 54 / IP 42	IP 54 / IP 42	IP 54 / IP 42
Nominal current [A]		2.22	4.09	4.09
Noise output [dB(A)] *		52	55	~55
Saturation level of gasses [ml/l] (acc. to VDI 2035-2 and 4708-2)	Min	15	15	15
	Med	12	12	12
	Max	8	8	8

* In silent mode.

Impulse Output Water Meter



- PN 10, 90 °C.
- 50 Hz.

Type	Features	Length [mm]		Order Code
Impulse output water meter	1 impulse/10 litres	80	1	17739

ENA DEGASSING AND TOP-UP AUTOMATS

For active degassing and automatic topping up of closed heating and cooling systems.

The ENA is a pressure step degasser that makes use of vacuum for highly efficient degassing of closed systems. Moreover, the ENA ensures automatic topping-up of the system after the top-up water has been degassed.

Can be easily used in combination with a Flexcon diaphragm pressure expansion vessel or pressure expansion automat.

- Active degassing by patented PALL-Ring technology.
- The menu of the control unit is available in 18 languages.
- Easy to use.
- Fully assembled and ready to connect.
- Compact and robust design.
- Controller can be programmed as required. Connection to BMS possible (RS 485).

How the ENA works

1. Not active

When the ENA is inactive, the stainless steel column is filled with water and the pressure is equal to the system pressure.

2. Creating a vacuum

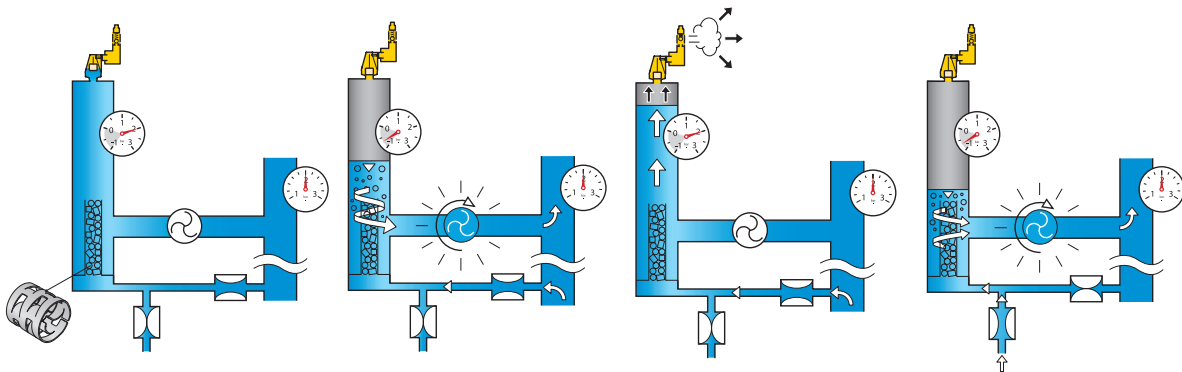
As the pump draws more water out of the column than can flow back in a vacuum is created. Gas is released and collects on the surface of the water.

3. Water intake

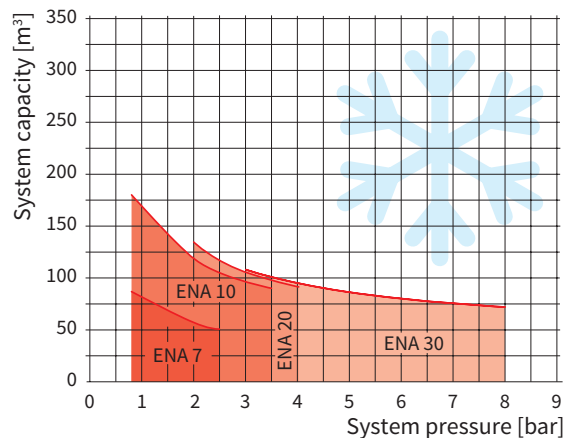
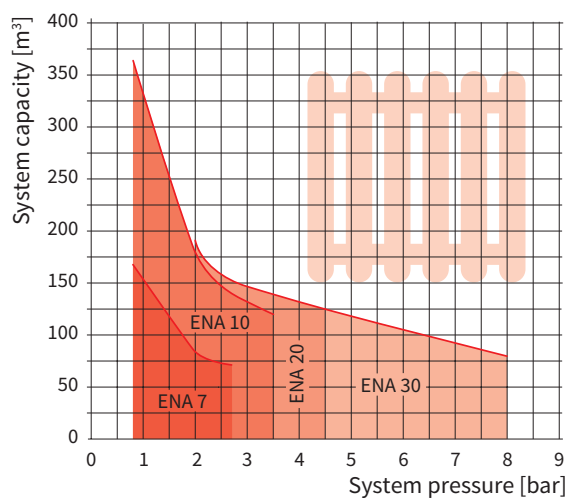
The pump stops and the column fills up again with water. The gas is then expelled via the automatic air vent.

4. Topping-up

If water is lost from the system installation the volume and, as a consequence, the pressure will drop. Water for topping-up is deaerated in the column and fed into the system in small doses (until the correct pressure has been restored).




ENA - Selection graphs heating/cooling



ENA 7 - 30

- Working temperature: 3 °C to 70 °C.
- Maximum (feed) supply temperature in the system: 120 °C.
- Ambient temperature: > 3 °C to 45 °C.
- Maximum pressure in the suppletion feed line: 2 to 8 bar.
- Noise production: approx. 55 dB(A).
- Electrical connection 230 V 50 Hz.
- Suitable for addition of glycol-based anti-freeze up to 30%.
- Complies with the following guidelines:
Machinery Directive 2006/42/EC
PED 2014/68/EU



Type	Max. work. press. [bar]	Operating pressure [bar]	Syst. conn.	Dimensions			Weight [kg]		Order Code
				W. [mm]	D. [mm]	H. [mm]			
ENA 7	8	0.8 - 2.7	Rp 1"	740	325	1270	40	1	17070
ENA 10	8	0.8 - 3.5	Rp 1"	740	325	1270	40	1	17090
ENA 20	8	2.0 - 4.5	Rp 1"	740	325	1270	45	1	17091
ENA 30	10	3.0 - 8.0	Rp 1"	710	525	1270	60	1	17092




NFE 1 Top-up Unit



Used for direct top up from potable water supply according to DIN 1988 and DIN EN 1717.

- Consists of a backflow preventer, water meter, ball valve and non-return valve.
- Maximum working pressure: 10 bar.
- Maximum working temperature: 65 °C.

Type	L. [mm]	Connection to		K _{vs} value ** (Backflow-preventer) [m³/h]	Weight [kg]		Order Code
		Potable water	System				
NFE 1.1	300	G ¹ / ₂ " / 15mm	G ¹ / ₂ " / 15mm	2.2	3	1	23780
NFE 1.2 *	300	G ¹ / ₂ " / 15mm	G ¹ / ₂ " / 15mm	2.2	3	1	23781

* NFE 1.2 has an impulse output water meter (10 litres / impulse).


** The K_{vs} value is the K_v value in the fully opened position.

NFE 2 Top-up Unit



Used for top up from a water supply where a backflow preventer is not needed.

- Consists of a water meter, ball valve and non-return valve.
- Maximum working pressure: 10 bar.
- Maximum working temperature: 90 °C.

Type	L. [mm]	Connection to		Weight [kg]		Order Code
		Potable water	System			
NFE 2.1	190	G $\frac{1}{2}$ " / 15mm	G $\frac{1}{2}$ " / 15mm	2	1	23782
NFE 2.2 *	190	G $\frac{1}{2}$ " / 15mm	G $\frac{1}{2}$ " / 15mm	2	1	23783

* NFE 2.2 has an impulse output water meter (10 litres / impulse).

Impulse Output Water Meter



- PN 10, 90 °C.
- 50 Hz.


Type	Features	Length [mm]		Order Code
Impulse output water meter	1 impulse/10 litres	80	1	17739

Gas Sensor



The gas sensor reduces the energy consumption of the ENA pressure stage deaerator and ensures a longer service life of the components. As soon as gases are removed by the ENA, this is recorded by the gas sensor. If no deaeration is registered, the ENA automatically switches off in order to subsequently start up again after a preset period.

- Energy-saving.
- Reduces wear and tear.
- Suitable for the ENA 7 - 30.
- The gas sensor is mounted on the outlet of the deaeration unit.

Type	Dimensions		Weight [kg]		Order Code
	W. [mm]	H. [mm]			
Gas sensor	120	190	0.7	1	17071

Flamco Vacuum Degassers

The Flamco Vacuum Degasser range is used to remove dissolved gasses from sealed chilled and heating systems. The equipment utilises a multifunction digital controller with a simple user interface. The equipment is an advanced product that combines a pressure step principle with side system configuration to minimize the effects on the sealed system. The real-time displays show the status of the equipment while monitoring the system pressure and health of its own components.

PSD

- Floor standing vacuum degasser unit.
- Effective, automatically repeated and controlled deaeration.
- With turbo mode for rapid deaeration.



Flexfiller Plus / Midifill Plus

- Floor standing, combined digital top-up pressurisation unit with vacuum degasser.
- 18 litre break tank (Midifill: 4 litre).



PressDS Plus

- Floor standing, combined digital top-up pressurisation unit with vacuum degasser and additive tank.
- 4 litre break tank.
- 18 litre additive tank.



General Technical Data

Housing: Mild Steel CR4, Powder Coating.
Break Tank: WRAS Approved material (Plus only).
Pump: See pump details.
Fluid Category Protection: Type AB Weir Overflow gap / Category 5 (Plus only).
Controller: MODBUS.
Directive: PED 2014/68/EU.
International Protection Marking: IP 54.

Type		Number of pumps	Pressure Rating [PN]	Max. Delivery Pressure [bar]	Max. Delivery Flow Rate [l/min]	Floor Standing / Wall Mounted	Break Tank Capacity [l]	System Volume (guide) [l]
PSD	Midi PSD	1	10	5.0	12	wall	N/A	< 50000
	250D	2	10	6.0	18	floor	N/A	< 300000
	280D	2	10	8.0	18	floor	N/A	< 300000
	2160D	2	16	16.0	18	floor	N/A	< 300000
Flexfiller Plus	Midifill Plus	1	10	5.0	12	wall	4	< 50000
	250D	2	10	6.0	18	floor	18	< 300000
	280D	2	10	8.0	18	floor	18	< 300000
	2160D	2	16	16.0	18	floor	18	< 300000
PressDS Plus	250	2	10	6.0	18	floor	4	< 300000
	280	2	10	8.0	18	floor	4	< 300000
	2160	2	16	16.0	18	floor	4	< 300000

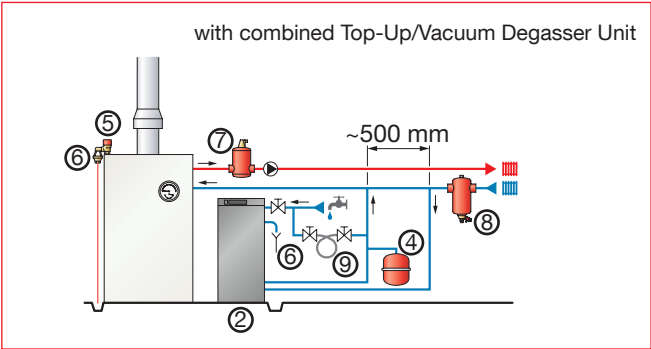
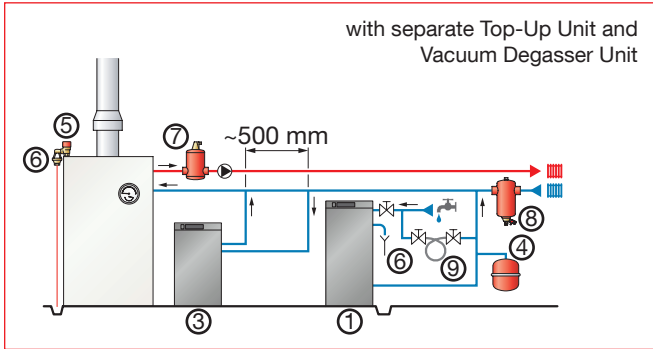
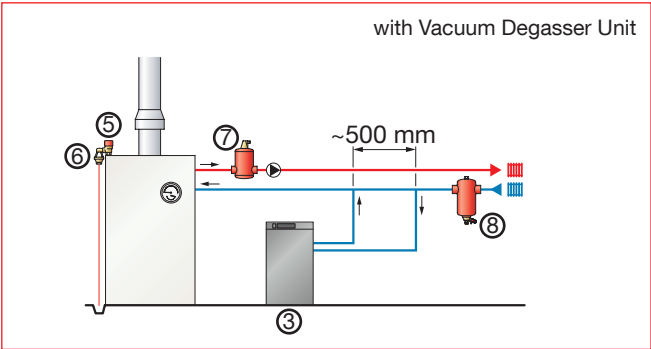
Installation and Pump Details

Installation and Placement

The vacuum degasser should be installed in the return header of the system, on the suction side of the circulating pump, in a frost-free and humidity free area. The point of connection will be the same as the

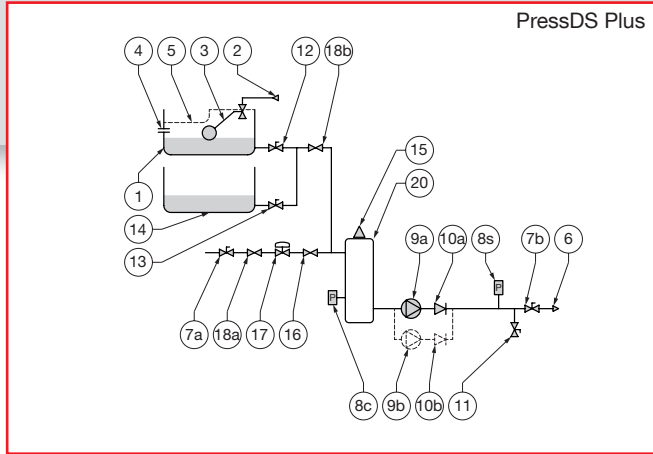
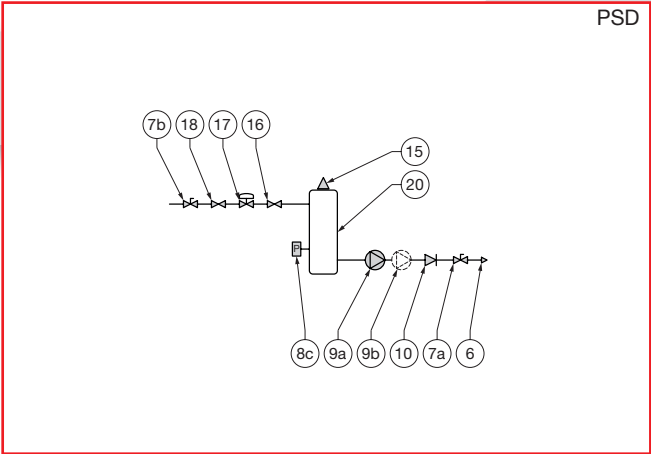
system expansion vessel to provide a neutral pressure reading. The two system connections must be installed on the return pipe approximately 0.5 metre apart.

System Schematics

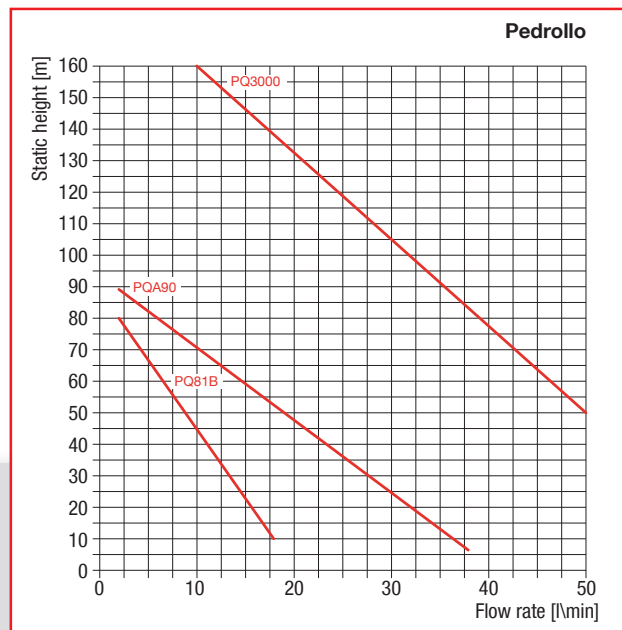


Nr	Description
1	Flexfiller Top-Up Unit
2	Flexfiller Plus / PressDS Plus Combined Unit
3	PSD Pressure Step Degasser
4	Flexcon Expansion Vessel
5	Prescor Safety Valve
6	Tundish
7	Flamcovent Smart Deaerator
8	Flamco Clean Smart Dirt Separator
9	Filling Loop (Optional)

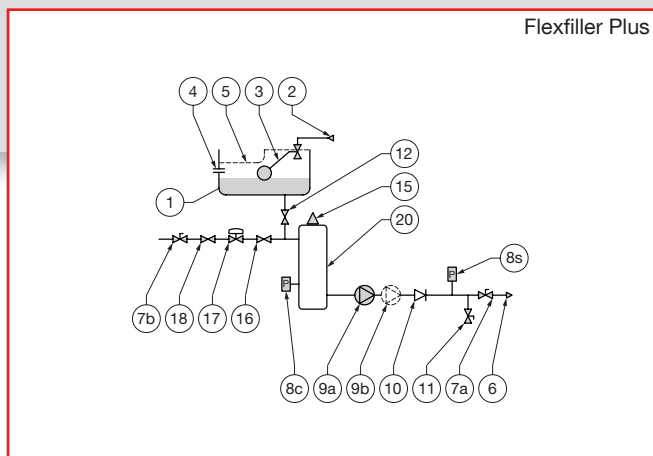
Product Schematics



Pump Details



Type		Pump Qty	Pump Type	Pump Body	Impeller	Insulation Class	IP rating
PSD	Midi PSD	1	Pedrollo PQ81B	Brass	Brass	F	IPX4
	250D	2	Pedrollo PQ81B	Brass	Brass	F	IPX4
	280D	2	Pedrollo PQA90	Ryton	Brass	F	IPX4
	2160D	2	Pedrollo PQ3000	Cast Iron	Bronze	H	IPX5
Flexfiller Plus	Midifill Plus	1	Pedrollo PQ81B	Brass	Brass	F	IPX4
	250D	2	Pedrollo PQ81B	Brass	Brass	F	IPX4
	280D	2	Pedrollo PQA90	Ryton	Brass	F	IPX4
	2160D	2	Pedrollo PQ3000	Cast Iron	Bronze	H	IPX5
PressDS Plus	250	2	Pedrollo PQ81B	Brass	Brass	F	IPX4
	280	2	Pedrollo PQA90	Brass	Brass	F	IPX4
	2160	2	Pedrollo PQ3000	Cast Iron	Bronze	H	IPX5



Number	Description
1	Break tank
2	Mains water inlet
3	Float Operated valve
4	Overflow connection
5	AB air gap backflow protection
6	Supply to sealed system
7 (7a/7b)	Isolation valve
8 (8a/8b)	Pressure transmitter
8s	Pressure sensor (system)
8c	Pressure sensor (cylinder)
9 (9a/9b)	Pump(s)
10 (10a/10b)	Non Return valve
11 (11a/11b)	Drain valve
12	Water balancing valve
13	Additive balancing valve
14	Additive tank
15	Automatic air vent
16	Variable bypass valve
17	Reducing valve
18(18a/18b)	Solenoid valve
20	Cylinder

PSD PRESSURE STEP DEGASSERS

The PSD is used to remove dissolved air from sealed chilled and heating water systems. The equipment utilises a multifunction digital controller with a simple user interface. The equipment is an advanced product that combines a pressure step principle with side system configuration to minimize the effects on the sealed system. The real-time display show the status of the equipment while monitoring the system pressure and health of its own components.

System Volume (Guide): < 300,000 Litres (Midi PSD 150D: 50,000 Litres)

Application of Use:

- Commercial.
- Industrial.
- Residential.

Certifications and Standards Applied:

- PED 2014/68/EU Sound Engineering Practice.
- IEE - Electrical Safety Guidance.
- EMC 2004/108/EC.
- BS 7074 Parts 1 to 3.
- Machinery Directive 95/16/EC.
- Electronic Components have been tested and comply with the EMC Directives.
- EN 61000-6-2: Generic Standards – Immunity standard for industrial environments.
- EN 61000-6-3: Generic Standards – Emission standard for residential, commercial and light industrial environment.
- CE marked components, where applicable.
- IP54 (BS EN60529) Rated Controller.
- WRAS Approved Pump.

Operating Conditions:

- Ambient Temperature Range: 5 °C / 40 °C.
- System temperature range at the point of connection: 5 °C to 70 °C.
- Max. Turbo Runtime: 168 hours (1 week).
- Max. Normal Downtime: 180 minutes (3 hours).
- Volt Free Contacts: Common Fault Contact.
- Relative humidity 95% non-condensing.
- Noise Rating Data: < 75 dBA.

Material of Construction:

- Cabinet: Mild steel CR4.
- Cylinder: Stainless Steel 304.
- Pump: PEDROLLO (Unit dependant. See pump details for more information).
- Valves: Brass.
- Connection: Brass.
- Pipework: Copper / Brass.
- Finish: Powder Coating.



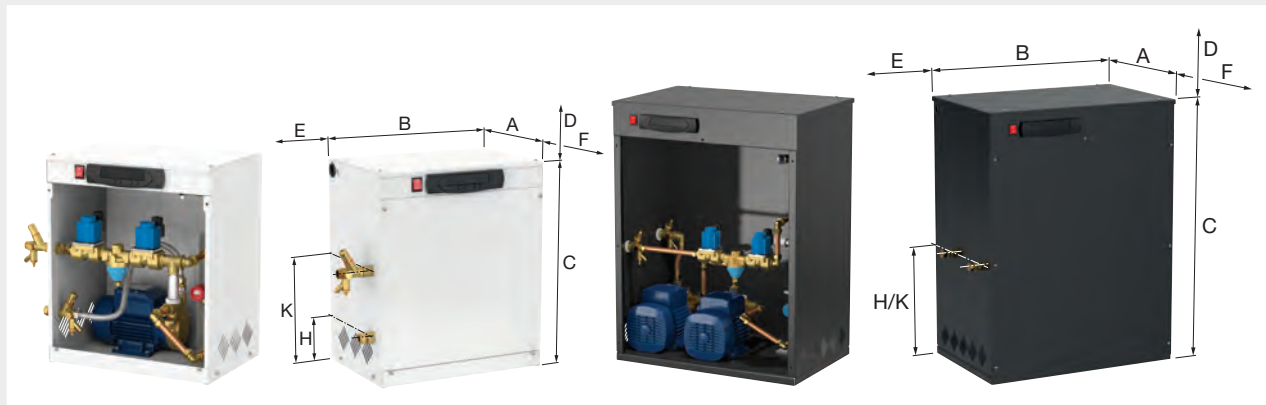
PSD


Compact, totally enclosed vacuum degasser unit (Pressure Step Degasser) for use on sealed systems in order to provide effective dissolved gas removal.

- System fluid is sampled from the system, isolated and subjected to a full vacuum.
- All dissolved air within the sample is liberated in accordance with Henry's Law and vented to atmosphere.
- The deaerated fluid is then reintroduced to the system.
- This process is automatically repeated and controlled with a digital processor.
- A turbo mode is available for initial system setup to allow for rapid deaeration of new installations.
- The real-time display shows the status of the mechanical components.

Product Features:

- For system volumes up to 300,000 litres (Flamco Midi PSD: 50,000 litres).
- Password protection for parameter entry.
- Pressure settings in 0.1 bar increments.
- Event logging for pump start, pump run hours counter, electrical interruption and common alarm.
- Volt free contacts for common fault.
- Pump fault, pressure transducer.
- Vacuum degassing, turbo and normal interval modes.
- Electric pump, 230V 50Hz 1ph (2160D: 415V 50Hz 3ph).



Type	Pump Quantity	Mounting	Connections [mm]	Pressure class [PN]	Operating Pressure [bar]	Power Consumption [kW]	Full Load Current [A]	Nom. Weight [kg]		Order Code
Midi PSD 150D	1	Wall	2 x 15 (Rp 1/2")	10	1 - 5	0.5	3.4	31	1	17106
PSD 250D	2	Floor	2 x 15 (Rp 1/2")	10	1 - 6	2 x 0.5	2 x 3.4	40	1	17375
PSD 280D	2	Floor	2 x 15 (Rp 1/2")	10	1 - 8	2 x 0.75	2 x 5.6	46	1	17105
PSD 2160D	2	Floor	2 x 15 (Rp 1/2")	16	8 - 16	2 x 2.2	2 x 6.6	64	1	17104

Dimensions PSD

Type	Dimensions							
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	H [mm]	K [mm]
Midi PSD 150D	280	410	480	500	150	800	110	260
PSD 250D	310	465	790	500	150	800	445	445
PSD 280D - 2160D	390	600	790	500	150	800	445	445

PSD PRESSURE STEP DEAERATORS (USA - 110V)

The Flamco PSD is used to remove dissolved air from sealed chilled and heating water systems. The equipment utilises a multifunction digital controller with a simple user interface. The equipment is an advanced product that combines a pressure step principle with side system configuration to minimize the effects on the sealed system. The real-time display show the status of the equipment while monitoring the system pressure and health of its own components.

System Volume: < 39,625 gallons

Application of Use:

- Commercial.
- Industrial.
- Residential.

Certifications and Standards Applied:

- PED 97/23/EC Sound Engineering Practice.
- IEE - Electrical Safety Guidance.
- EMC 2004/108/EC.
- BS 7074 Parts 1 to 3.
- Machine Directive 95/16/EC.
- Electronic Components have been tested and comply with the EMC Directives.
- EN 61000-6-2: Generic Standards - Immunity standard for industrial environments.
- EN 61000-6-3: Generic Standards - Emission standard for residential, commercial and light industrial environment.
- CE marked components, where applicable.
- IP54 (BS EN60529) Rated Controller.

Operating Conditions:

- Design Pressure: 145 Psi at 212 °F / 100 °C.
- System Temperature Range: 32 - 194 °F / 0 - 90 °C.
- Ambient Temperature Range: 32 - 113 °F / 0 - 45 °C.
- Max. temperature at point of connection: 158 °F / 70 °C (Pressure step 'Stop' Pressure to be set no lower than 0.0 Psi Gauge).
- Fuse Rating: 10 Amps.
- Safety Rating: IP 54.
- Max. Turbo Runtime: 168 hours (1 week).
- Max. Normal Downtime: 180 minutes (3 hours).
- Volt Free Contacts: Common Fault Contact.
- Relative humidity 95% non-condensing.
- Noise output: < 75 dBA.

Material of Construction:

- Cabinet: Mild Steel AISI 1010.
- Pump: WRAS Approved / Insulation Class F.
- Cylinder: Stainless Steel 304.
- Valves: Brass.
- Connection: Brass / Polypropylene.
- Pipework: Braided flexihose / Copper.
- Finish: Powder Coating - Blue (RAL 5007).

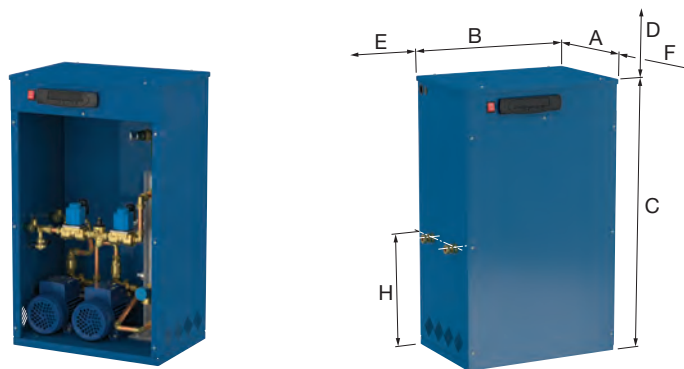



PSD USA 110V

Compact, totally enclosed vacuum deaerator unit (Pressure Step deaerator) for use on sealed systems in order to provide effective dissolved gas removal.

Product Features:

- For system volumes up to 39,625 gallons.
- System quick-fill mode.
- Password protection for parameter entry.
- Pressure settings in 1 Psi increments.
- Service reminder option (12 months).
- Pump exercising option (2 second pulse if inactive for 60 days).
- Event logging for pump start, pump run hours counter, electrical.
- Interruption and common alarm.
- Auxiliary contacts for common fault.
- Pump fault, pressure transducer.
- Vacuum deaerating, turbo and normal interval modes.
- Pump inlet strainer and pump check valve.
- Glycol mixture up to 50%.
- Vacuum cylinder.
- Adjustable differential.
- MODBUS and RS485 connectivity.
- Electric pump, 110V 60Hz 1ph.



Type	Pump Quantity	Mounting	Connections (Iso threads)	Pressure Rating [psi]	Operating Pressure [psi]	Power Consumption [W]	Full Load Current [A]	Nom. Weight [lbs]		Order Code
PSD USA 110V 250D	2	Floor	1/2" NPT	150	14 - 87	1430	3.4	88	1	17377

Dimensions PSD USA 110V

Type	Dimensions						
	A ["]	B ["]	C ["]	D ["]	E ["]	F ["]	H ["]
PSD USA 110V 250D	12.2	18.3	31.1	19.68	5.9	31.49	17.51

COMBINED PRESSURISATION AND DEGASSING PRODUCTS - PRO RANGE

Compact, totally enclosed combined digital pressurisation units. System fluid is sampled from the system, isolated and subjected to a full vacuum. All dissolved air within the sample is liberated in accordance with Henry's Law and vented to atmosphere. The deaerated fluid is then reintroduced to the system. This process is automatically repeated and controlled with a digital processor. A turbo mode is available for initial system setup to allow for rapid deaeration of new installations. The real-time display shows the status of the mechanical components.

System Volume (Guide): < 300,000 Litres - Pro PDG / Pro PDD.

Product Features:

- System fill mode.
- Password protected.
- Bi-directional programming menu.
- Onscreen Service Reminder - 12 Months.
- MODBUS RTU Communication Protocol.
- Flood Protection (Pump Runtime Limiter, Excessive Start Alarm).
- Pressure setting in 0.1 bar increments.
- Pump pulse option.
- Event logging: Alarm activations, Pump Run counter (activations per pump), Cumulative run timer (hours per pump), Electrical interruption.
- Volt free contacts: Common Alarm (N/C), High Pressure Alarm (N/O), Low Pressure Alarm (N/O), Sensor Health (N/O), Pump 1 Health (N/O), Pump 2 Health (N/O).
- Optional Additional Volt Free Contacts (Requires an additional factory fitted expansion board): Low Pressure Warning (N/O), High Pressure Warning (N/O), Low Water In Break Tank (N/O), Low Additive In Holding Tank (N/O), Pump 1 Run For Topup (N/O), Pump 2 Run For Topup (N/O).

Certifications and Standards Applied:

- PED 2014/68/EU Sound Engineering Practice.
- IEE - Electrical Safety Guidance.
- EMC 2004/108/EC.
- BS7074 Parts 1 to 3.
- Machinery Directive 2006/42/EC.
- Electronic Components have been tested and comply with the EMC Directives.
- EN 61000-6-2: Generic Standards – Immunity standard for industrial environments.
- EN61000-6-3: Generic Standards – Emission standard for residential, commercial and light industrial environment.
- CE marked components, where applicable.
- WRAS approved float valve to BS1212 part 2.
- IP54 (BS EN60529) rated controller.

Material of Construction:

- Cabinet: Mild steel CR4 Powder Coated.
- Float Valve: WRAS Approved.
- Break Tank: Polypropylene.
- Cylinder: Stainless steel 304.
- Valves: Brass. or Valves: Brass / PTFE.
- Connection: Brass / Polypropylene.
- Pipework: Braided flexihose / EPDM / Copper.

Pro PDG

Compact, totally enclosed combined digital pressurisation unit with vacuum degasser for use on sealed systems in order to provide a minimum system pressure requirement and effective dissolved gas removal.

Application:

- Commercial and Industrial.


Product Features:

- For system volumes up to 300,000 litres.
- Break Tank Capacity: 18 litres.
- Pump: WRAS Approved / Insulation Class F.
- Floor mounted pressurisation and degassing unit.
- Dry Run Protection.
- Anti Seize Routine (Pump is pulsed for 2 seconds if inactive for 60 days, must be enabled at time of commissioning).
- Electric pump, 230V 50Hz 1ph.
- Colour: Grey (RAL 7016).

Operating Conditions:

- System temperature range at point of connection: 5 °C / 70 °C.
- Ambient temperature range: 5 °C / 40 °C.
- Pressure rating: PN 10.
- Max. Turbo Runtime: 168 hours (1 week).
- Max. Normal Downtime: 180 minutes (3 hours).
- Volt Free Contacts: Common Fault Contact.
- Relative humidity 95% non-condensing.
- Noise Rating Data: < 75 dBA.



Type	Pump quantity	Connections			Max. Delivery Pressure [bar]	Power Consumption [kW]	Full Load Current [A]	Weight [kg]		Order Code
		System [mm]	Mains Supply [mm]	Overflow [mm]						
Pro PDG 261 / 1-6	2	2 x 15 (1/2")	15 (1/2")	22	6	2 x 0.5	6.8	57	1	21609
Pro PDG 281 / 1-8	2	2 x 15 (1/2")	15 (1/2")	22	8	2 x 0.75	11.2	65	1	21610

Dimensions Pro PDG

Type	Dimensions									
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	H [mm]	K [mm]	M [mm]	
Pro PDG 261 - 281	324	630	1095	500	150	500	340	922	960	

Pro PDD

Compact, totally enclosed combined digital pressurisation unit with vacuum degasser and additive tank for use on sealed systems in order to provide a minimum system pressure requirement and effective dissolved gas removal whilst maintaining the system fluid balance. The correct fluid mix is blended on demand at the time of system top-up.

Application:

- Commercial, Industrial and Residential.

Product Features:

- For system volumes up to 300,000 litres.
- Break Tank Capacity: 4 litres.
- Additive Tank Capacity: 20 litres.
- Pump: WRAS Approved / Insulation Class F.
- Floor mounted pressurisation, dosing and degassing unit.
- Available with double pump (for duty/standby configuration).
- Dry Run Protection.
- Anti Seize Routine (Pump is pulsed for 2 seconds if inactive for 60 days, must be enabled at time of commissioning).
- Electric pump, 230V 50Hz 1ph.
- Colour: Grey (RAL 7016).

Operating Conditions:

- System temperature range at point of connection: 5 °C / 70 °C.
- Ambient temperature range: 5 °C / 40 °C.
- Pressure rating: PN 10.
- Max. Turbo Runtime: 168 hours (1 week).
- Max. Normal Downtime: 180 minutes (3 hours).
- Volt Free Contacts: Common Fault Contact.
- Relative humidity 95% non-condensing.
- Noise Rating Data: < 75 dBA.



Type	Pump quantity	Pressure rating [PN]	System [mm]	Connections		Max. Delivery Pressure [bar]	Power Consumption [kW]	Full Load Current [A]		Order Code
				Mains Supply [mm]	Overflow [mm]					
Pro PDD 261 / 1-6	2	10	2 x 15 (1/2")	15 (1/2")	22	6	2 x 0.5	6.8	1	21615
Pro PDD 281 / 1-8	2	16	2 x 15 (1/2")	15 (1/2")	22	8	2 x 0.75	11.2	1	21616

Dimensions Pro PDD

Type	Dimensions								
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	H [mm]	K [mm]	M [mm]
Pro PDD 261 - 281	633	325	1390	500	500	500	340	1270	1315

COMBINED PRESSURISATION AND DEGASSING PRODUCTS - STANDARD RANGE

Compact, totally enclosed combined digital pressurisation units. System fluid is sampled from the system, isolated and subjected to a full vacuum. All dissolved air within the sample is liberated in accordance with Henry's Law and vented to atmosphere. The deaerated fluid is then reintroduced to the system. This process is automatically repeated and controlled with a digital processor. A turbo mode is available for initial system setup to allow for rapid deaeration of new installations. The real-time display shows the status of the mechanical components.

System Volume (Guide): < 300,000 litres (Midifill Plus 150D: < 50,000 litres).

Product Features:

- MODBUS RTU Communication Protocol.
- System fill mode.
- Password protected.
- Pressure setting in 0.1 bar increments.
- Sequential programming menu.
- Pump pulse option.
- Flood Protection (Pump Runtime Limiter, Excessive Start Alarm).
- Event logging: Alarm activations, Pump Run counter (activations per pump), Cumulative run timer (hours per pump), Electrical interruption.
- Volt free contacts: Common Alarm (N/C), High Pressure Alarm (N/O), Low Pressure Alarm (N/O), Sensor Health (N/O), Pump 1 Health (N/O), Pump 2 Health (N/O).
- Optional Additional Volt Free Contacts: Low Pressure Warning (N/O), High Pressure Warning (N/O), Low Water In Break Tank (N/O), Low Additive In Holding Tank (N/O), Pump 1 Run For Topup (N/O), Pump 2 Run For Topup (N/O).

Certifications and Standards Applied:

- PED 2014/68/EU Sound Engineering Practice.
- IEE - Electrical Safety Guidance.
- EMC 2004/108/EC.
- BS7074 Parts 1 to 3.
- Machinery Directive 95/16/EC.
- Electronic Components have been tested and comply with the EMC Directives.
- EN61000-6-2: Generic Standards – Immunity standard for industrial environments.
- EN61000-6-3: Generic Standards – Emission standard for residential, commercial and light industrial environment.
- CE marked components, where applicable.
- WRAS approved float valve to BS1212 part 2.
- IP54 (BS EN60529) rated controller.

Material of Construction:

- Cabinet: Mild steel CR4.
- Float: WRAS Approved Beta Side Entry.
- Break Tank: WRAS Approved Polypropylene.
- Cylinder: Stainless steel 304.
- Pump: PEDROLLO (Unit dependant. See pump details for more information).
- Valves: Brass.
- Connection: Brass / Polypropylene.
- Pipework: Braided flexihose / EPDM / Copper.
- Finish: Powder coated.

Flexfiller Plus & Midifill Plus

The Flexfiller Plus and Midifill Plus are compact, totally enclosed combined digital pressurisation units with vacuum degasser for use on sealed systems in order to provide a minimum system pressure requirement and effective dissolved gas removal.

Application:

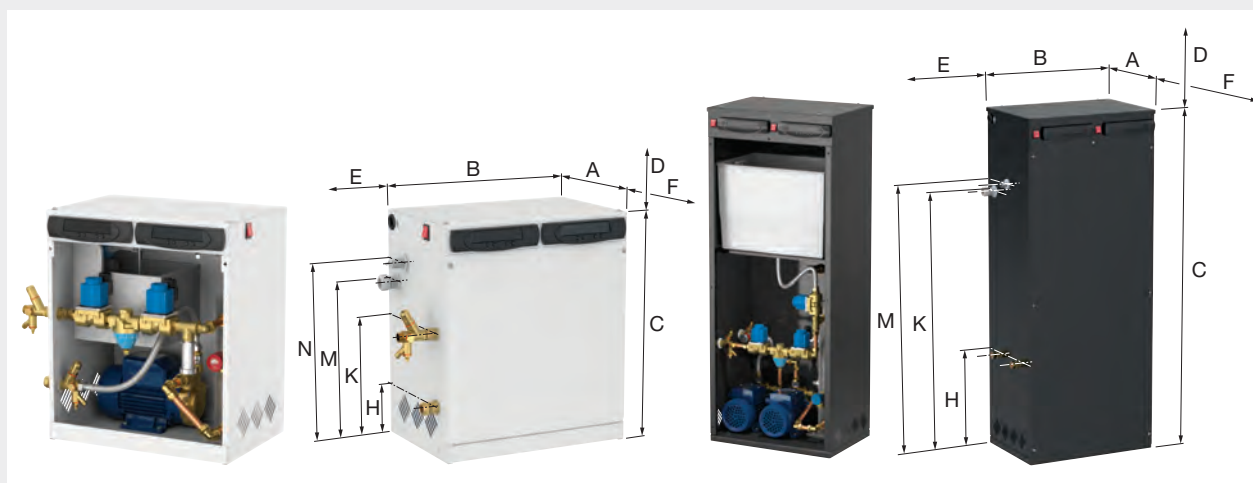
- Commercial and Industrial.

Product Features:

- For system volumes up to 300,000 litres (Midifill Plus 150D: < 50,000 litres).
- Available with single pump (Midifill Plus) or double pump (for duty/standby configuration).
- Fluid Protection Category 5 (AB Weir Overflow).
- Onscreen Service Reminder - 12 Months.
- Individual controllers for pressurisation and degassing function.
- Vacuum degassing, turbo and normal interval modes.
- Electric pump, 230V 50Hz 1ph (2160D: 415V 50Hz 3ph).
- Colour: Midifill Plus: White (RAL 9003), Flexfiller Plus: Black (RAL 9005).

Operating Conditions:

- System temperature range at point of connection: 5 °C / 70 °C.
- Ambient temperature range: 5 °C / 40 °C.
- Safety Rating: IP 54.
- Maximum Turbo Runtime: 168 hours (1 week).
- Maximum Normal Downtime: 180 minutes (3 hours).
- Relative humidity 95% non-condensing.
- Noise Rating Data: < 75 dBA.



Type	Pump quantity	Mounting	Pressure rating [PN]	Connections			Max. Delivery Pressure [bar]	Operating Pressure [bar]	Power Consumption [kW]	Full Load Current [A]		Order Code
				System [mm]	Mains Supply [mm]	Overflow [mm]						
Midifill Plus 150D	1	Wall	10	2 x 15 (1/2")	15 (1/2")	22	6.0	1 - 5	0.5	3.4	1	45053
Flexfiller Plus 250D	2	Floor	10	2 x 15 (1/2")	15 (1/2")	22	6.0	1 - 6	2 x 0.52	2 x 3.4	1	45045
Flexfiller Plus 280D	2	Floor	10	2 x 15 (1/2")	15 (1/2")	22	8.0	1 - 8	2 x 0.75	2 x 5.6	1	45121
Flexfiller Plus 2160D	2	Floor	16	2 x 15 (1/2")	15 (1/2")	22	13.6	8 - 16	2 x 2.2	2 x 2.2	1	45043

Dimensions Flexfiller Plus & Midifill Plus

Type	Dimensions									
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	H [mm]	K [mm]	M [mm]	N [mm]
Midifill Plus 150D	280	410	510	500	150	800	120	340	380	260
Flexfiller Plus 250D	320	480	1180	500	150	800	340	920	960	-
Flexfiller Plus 280D	660	470	1090	500	150	800	370	690	740	-
Flexfiller Plus 2160D	660	470	1090	500	150	800	370	690	740	-

PressDS Plus

The PressDS Plus (Pressurisation/Degassing/Dosing System) is a compact, totally enclosed combined digital pressurisation unit with vacuum degasser and additive tank for use on sealed systems in order to provide a minimum system pressure requirement, effective dissolved gas removal and adding additives to the system. The correct fluid mix is blended on demand at the time of system top-up.

Application:

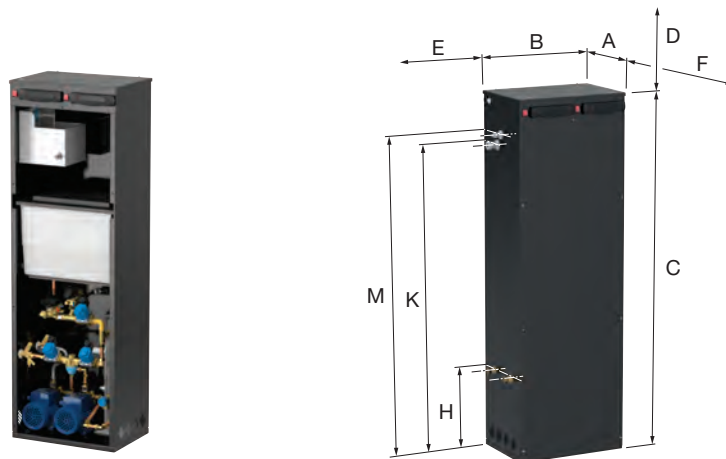
- Commercial.


Product Features:

- For system volumes up to 300,000 litres.
- Fluid Protection Category 5 (AB Weir Overflow).
- Onscreen Service Reminder - 12 Months. Onscreen message when additive tank is empty.
- Individual controllers for pressurisation and degassing function.
- Vacuum degassing, turbo and normal interval modes.
- 18 litre additive tank.
- Mix ratios from 1% to 50% user configurable balancing valves.
- Top-up pressurisation unit (<18.0 l/min).
- Electric pump, 230V 50Hz 1ph (2160D: 415V 50Hz 3ph).
- Colour: Black (RAL 9005).

Operating Conditions:

- System temperature range at point of connection: 5 °C / 70 °C.
- Ambient temperature range: 5 °C / 40 °C.
- Relative humidity 95% non-condensing.



Type	Pump quantity	Pressure rating [PN]	Connections			Max. Delivery Pressure [bar]	Operating Pressure [bar]	Power Consumption [kW]	Full Load Current [A]	Weight [kg]		Order Code
			System [mm]	Mains Supply [mm]	Overflow [mm]							
PressDS Plus 250D	2	10	15 (1/2")	2 x 15 (1/2")	22	6.0	1 - 6	2 x 0.5	2 x 3.4	63	1	45102
PressDS Plus 2160D	2	16	15 (1/2")	2 x 15 (1/2")	22	16	8 - 16	2 x 2.2	2 x 3.4	92	1	45120

Dimensions PressDS Plus

Type	Dimensions									
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	H [mm]	K [mm]	M [mm]	
PressDS Plus 250D	320	480	1480	500	150	800	340	1270	1320	
PressDS Plus 2160D	660	470	1090	500	150	800	370	690	740	

DOSING POTS

Mild Steel Dosing Pots

Most heating and chilled water systems require chemical dosing and the dosing pot provides a controlled method of achieving this. Dosing pots are of a mild steel welded construction, supplied fully assembled for easy installation. The unit comes complete with tundish, vessel, air vent, inlet, outlet and drain valves.

Product features:

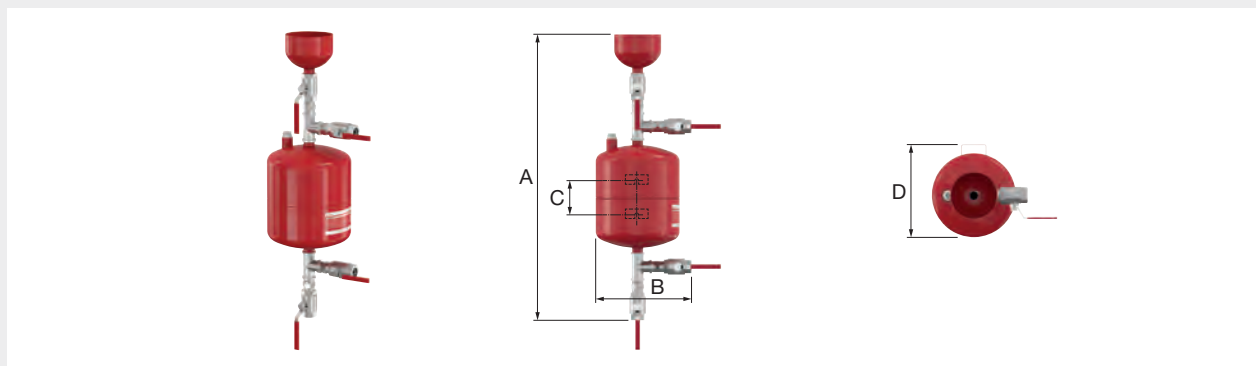
- Supplied fully assembled.
- Simple operations.
- Increases energy efficiency.
- Extends the life of the system.
- Internally uncoated to guarantee chemical compatibility with standard installations.
- Minimum/Maximum working temperature: 5 °C / 95 °C.
- Maximum working pressure: 16 bar.


Certifications and standards applied:

- PED 2014/68/EU Article 4 Paragraph 3 Sound Engineering Practice.
- Welding BS EN281-1.
- Fitting to BS21/ISO 7-1.

Material of construction:

- Cylinder: EN/ISO S235JRG2.
- Dished ends: EN/ISO S235JRG2.
- Fittings: Galvanised steel.
- T-piece: Galvanised steel.
- Tundish: EN/ISO S235JRG2.
- Valves: Chrome plated brass.
- Exterior finishing: Epoxy powder coating – Red (RAL 3002).



Type	Dimensions			Bolt Spacing (C)	System connections	Weight [kg]		Order Code
	A [mm]	B [mm]	D [mm]					
Dosing pot 3.5 l	565	225	220	40	G 3/4" F	4.9	1	17701
Dosing pot 6 l	670	225	220	90	G 3/4" F	5.9	1	17702
Dosing pot 11 l	935	215	200	279	G 3/4" F	9.1	1	17703
Dosing pot 15 l	1120	215	200	455	G 3/4" F	9.8	1	17704
Dosing pot 18 l	1250	215	200	587	G 3/4" F	10.9	1	17705
Dosing pot 25 l	937	270	295	224	G 3/4" F	12.6	1	17706
Dosing pot 35 l	1122	270	295	405	G 3/4" F	15.6	1	17707

Buffer Vessels - Heating/Cooling Systems



P. 210

Storage Vessels - Potable Water Systems



P. 217

Water Heaters



P. 222

Thermal Batteries



P. 258

Accessories for Water Heaters and Storage Vessels



P. 260

Buffering and Water Heating

4



Flamco has a very wide range of high-quality direct and indirectly fired hot water cylinders and buffer vessels for drinking water and heating installations, available as enamelled, stainless steel or carbon steel. Made from quality materials and insulated according to strict environmental guidelines to provide a high heat output, they are very energy efficient. A revolutionary form of heat storage is available in the form of our FlexTherm Eco, it is twice as fast and three times as compact with an extremely low standing loss (A+ rating). The range includes tap water supply systems and thermal buffer tanks for heating, cooling or combi boiler systems.

PS BUFFER VESSELS

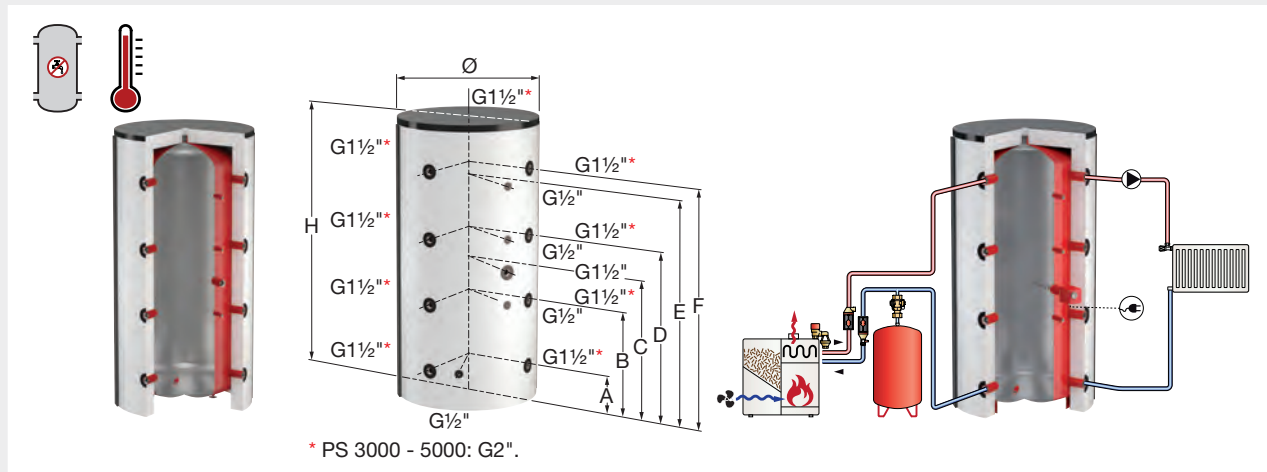
PS 200 - 5000


Buffer vessels for use in closed heating installations. Can also be used as buffer vessel in cooling installations (insulation for cooling installations is not available; for buffer vessels for cooling installations provided with insulation, see Flamco PSK).

- On a construction with adjustable feet for accurate levelling (up to 2000 litres).
- Can be connected with several buffer vessels.
- Temperature sensor connections: G $\frac{1}{2}$ " (4x).
- Connections under a 90° angle, enabling an angular setting.
- Alternative connections, capacities and operating pressures are available upon request.
- Maximum working pressure: 3 bar.
- Maximum working temperature: 95 °C.
- Steel vessel (made of S235JR): Outside powder-coated, inside untreated.

Insulation (Excluded - Can be ordered separately (see Chapter 'Accessories for Water Heaters and Storage Vessels')):

- EPS insulating mantle (fire category B1) with a polypropylene outer shell in white (RAL 9010) / white aluminium (RAL 9006).



Type	Capacity [l]	Dimensions *			Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting height [mm]			
PS 200	200	480	1300	1350	47	1	18600
PS 300	300	550	1590	1650	66	1	18605
PS 500	500	650	1650	1700	80	1	18756
PS 600	600	650	2050	2100	93	1	19380
PS 750	750	790	1800	1850	102	1	18786
PS 850	850	790	1950	2000	140	1	18793
PS 1000 (Ø790)	1000	790	2200	2250	170	1	18885
PS 1000 (Ø850)	1000	850	2000	2050	172	1	18850
PS 1200	1200	850	2250	2300	175	1	18843
PS 1500	1500	1000	2320	2380	225	1	18816
PS 1800	1800	1100	2200	2250	272	1	18856
PS 2000	2000	1100	2350	2400	310	1	18826
PS 3000	3000	1250	2800	2900	586	1	18670
PS 4000	4000	1500	2950	3050	850	1	19340
PS 5000	5000	1600	3250	3350	970	1	19344

* Dimensions excluding insulation.

PS 200 - 5000 - Connection diagram

Type	System connections	Distance from floor to connections					
		A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]
PS 200	8	180	480	-	780	980	1080
PS 300	8	210	590	-	980	1260	1360
PS 500	8	180	600	770	1010	1330	1430
PS 600	8	180	730	980	1280	1730	1830
PS 750	8	270	690	940	1100	1420	1520
PS 850	8	270	740	970	1200	1570	1670
PS 1000 (Ø 790)	8	270	820	995	1370	1820	1920
PS 1000 (Ø 850)	8	305	790	1075	1220	1605	1705
PS 1200	8	305	855	1195	1405	1855	1955
PS 1500	8	340	890	1230	1440	1890	1990
PS 1800	8	350	850	1100	1350	1750	1850
PS 2000	8	350	900	1310	1450	1900	2000
PS 3000	8	450	1060	1390	1720	2240	2330
PS 4000	8	540	1150	1480	1810	2330	2420
PS 5000	8	695	1305	1635	1965	2485	2575

PS 200 - 5000 - Performance

Technical specifications	PS 200 - 5000														
	200	300	500	600	750	850	1000 Ø790	1000 Ø850	1200	1500	1800	2000	3000	4000	5000
Total heat loss (EN 12897) [W]	76	107	138	110	120	129	142	141	133	162	173	183	n/a	n/a	n/a
Energy label	C	D	D	C	C	C	C	C	C	C	C	C	n/a	n/a	n/a

n/a = not applicable.

PS-R INDIRECTLY HEATED BUFFER VESSELS

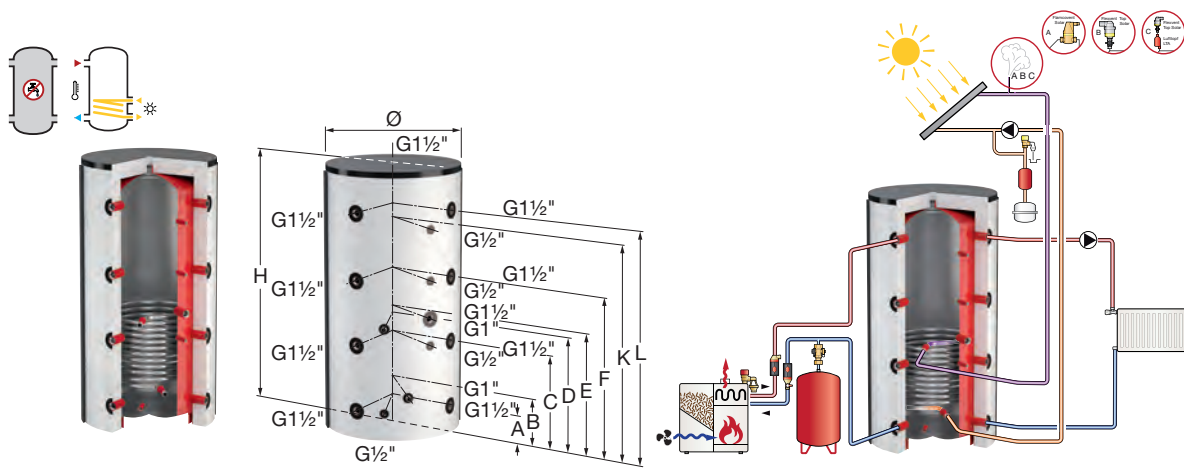
PS-R 300 - 2000


Buffer vessels for use in closed heating installations. Including a permanently welded-in heating coil for connecting additional heating sources (such as a solar installation).

- Including adjustable feet for accurate levelling.
- Temperature sensor connections: G1/2" (4x).
- Connections under a 90° angle, enabling an angular setting.
- Alternative connections, capacities and operating pressures are available upon request.
- Maximum working pressure: 3 bar (buffer vessel) / 10 bar (heating coil).
- Maximum working temperature: 95 °C (buffer vessel) / 110 °C (heating coil).
- Steel vessel (made of S235JR): Outside powder-coated, inside untreated.

Insulation (Excluded - Can be ordered separately (see Chapter 'Accessories for Water Heaters and Storage Vessels')):

- EPS insulating mantle (fire category B1) with a polypropylene outer shell in white (RAL 9010) / white aluminium (RAL 9006).



Type	Capacity [l]	Dimensions *			Heating surface area [m²]	Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting height [mm]				
PS-R 300	300	550	1590	1650	1.0	93	1	19348
PS-R 500	500	650	1650	1700	1.6	102	1	19120
PS-R 600	600	650	2050	2100	2.0	124	1	19349
PS-R 750	750	790	1800	1850	2.1	134	1	19121
PS-R 850	850	790	1950	2000	2.3	175	1	19350
PS-R 1000 (Ø850)	1000	850	2000	2050	2.7	208	1	19122
PS-R 1000 (Ø790)	1000	790	2200	2250	2.7	210	1	18845
PS-R 1200	1200	850	2250	2300	2.9	225	1	19351
PS-R 1500	1500	1000	2320	2380	3.2	330	1	19123
PS-R 2000	2000	1100	2350	2400	5.0	380	1	19352

* Dimensions excluding insulation.

PS-R 300 - 2000 - Connection diagram

Type	System connections	Distance from floor to connections							
		A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]	L [mm]
PS-R 300	8	210	310	590	750	-	880	1260	1360
PS-R 500	8	180	280	600	720	770	1010	1330	1430
PS-R 600	8	180	280	730	880	980	1280	1730	1830
PS-R 750	8	270	370	690	890	940	1100	1420	1520
PS-R 850	8	270	370	740	920	970	1200	1570	1670
PS-R 1000 (Ø790)	8	270	370	820	1010	1095	1370	1820	1920
PS-R 1000 (Ø850)	8	305	405	790	1005	1075	1220	1605	1705
PS-R 1200	8	305	405	855	1045	1195	1405	1855	1955
PS-R 1500	8	340	440	890	1040	1230	1440	1890	1990
PS-R 2000	8	350	450	900	1200	1310	1450	1900	2000

PS-R 300 - 2000 - Performance

Technical specifications	PS-R 300 - 2000									
	300	500	600	750	850	1000 Ø790	1000 Ø850	1200	1500	2000
Total heat loss (EN 12897) [W]	107	137	109	119	128	141	140	132	161	182
Energy label	D	D	C	C	C	C	C	C	C	C

PS-T INDIRECTLY HEATED BUFFER VESSELS

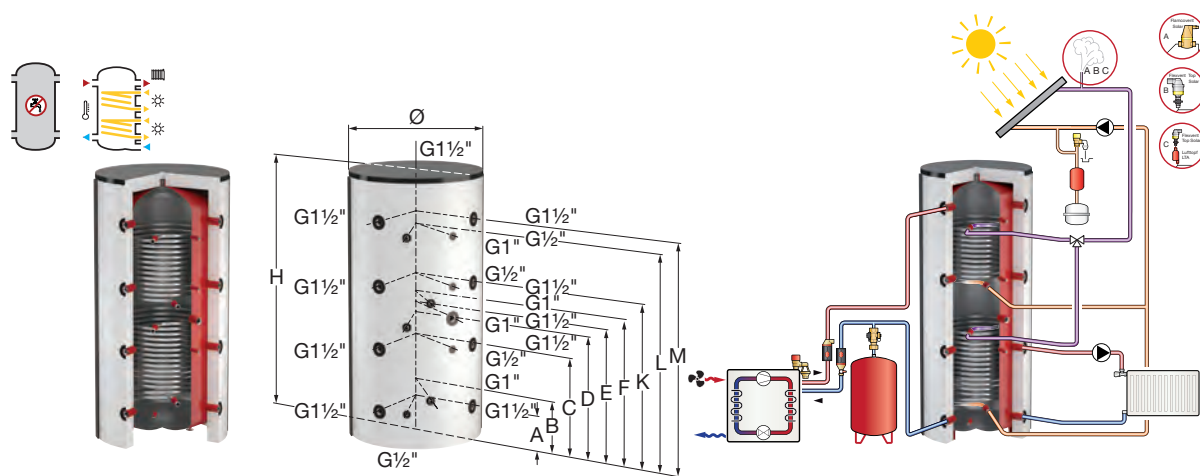
PS-T 600 - 2000


Buffer vessels for use in closed heating installations. Including two permanently welded-in heating coils for connecting additional heating sources (such as a solar installation or wood-burning stove).

- Including adjustable feet for accurate levelling.
- Temperature sensor connections: G1/2" (4x).
- Connections under a 90° angle, enabling an angular setting.
- Maximum working pressure: 3 bar (buffer vessel) / 10 bar (heating coil).
- Maximum working temperature: 95 °C (buffer vessel) / 110 °C (heating coil).
- Steel vessel (made of S235JR): Outside powder-coated, inside untreated.

Insulation (Excluded - Can be ordered separately (see Chapter 'Accessories for Water Heaters and Storage Vessels')):

- EPS insulating mantle (fire category B1) with a polypropylene outer shell in white (RAL 9010) / white aluminium (RAL 9006).



Type	Capacity [l]	Dimensions *			Heating surface area [m²] **	Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting height [mm]				
PS-T 600	600	650	2050	2100	1.5 / 2.0	146	1	19353
PS-T 750	750	790	1800	1850	1.5 / 2.1	156	1	19354
PS-T 850	850	790	1950	2000	2.0 / 2.3	205	1	19355
PS-T 1000 (Ø790)	1000	790	2200	2250	2.2 / 2.7	245	1	19356
PS-T 1000 (Ø850)	1000	850	2000	2050	2.2 / 2.7	243	1	19357
PS-T 1200	1200	850	2250	2300	2.6 / 2.9	261	1	19358
PS-T 1500	1500	1000	2320	2380	2.8 / 3.2	306	1	19359
PS-T 2000	2000	1100	2350	2400	3.5 / 5.0	396	1	19360

* Dimensions excluding insulation.

** Upper/lower heating surface area.

PS-T 600 - 2000 - Connection diagram

Type	System connections	Distance from floor to connections								
		A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]	L [mm]	M [mm]
PS-T 600	8	180	280	730	880	980	1240	1280	1680	1830
PS-T 750	8	270	370	690	890	940	1060	1100	1420	1520
PS-T 850	8	270	370	740	920	970	1090	1200	1570	1670
PS-T 1000 (Ø790)	8	270	370	820	1010	1095	1210	1370	1820	1920
PS-T 1000 (Ø850)	8	305	405	790	1005	1075	1125	1220	1605	1705
PS-T 1200	8	305	405	855	1045	1195	1295	1405	1855	1955
PS-T 1500	8	340	440	890	1040	1230	1370	1440	1890	1990
PS-T 2000	8	350	450	900	1200	1310	1380	1450	1900	2000

PS-T 600 - 2000 - Performance

Technical specifications	PS-T 600 - 2000							
	600	750	850	1000 Ø790	1000 Ø850	1200	1500	2000
Total heat loss (EN 12897) [W]	108	118	127	140	139	131	160	181
Energy label	C	C	C	C	C	C	C	C

PS-K BUFFER VESSELS FOR CHILLED WATER

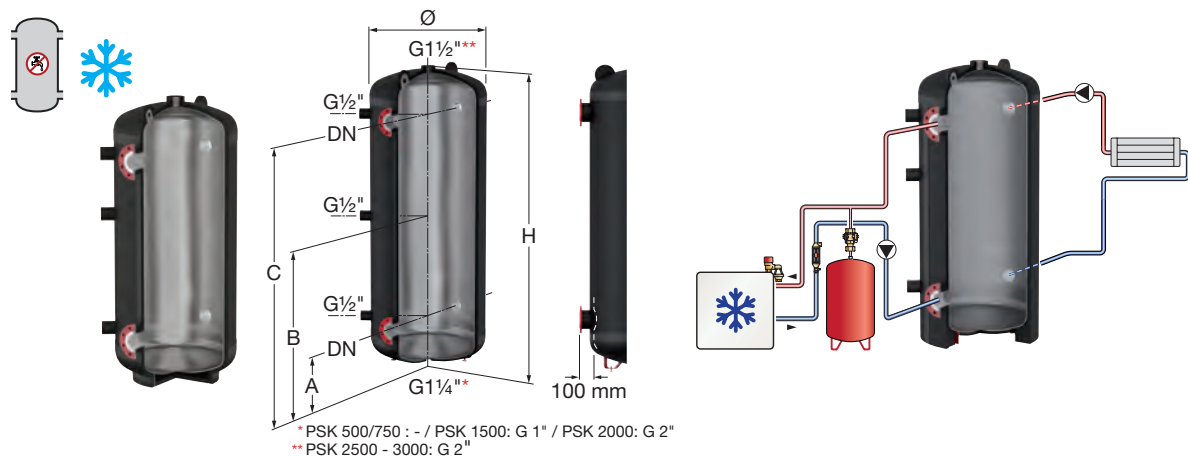
PS-K 500 - 3000


Buffer vessels including flange connections for use in closed chilled water installations.

- Including adjustable feet for accurate levelling.
- Large flange connections for large water flows.
- Sturdy construction, easy to assemble.
- Temperature-sensor connections: G $\frac{1}{2}$ " (3x).
- Connections:
Female thread according to DIN ISO 228/T.1
Flanges according to EN 1092-1/11 B1, PN 16.
- Maximum working pressure: 6 bar.
- Minimum / Maximum working temperature: -10 °C / +50 °C.
- Suitable for glycol solutions of up to 50%.
- Steel vessel (made of S235JR): Outside powder coated, inside untreated.

Insulation (Excluded - Can be ordered separately (see Chapter 'Accessories for Water Heaters and Storage Vessels')):

- 25mm vapour-tight insulation sheath (fire category B1), suitable for cooling water applications.



Type	Capacity [l]	Dimensions *			Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting height [mm]			
PS-K 500	500	650	1640	1700	120	1	18260
PS-K 750	750	750	1970	2000	168	1	18261
PS-K 1000	1000	790	2220	2260	182	1	18262
PS-K 1500	1500	1000	2320	2380	299	1	18263
PS-K 2000	2000	1100	2350	2400	402	1	18264
PS-K 2500	2500	1200	2650	2700	547	1	18265
PS-K 3000	3000	1250	2830	3000	617	1	18266

* Dimensions excluding insulation.

PS-K 500 - 3000 - Connection diagram

Type	System connections	DN	Distance between floor and connections		
			A [mm]	B [mm]	C [mm]
PS-K 500	4	80	315	810	1305
PS-K 750	4	100	360	970	1580
PS-K 1000	4	125	385	1100	1815
PS-K 1500	4	150	460	1165	1870
PS-K 2000	4	200	500	1175	1850
PS-K 2500	4	200	520	1320	2120
PS-K 3000	4	200	640	1440	2240

LS STORAGE VESSELS FOR POTABLE HOT WATER

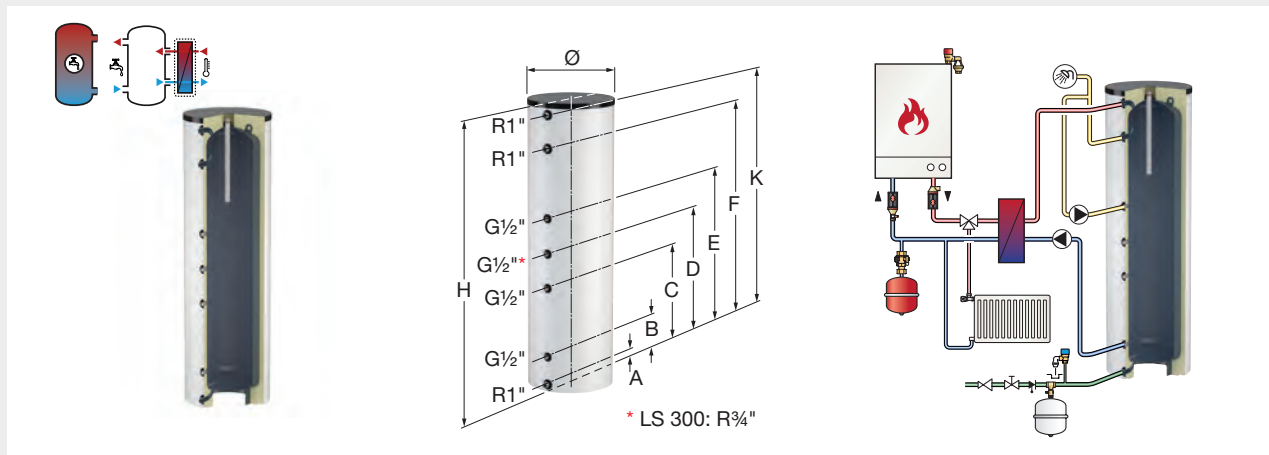
LS 200 - 300

Storage vessel for potable hot water, for use in systems in which heat can be exchanged by external heat exchangers.

- High-quality glass lining according to DIN 4753/part 3 for hygienic hot water production and optimum corrosion protection in combination with a no-maintenance or Mg anode.
- Including adjustable feet for accurate levelling.
- Suitable for connecting external heat exchangers.
- Connections for thermostat - thermometer - circulation.
- Maximum working pressure: 10 bar.
- Maximum working temperature: 95 °C.

Insulation:

- Standard colours: white (RAL 9010) and white aluminium (RAL 9006).
- Including hard foam insulation (direct foam injection) with a polystyrene outer shell.



Type	Capacity [l]	Dimensions *			Insulation colour	Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting height [mm]				
LS 200	200	560	1360	1500	white	55	1	18623
LS 200	200	560	1360	1500	white alu.	55	1	18624
LS 300	300	660	1620	1750	white	95	1	18720
LS 300	300	660	1620	1750	white alu.	95	1	18721

* Dimensions including insulation.



LS 200 - 300 - Connection diagram

Type	Distance from floor to connection centres						
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]
LS 200	65	245	545	710	885	1075	1285
LS 300	65	310	-	850	950	1340	1560

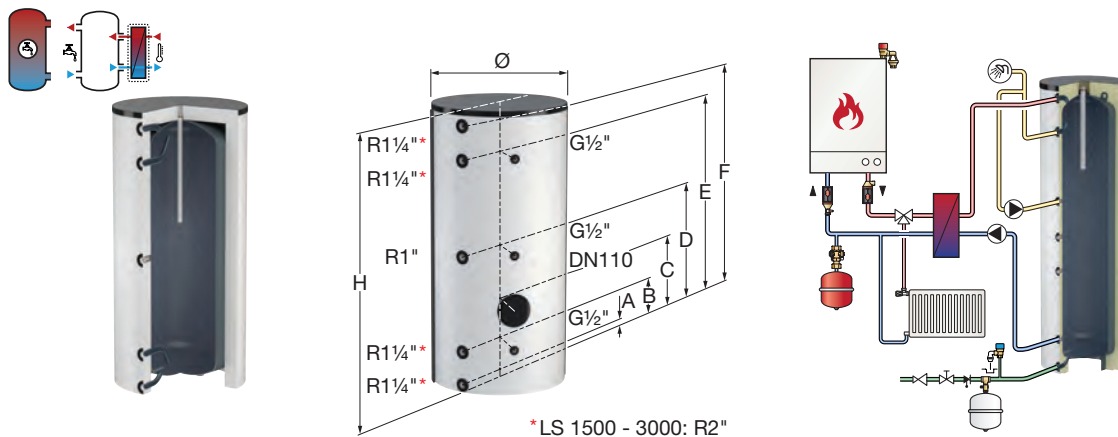
LS 500 - 3000


Storage vessel for potable hot water, for use in systems in which heat can be exchanged by external heat exchangers.

- High-quality glass lining according to DIN 4753/part 3 for hygienic hot water production and optimum corrosion protection in combination with a no-maintenance or Mg anode (standard from 1,500 litres).
- Including adjustable feet for accurate levelling.
- Suitable for connecting external heat exchangers.
- Connections for thermostat - thermometer - circulation.
- Cleaning & inspection flange DN 110 at the side (LS 1500 - 3000 also at the top side).
- Maximum working pressure: 10 bar.
- Maximum working temperature: 95 °C.

Insulation:

- Standard colours: white (RAL 9010) and white aluminium (RAL 9006).
- Including EPS insulating mantle (fire category B1) with a polypropylene outer shell (fire category B2).



Type	Capacity [l]	Dimensions *			Insulation colour	Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting height [mm]				
LS 500	500	650	1640	1800	white	125	1	18630
LS 500	500	650	1640	1800	white alu.	125	1	18635
LS 750	750	750	1970	2070	white	190	1	18637
LS 750	750	750	1970	2070	white alu.	190	1	18638
LS 1000	1000	800	2230	2320	white	232	1	18640
LS 1000	1000	800	2230	2320	white alu.	232	1	18641
LS 1500	1500	1000	2320	2480	white	397	1	18643
LS 1500	1500	1000	2320	2480	white alu.	397	1	18644
LS 2000	2000	1100	2440	2600	white	474	1	18646
LS 2000	2000	1100	2440	2600	white alu.	474	1	18647
LS 3000	3000	1200	2830	3000	white	730	1	18654

* Dimensions excluding insulation.



LS 500 - 3000 - Connection diagram

Type	Distance from floor to connection centres					
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]
LS 500	60	285	485	830	1375	1600
LS 750	60	300	637	970	1420	1900
LS 1000	70	310	645	1100	1670	2160
LS 1500	85	385	585	1160	1935	2235
LS 2000	105	405	605	1180	1955	2235
LS 3000	95	420	620	1420	2405	2730

LS - Performance

Technical specifications	LS							
	200	300	500	750	1000	1500	2000	3000
Total heat loss (EN 12897) [W]	83	108	133	119	147	161	183	n/a
Energy label	C	D	D	C	C	C	C	n/a

n/a = not applicable.

LS-E STAINLESS STEEL STORAGE VESSELS FOR POTABLE HOT WATER

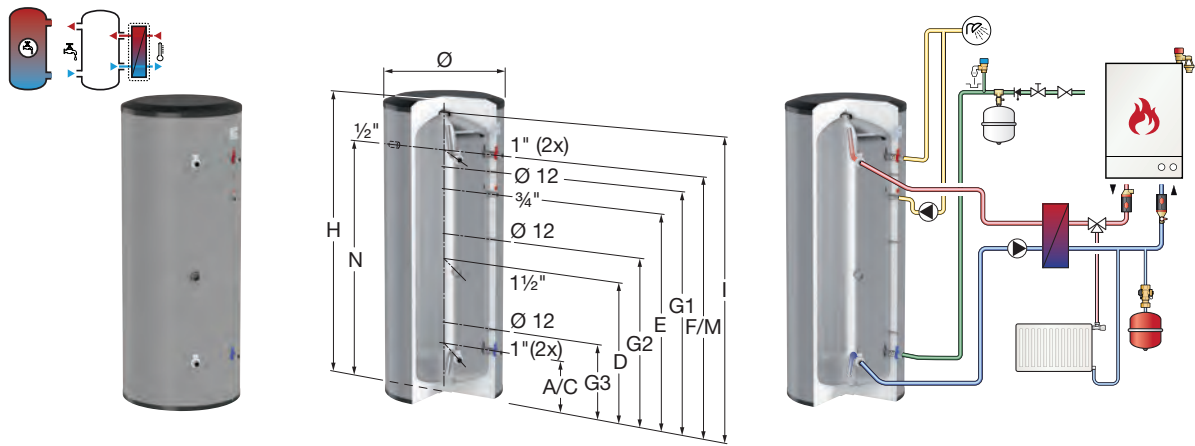
LS-E 300 - 500

Storage vessel for potable hot water, for use in systems in which heat can be exchanged by external heat exchangers.

- Efficient: Minimum heat loss and very fast heating up.
- Requires little maintenance and no anode.
- Light weight.
- Excellent stratification of the water in the vessel.
- High resistance to chloride (up to 250 ppm).
- Including an 1 1/2" connection suitable for connecting an additional electric heating element.
- Maximum working pressure: 10 bar.
- Maximum working temperature: 95 °C.
- Stainless steel type: 1.4521.

Insulation:

- Standard colour: silver.
- Including graphite polystyrene (GPS) insulation (direct foam injection) with a polypropylene outer shell (fire category B2).



Type	Capacity [l]	Ø [mm]	Dimensions *		Insulation colour	Weight [kg]		Order Code
			H [mm]	Tilting height [mm]				
LS-E 300	304	675	1804	1884	silver	40	1	19950
LS-E 500	491	795	2020	2126	silver	70	1	19951

* Dimensions including insulation.



LS-E 300 - 500 - Connection diagram

Type	Distance from floor to connection centres							
	A/C [mm]	D [mm]	G3 [mm]	G2 [mm]	E [mm]	G1 [mm]	F/M/N [mm]	I [mm]
LS-E 300	258	798	378	798	1131	1418	1543	1728
LS-E 500	283	929	437	1095	1369	1606	1723	1923

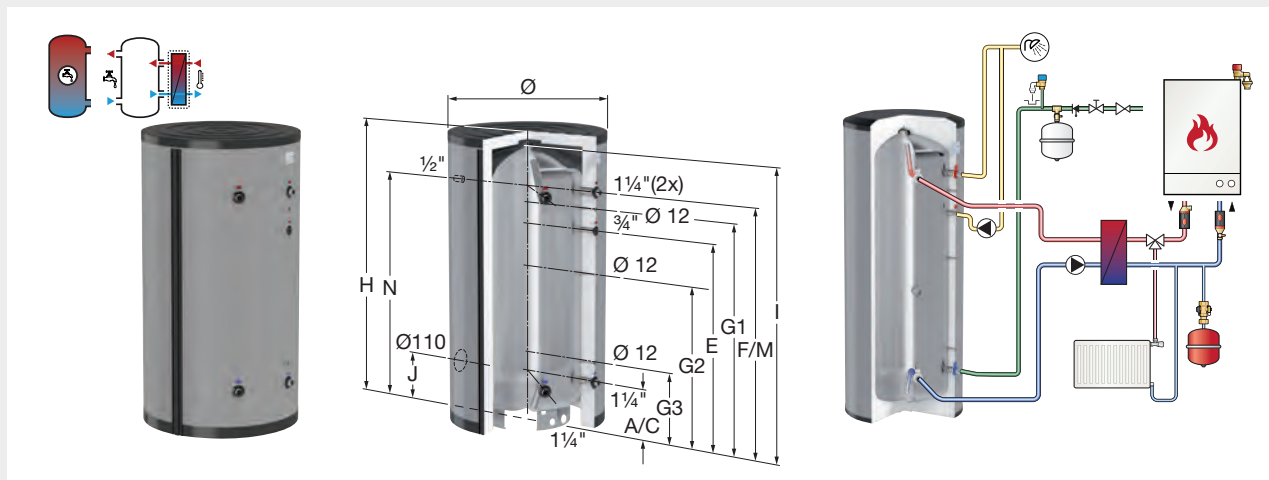
LS-E 750 - 1000


Storage vessel for potable hot water, for use in systems in which heat can be exchanged by external heat exchangers.

- Efficient: Minimum heat loss and very fast heating up.
- Requires little maintenance and no anode.
- Light weight.
- Excellent stratification of the water in the vessel.
- High resistance to chloride (up to 250 ppm).
- Including an inspection flange DN 110 at the side.
- Maximum working pressure: 10 bar.
- Maximum working temperature: 95 °C.
- Stainless steel type: 1.4521.

Insulation:

- Standard colour: silver.
- Including graphite polystyrene (GPS) insulation with a polypropylene outer shell (fire category B1).



Type	Capacity [l]	Dimensions *			Insulation colour	Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting height [mm]				
LS-E 750	765	990	1867	2098	silver	81	1	19442
LS-E 1000	967	990	2292	2481	silver	97	1	19953

* Dimensions including insulation.

**LS-E 750 - 1000 - Connection diagram**

Type	Distance from floor to connection centres							
	A/C [mm]	G3 [mm]	G2 [mm]	E [mm]	G1 [mm]	F/M/N [mm]	I [mm]	J [mm]
LS-E 750	323	448	1003	1278	1413	1518	1753	413
LS-E 1000	323	488	1128	1718	1838	1943	2188	413

LS-E - Performance

Technical specifications	LS-E			
	300	500	750	1000
Total heat loss (EN 12897) [W]	56	71	104	122
Insulation thickness [mm]	85	95	100	100
Energy label	B	B	C	C

DUO UPRIGHT WATER HEATERS

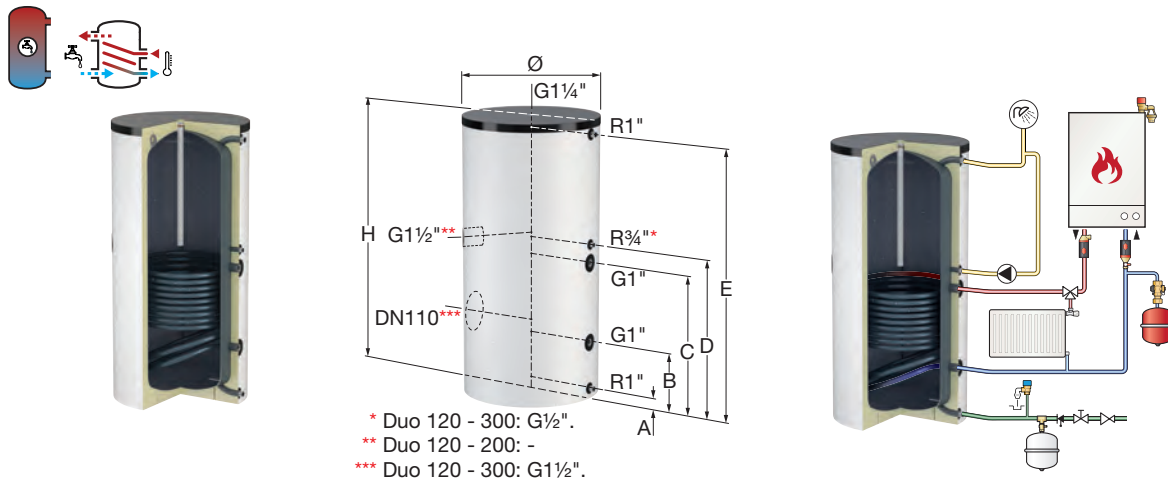
Duo 120 - 500


An indirectly heated and upright water heater including a permanently welded-in heating coil, suitable for all modern heating systems.

- Minimum lime deposits due to smooth surfaces. High-quality glass lining according to DIN 4753/part 3 for potable hot water production and optimum corrosion protection by means of a standard Mg-anode.
- Equipped with a built-in thermometer and immersion pipe.
- A set of adjustable feet is optionally available (Art.No. 18989).
- From 400 litres, equipped with a DN 110 inspection flange at the side, suitable for connecting additional heating elements; Ex Works - closed with a removeable blind flange.
- The heating coil is designed to ensure full depth heating to prevent the accretion of Legionella bacteria.
- Maximum working pressure: 10 bar (potable water vessel) / 16 bar (heating coil).
- Maximum working temperature: 95 °C (potable water vessel) / 130 °C (heating coil).

Insulation:

- Standard colours: white (RAL 9010) and white aluminium (RAL 9006).
- Including hard foam insulation (direct foam injection) with a polystyrene outer shell.



Type	Capacity [l]	Dimensions *			Heating surface area [m ²]	Heating capacity [kW] **	Water capacity [l/h] **	Insulation colour	Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting- height [mm]							
Duo 120	120	560	940	1090	0.5	10.2	177	white alu.	63	1	18501
Duo 120	120	560	940	1090	0.5	10.2	177	white	63	1	18500
Duo 150	150	560	1050	1200	0.6	11.6	202	white alu.	68	1	18503
Duo 150	150	560	1050	1200	0.6	11.6	202	white	68	1	18502
Duo 200	200	560	1350	1500	0.9	18.6	323	white alu.	86	1	18505
Duo 200	200	560	1350	1500	0.9	18.6	323	white	86	1	18504
Duo 300	300	660	1620	1750	1.3	29.5	513	white alu.	105	1	18447
Duo 300	300	660	1620	1750	1.3	29.5	513	white	105	1	18435
Duo 400	400	750	1530	1715	1.6	35.4	615	white alu.	158	1	18390
Duo 400	400	750	1530	1715	1.6	35.4	615	white	158	1	18423
Duo 500	500	750	1730	1895	2.0	45.2	785	white alu.	181	1	18395
Duo 500	500	750	1730	1895	2.0	45.2	785	white	181	1	18429

* Dimensions including insulation.

** At 80 °C supply temperature and 60 °C potable water temperature.



Duo 120 - 500 - Connection diagram

Type	Distance from floor to connection centres				
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]
Duo 120	65	245	545	635	885
Duo 150	65	245	590	690	985
Duo 200	65	245	710	885	1285
Duo 300	65	310	750	850	1560
Duo 400	70	330	770	870	1470
Duo 500	70	330	890	990	1670

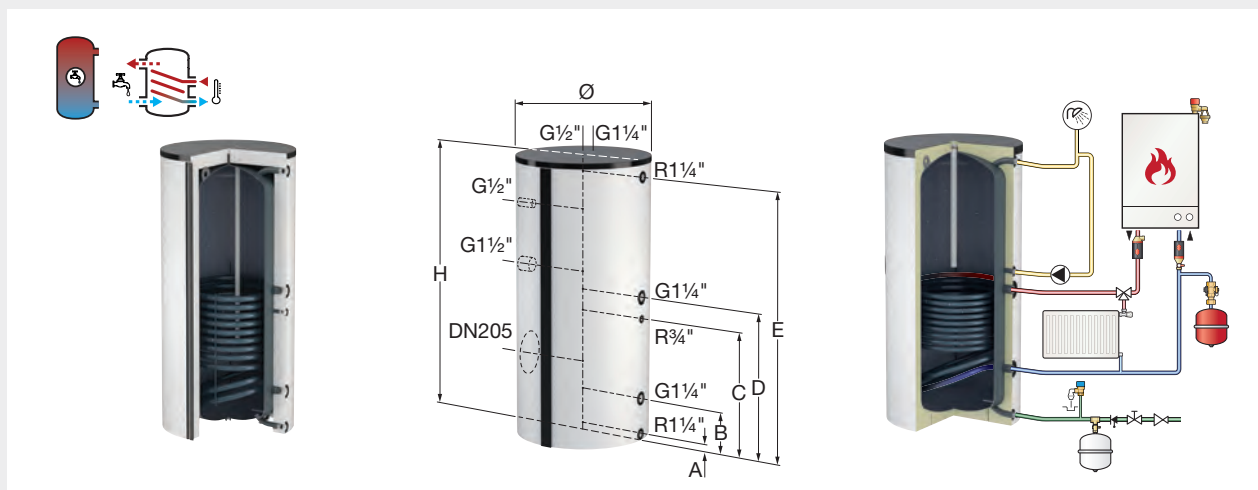
Duo 750 - 1000

An indirectly heated and upright water heater including a permanently welded-in heating coil, suitable for all modern heating systems.

- Minimum lime deposits due to smooth surfaces. High-quality glass lining according to DIN 4753/part 3 for potable hot water production and optimum corrosion protection by means of a standard Mg-anode.
- Equipped with a built-in thermometer.
- Including a clamping strip with which a temperature sensor can be affixed at any chosen height to enable optimum heat efficiency of the water heater.
- Feet adjustable in height for accurate levelling.
- Inspection flange at the side: DN 205, suitable for connecting additional heating elements; Ex Works - closed with a removeable blind flange.
- Suitable for connecting additional heating elements and fitted with a coupling sleeve for accessories.
- The heating coil is designed to ensure full depth heating to prevent the accretion of Legionella bacteria.
- Maximum working pressure: 10 bar (potable water vessel) / 16 bar (heating coil).
- Maximum working temperature: 95 °C (potable water vessel) / 110 °C (heating coil).

Insulation:

- Standard colours: white (RAL 9010) and white aluminium (RAL 9006).
- Including EPS insulating mantle (fire category B1) with a polypropylene outer shell (fire category B2).



Type	Capacity [l]	Dimensions *			Heating surface area [m²]	Heating capacity [kW] **	Water capacity [l/h] **	Insulation colour	Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting height [mm]							
Duo 750	750	750	1970	2070	2.7	67.1	1166	white	280	1	19297
Duo 750	750	750	1970	2070	2.7	67.1	1166	white alu.	280	1	19298
Duo 1000	1000	800	2230	2320	3.2	73.9	1283	white	360	1	19305
Duo 1000	1000	800	2230	2320	3.2	73.9	1283	white alu.	360	1	19306

* Dimensions excluding insulation.

** At 80 °C supply temperature and 60 °C potable water temperature.



Duo 750 - 1000 - Connection diagram

Type	Distance from floor to connection centres				
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]
Duo 750	60	320	890	1040	1880
Duo 1000	70	330	960	1110	2140

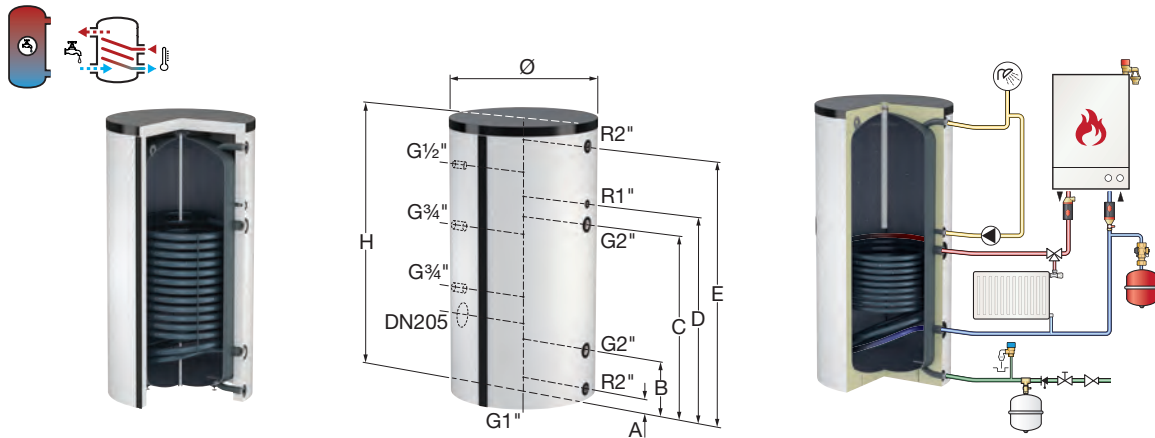
Duo 1500 - 3000

An indirectly heated and upright water heater including a permanently welded-in heating coil, suitable for all modern heating systems.

- Minimum lime deposits due to smooth surfaces. High-quality glass lining according to DIN 4753/part 3 for potable hot water production and optimum corrosion protection by means of a FSA no-maintenance anode.
- Equipped with a built-in thermometer.
- Feet adjustable in height for accurate levelling.
- Inspection flange at the side: DN 205, suitable for connecting additional heating elements; Ex Works - closed with a removeable blind flange.
- Suitable for connecting additional heating elements and fitted with a coupling sleeve for accessories.
- The heating coil is designed to ensure full depth heating to prevent the accretion of Legionella bacteria.
- Maximum working pressure: 10 bar (potable water vessel) / 16 bar (heating coil).
- Maximum working temperature: 95 °C (potable water vessel) / 110 °C (heating coil).

Insulation:

- Standard colours: white (RAL 9010) and white aluminium (RAL 9006).
- Including EPS insulating mantle (fire category B1) with a polypropylene outer shell (fire category B2).



Type	Capacity [l]	Dimensions *			Heating surface area [m ²]	Heating capacity [kW] **	Water capacity [l/h] **	Insulation colour	Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting height [mm]							
Duo 1500	1500	1000	2320	2480	6.4	143	2383	white	570	1	19310
Duo 1500	1500	1000	2320	2480	6.4	143	2383	white alu.	570	1	19311
Duo 2000	2000	1100	2400	2600	7.3	170	2951	white	666	1	19315
Duo 2000	2000	1100	2400	2600	7.3	170	2951	white alu.	666	1	19316
Duo 3000	3000	1200	2830	3000	7.3	170	2951	white	939	1	19318

* Dimensions excluding insulation.

** At 80 °C supply temperature and 60 °C potable water temperature.



Duo 1500 - 3000 - Connection diagram

Type	Distance from floor to connection centres				
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]
Duo 1500	85	435	1555	1735	2235
Duo 2000	105	455	1575	1755	2255
Duo 3000	95	470	1590	2205	2730

Duo - Performance

Technical specifications	Duo										
	120	150	200	300	400	500	750	1000	1500	2000	3000
Total heat loss (EN 12897) [W]	56	63	83	87	96	102	117	145	160	181	n/a
Energy label	C	C	C	C	C	C	C	C	C	C	n/a
Insulation thickness [mm]	80	80	80	80	80	80	80	100	100	100	100
Performance index (T => 60 °C) [NL]	1.3	2.1	4.0	8.6	14.0	20.0	29.0	42.0	80.0	110.0	201.0
Continuous power (T => 45 °C) [kW] **	14.7	16.7	26.8	42.8	51.3	65.4	97.7	107.5	207.9	247.9	247.9
Continuous power (T => 60 °C) [kW] **	10.2	11.6	18.6	29.5	35.4	45.2	67.1	73.9	143.0	170.0	170.0
Continuous power (T => 70 °C) [kW] **	11.8	13.5	21.5	34.3	41.1	52.4	78.2	86.1	166.5	198.2	198.2
Peak flow (T => 40 °C) [l/10 min.] *	94	100	147	200	294	300	574	600	800	1000	1200
Peak flow (T => 60 °C) [l/10 min.] *	89	100	144	200	287	300	549	600	800	1000	1200
Continuous output (T => 40 °C) [l/h] *	357	409	653	1038	1245	1588	2362	2599	5028	5980	5980
Continuous output (T => 40 °C) [l/h] **	440	500	799	1279	1532	1953	2917	3211	6208	7402	7402
Continuous output (T => 45 °C) [l/h] **	364	414	662	1059	1269	1617	2415	2659	5141	6128	6128
Continuous output (T => 60 °C) [l/h] *	177	202	323	513	615	785	1166	1283	2483	2951	2951
Continuous output (T => 70 °C) [l/h] **	171	195	312	497	595	759	1132	1246	2410	2869	2869
First hour output (T => 40 °C) [l/h] *	391	442	691	1066	1331	1629	2543	2794	4978	5985	6336
First hour output (T => 60 °C) [l/h] *	236	272	413	633	799	982	1521	1734	2990	3662	4190
First hour output (T => 70 °C) [l/h] *	231	266	403	620	782	961	1492	1704	2933	3600	4132
Heat up time (T => 40 °C) [min.] **	16	18	15	14	16	15	15	19	14	16	24
Heat up time (T => 45 °C) [min.] **	20	22	18	17	19	19	19	23	18	20	29
Set drain rate [l/min.]	10	10	15	20	30	30	60	60	80	100	120
Hot water flow (T => 60 °C) [l/h] *	500	500	800	1500	1700	2100	3900	4400	8000	11000	11000
Heating surface of the coil [m²]	0.5	0.6	0.9	1.3	1.6	2.0	2.7	3.2	6.4	7.3	7.3
Pressure drop coil 80/60 °C [kPa]	0.4	0.5	1.6	6.8	10.2	18.7	5.4	7.3	5.0	9.8	9.8

* Hot leg temperature: 80 °C, cold water temperature: 10 °C.

** Hot leg temperature: 90 °C, cold water temperature: 10 °C.

n/a = not applicable.

Duo HLS-E 120 - 500 - Connection diagram

Type	Distance from floor to connection centres						
	A/C [mm]	M [mm]	D [mm]	E [mm]	F/N [mm]	G [mm]	I [mm]
Duo HLS-E 120	50	390	-	618	748	293	933
Duo HLS-E 150	50	450	-	808	938	353	1123
Duo HLS-E 200	50	553	-	1110	1240	378	1425
Duo HLS-E 300	53	658	798	1028	1278	458	1728
Duo HLS-E 400	55	690	745	1228	1413	490	1613
Duo HLS-E 500	55	690	745	1523	1723	490	1923

Duo HLS-E 750 - 1000

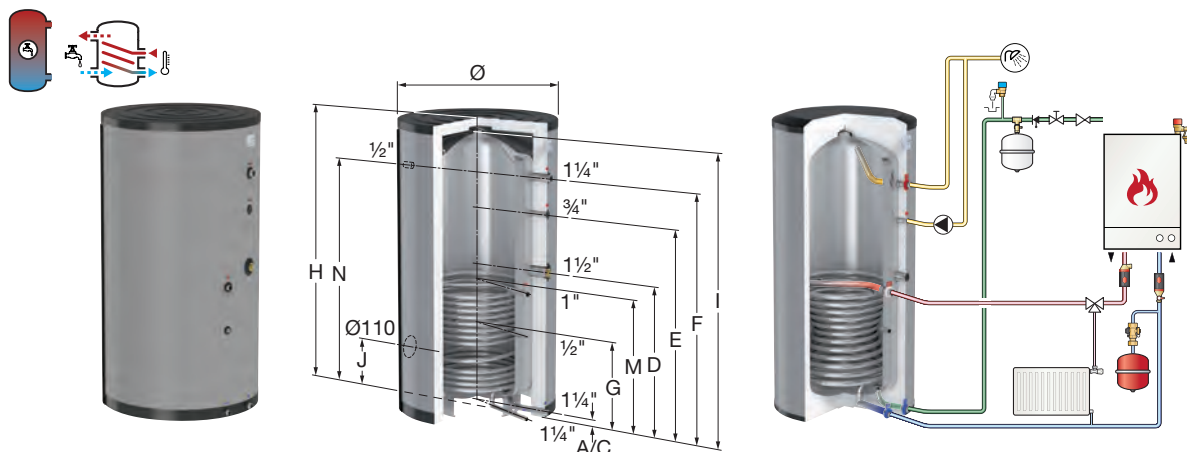
An indirectly heated water heater that can be combined with all heating installations.

The Diabolo-shaped coil guarantees an efficient heat exchange with a short heat up time. The Duo HLS-E Solar provides optimum performance combined with a high level of energy efficiency.

- Efficient: Minimum heat loss and very fast heating up.
- Requires little maintenance and no anode.
- Light weight.
- Excellent stratification of the water in the vessel.
- High resistance to chloride (up to 250 ppm).
- Including an 1 ½" connection suitable for connecting an additional electric heating element.
- Including an inspection flange DN 110 at the side.
- Maximum working pressure: 10 bar (potable water vessel) / 40 bar (heating coil).
- Maximum working temperature: 95 °C (potable water vessel) / 130 °C (heating coil).
- Stainless steel type: 1.4521.

Insulation:

- Standard colour: silver.
- Including graphite polystyrene (GPS) insulation with a polypropylene outer shell (fire category B1).



Type	Capacity [l]	Ø [mm]	Dimensions *		Insulation colour	Weight [kg]		Order Code
			H [mm]	Tilting height [mm]				
Duo HLS-E 750	748	990	1859	2098	silver	98	1	19411
Duo HLS-E 1000	950	990	2284	2481	silver	114	1	19912

* Dimensions including insulation.



Duo HLS-E 750 - 1000 - Connection diagram

Type	Distance from floor to connection centres							
	A/C [mm]	M [mm]	D [mm]	E [mm]	F/N [mm]	G [mm]	I [mm]	J [mm]
Duo HLS-E 750	50	838	936	1293	1518	568	1753	413
Duo HLS-E 1000	50	838	936	1718	1943	568	2188	413

Duo HLS-E - Performance

Technical specifications	Duo HLS-E							
	120	150	200	300	400	500	750	1000
Heating surface area of the coil [m ²]	0.57	0.66	0.91	1.32	1.59	1.59	2.25	2.25
Continuous power output (DIN 4708) [kW]	29	33	42	65	85	85	130	130
Service water flow (10 - 45 °C) [l/h]	712	810	1031	1596	2088	2088	3193	3193
Total heat loss (EN 12897) [W]	33	38	47	54	60	69	100	118
Insulation thickness [mm]	70	70	70	85	95	95	100	100
Energy label	A	A	B	B	B	B	C	C
Heating water throughput [m ³ /h]	2.5	2.5	2.5	3	4	4	5	5
Pressure loss [mbar]	75	90	125	260	190	190	380	380
Performance index (60 °C) [NL]	1.5	2.5	6	16	22	27	47	54
Peak flow (T = 40 °C) [l/10 min.]*	211	261	365	552	685	772	1211	1428
Peak flow (T = 60 °C) [l/10 min.]*	157	194	268	403	513	600	890	1107
Peak flow (T = 40 °C) [l/h]*	746	911	1320	2007	2370	2457	4001	4218
Peak flow (T = 60 °C) [l/h]*	422	512	738	1113	1338	1425	2075	2292
Permanent flow (T = 40 °C) [l/h]**	642	780	1146	1746	2022	2022	3348	3348
Permanent flow (10 -> 40 °C, with water of 90 °C) [l/h]	714	864	1272	1938	2250	2250	3240	3240
Heat up time (10 -> 40 °C, with water of 90 °C) [min.]	10	10	9	9	10	12	13	17
Power output (at ΔT = 35 °C) [kW]	21.4	26	38.2	58.3	67.3	67.3	97.2	97.2
Heat up time (at ΔT = 35 °C) [min.]	13	13	12	12	13	17	18	23
Rated power output 85/65 °C coil [kW]	16.9	20.5	30.1	45.7	52.9	52.9	76.1	76.1
Continuous flow 85/65 °C [l/h]	266	322	474	720	834	834	1200	1200
First hour continuous flow 85/65 °C [l]	370	453	648	981	1182	1269	1853	2070
Pressure drop coil 85/65 °C [kPa]	1.1	1.9	5.2	15.9	8.3	8.3	22.9	22.9
Rated power output 90/70 °C coil [kW]	21.2	25.7	37.3	56.3	65.4	65.4	93.9	93.9
Continuous flow 90/70 °C [l/h]	335	406	587	888	1031	1031	1479	1479
First hour continuous flow 90/70 °C [l]	439	537	761	1149	1379	1466	2132	2349
Pressure drop coil 90/70 °C [kPa]	1.7	2.8	7.6	23	12	12	34.1	34.1

* Hot leg temperature: 85 °C. Heating water throughput as per rated output 85/65 °C. Cold water temperature: 10 °C.

SUPASTOR INDIRECT WATER HEATERS

Supastor Indirect 125 - 1000

Indirect unvented cylinders for potable water installations.

Economical, high performance, stainless steel vessels for hot and cold water storage which can be combined with all modern central heating systems. Tanks for use in all closed circuit water supply systems, demand satisfied by storage volume.

Supastor indirect unvented cylinders have been designed around UK specifications being compact, easy to install with 'in-line' connections and are supplied with all necessary controls.

Technical specification:

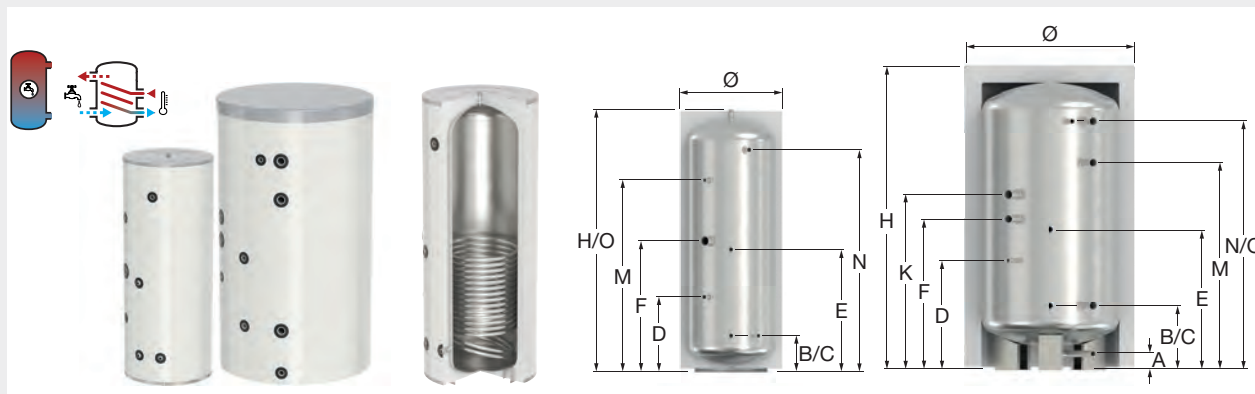
- Maximum working pressure: 6.0 bar.
- Maximum working temperature: 90 °C.
- T&P pressure setting: 7.0 bar.
- T&P temperature setting: 90 °C.
- Expansion relief valve setting: 6.0 bar.
- Electrical Heaters: 3 kW 230V/50Hz Immersion Heater (Factory standard, but other Immersion heaters can be used (See table for compatibility)).

Materials:

- Tank: Stainless steel DUPLEX LDX 2101 (EN1.4162).
- Coils and Connections: Stainless steel AISI 316L.

Insulation & Casing:

- 125 - 500 l.: 50 mm CFC-free and HCFC-free polyurethane thermal insulation with Painted Galvanized carbon steel DX51D.
- 800 - 1000 l.: 100 mm HITEC thermal insulation with ABS Silver Grey Casing.



Type	Capacity [l]	Heating surface area [m²]	Heating capacity [kW]	Water capacity [l/h]	Dimensions		Insulation colour	Weight [kg]		Order Code
					Ø [mm]	H [mm]				
Supastor Indirect 125 + Kit	125	0.46	21.7	415	550	1020	white	36	1	45209
Supastor Indirect 150 + Kit	150	0.56	23.0	440	550	1180	white	42	1	45210
Supastor Indirect 170 + Kit	170	0.56	22.5	430	550	1260	white	48	1	45211
Supastor Indirect 200 + Kit	200	0.86	31.7	605	550	1440	white	50	1	45212
Supastor Indirect 250 + Kit	250	0.93	33.2	635	550	1760	white	59	1	45213
Supastor Indirect 300 + Kit	300	1.31	42.6	815	620	1590	white	65	1	45214
Supastor Indirect 500 + Kit	500	1.60	50.2	960	710	1900	white	100	1	45215
Supastor Indirect 800 + Kit	800	2.21	82.2	1570	820 *	1850	white	165	1	45216
Supastor Indirect 1000 + Kit	1000	2.21	80.1	1530	820 *	2300	white	197	1	45217

* Dimensions excluding insulation.

kiwa

Supastor Indirect - Performance

Technical specifications	Supastor Indirect								
	125	150	170	200	250	300	500	800	1000
Energy Efficiency (EN 12897) [W]	37	37	37	36	37	37	36	n/a	n/a
Energy label	B	B	C	C	C	C	C	n/a	n/a
Total heat loss [W]	48	52	62	77	83	94	133	133	231
Standing heat loss [kWh/24hr]	1.15	1.25	1.49	1.85	1.99	2.26	3.19	3.19	5.54
Heating surface area [m ²]	0.46	0.56	0.56	0.86	0.93	1.31	1.60	2.21	2.21
Coil pressure drop [mbar]	40	42	42	77	80	92	96	96	123
Rated power output 82/71 °C [kW]	21.7	23.0	22.5	31.7	33.2	42.6	50.2	82.2	80.1
Water capacity [l/h]	415	440	430	605	635	815	960	1570	1530
Primary flow rate required for primary heating power [l/min.]	25	34	34	42	42	59	60	92	92
Heat up time [mins] *	21	23	25	30	34	39	48	50	57
Re-heat-up time 70% draw off [mins] *	14	15	17	20	22	24	31	33	37
Hot water storage tank volume [l]	126	151	169	200	250	294	498	770	1000
Expansion vessel (Airfix P, 10 bar) [l]	12	12	12	12	12	12	24	35	35
Weight empty [kg]	36	42	48	50	59	65	100	165	197
Weight full [kg]	159	190	216	250	305	354	495	916	1193

* Heat up time and re-heat time are based on a primary flow temperature of 60 °C and a temperature rise from 15 °C to 60 °C.
n/a = not applicable.

Connection diagram Supastor Indirect 125 - 1000

Type	Distance from floor to connection centres								
	A [mm]	B/C [mm]	D [mm]	E [mm]	F [mm]	K [mm]	M [mm]	N [mm]	O [mm]
Supastor Indirect 125	-	196	299	421	471	-	651	751	1020
Supastor Indirect 150	-	196	341	486	536	-	786	911	1180
Supastor Indirect 170	-	196	341	486	536	-	881	1031	1260
Supastor Indirect 200	-	196	376	646	696	-	981	1211	1440
Supastor Indirect 250	-	196	396	676	726	-	1271	1531	1760
Supastor Indirect 300	-	218	448	733	783	-	1153	1333	1590
Supastor Indirect 500	-	225	500	835	885	-	1440	1640	1640
Supastor Indirect 800	?	380	650	900	960	1160	1240	1490	1490
Supastor Indirect 1000	?	380	650	900	960	1160	1575	1920	1920

Connections Supastor Indirect 125 - 1000

Type	Connections								
	Drain (A)	Boiler return (B)	Cold water inlet (C)	Aquastat pocket * (D)	Boiler Flow (E)	Immer-sion Heater (F & K)	Secondary Return (M)	T&P Relief Valve (N)	Hot Water Draw Off (O)
Supastor Indirect 125	-	22 mm	22 mm	?	22 mm	1 3/4" F	1/2" F (Blank)	3/4" F	22 mm
Supastor Indirect 150	-	22 mm	22 mm	?	22 mm	1 3/4" F	1/2" F (Blank)	3/4" F	22 mm
Supastor Indirect 170	-	22 mm	22 mm	?	22 mm	1 3/4" F	1/2" F (Blank)	3/4" F	22 mm
Supastor Indirect 200	-	22 mm	22 mm	?	22 mm	1 3/4" F	1/2" F (Blank)	3/4" F	22 mm
Supastor Indirect 250	-	22 mm	22 mm	?	22 mm	1 3/4" F	1/2" F (Blank)	3/4" F	22 mm
Supastor Indirect 300	-	22 mm	22 mm	?	22 mm	1 3/4" F	1/2" F (Blank)	3/4" F	22 mm
Supastor Indirect 500	-	28 mm	28 mm	?	28 mm	1 3/4" F	1/2" F (Blank)	3/4" F	28 mm
Supastor Indirect 800	1" F	1" F	1 1/2" F	?	1" F	1 3/4" F	1 1/2" F	3/4" F	1 1/2" F
Supastor Indirect 1000	1" F	1" F	1 1/2" F	?	1" F	1 3/4" F	1 1/2" F	3/4" F	1 1/2" F

* 800 - 1000 Litres: Sensor

Supastor Indirect - Selection Guide

In known hard water areas additional protection must be used to prevent the build up of limescale deposits. Failure to do so may limit the cathodic protection and affect the warranty period as this will not constitute a manufacturing defect.

Property Type	Size [l]
1/2 beds with 1 bath / shower	125
3 beds with 1 bath / shower	150 or 170
4 beds with 1 bath / shower	170 or 200
2/3 beds with 2 baths / showers	200
4/5 beds with 2 baths / showers	200 or 250
Sports club, restaurant etc.	300 or 500
Hotels, schools etc.	800 or 1000

Immersion Size Compatibility Chart

Immersion sizes	Supastor Indirect							800	1000
	125	150	170	200	250	300	500		
3 kW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6 kW	✓	✓	✓	✓	✓	✓	✓	✓	✓
9 kW	n/a	n/a	n/a	n/a	n/a	n/a	✓	✓	✓
12 kW	n/a	n/a	n/a	n/a	n/a	n/a	✓	✓	✓
18 kW	n/a	n/a	n/a	n/a	n/a	n/a	n/a	✓	✓

n/a = not applicable.

DUO HLS HIGH-YIELD WATER HEATERS

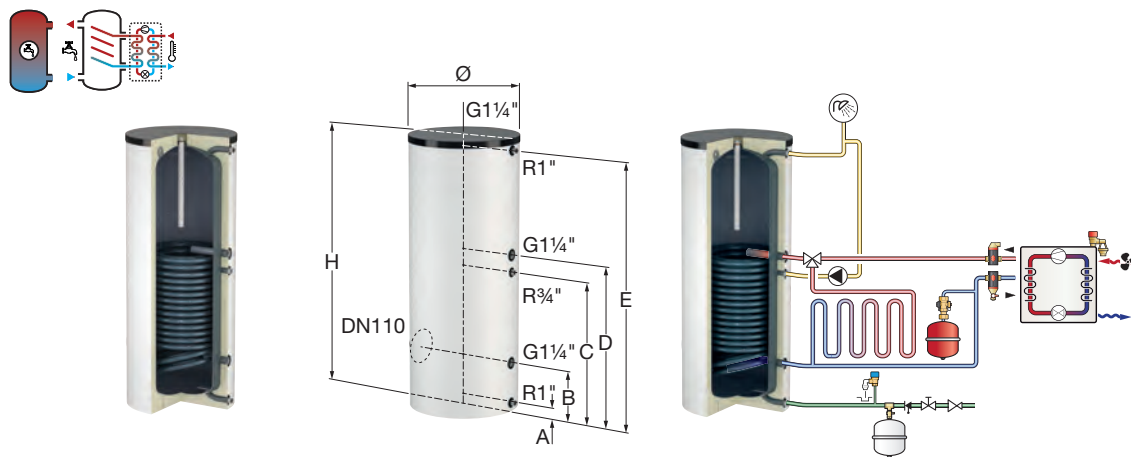
Duo HLS 300 - 500

An indirectly heated and high yield water heater that is specially developed for combination with heat pumps. Including a permanently welded-in, extra large and double heat exchanger.

- High-quality glass lining according to DIN 4753/part 3 for potable hot water production and optimum corrosion protection by means of a standard Mg-anode.
- Equipped with a built-in thermometer and immersion pipe.
- Equipped with a DN 110 inspection flange at the side, suitable for connecting additional heating elements; Ex Works - closed with a removeable blind flange.
- The heating coil is designed to ensure full depth heating to prevent the accretion of Legionella bacteria.
- A set of adjustable feet is optionally available (Art.No. 18989).
- Circulation connection R ¾".
- Maximum working pressure: 10 bar (potable water vessel) / 16 bar (heating coil).
- Maximum working temperature: 95 °C (potable water vessel) / 110 °C (heating coil).

Insulation:

- Standard colours: white (RAL 9010).
- Including hard foam insulation (direct foam injection) with a polystyrene outer shell.



Type	Capacity [l]	Dimensions *			Heating surface area [m²]	Heating capacity [kW] **	Water capacity [l/h] **	Insulation colour	Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting height [mm]							
Duo HLS 300	300	660	1710	1750	3.2	64.3	1117	white	160	1	18171
Duo HLS 400	400	750	1630	1715	4.1	80.6	1401	white	198	1	18176
Duo HLS 500	500	750	1830	1895	4.8	95.7	1663	white	222	1	18181

* Dimensions including insulation.

** At 80 °C supply temperature and 60 °C potable water temperature.



Duo HLS 300 - 500 - Connection diagram

Type	Distance from floor to connection centres				
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]
Duo HLS 300	65	305	845	945	1560
Duo HLS 400	70	330	870	970	1470
Duo HLS 500	70	330	990	1090	1670

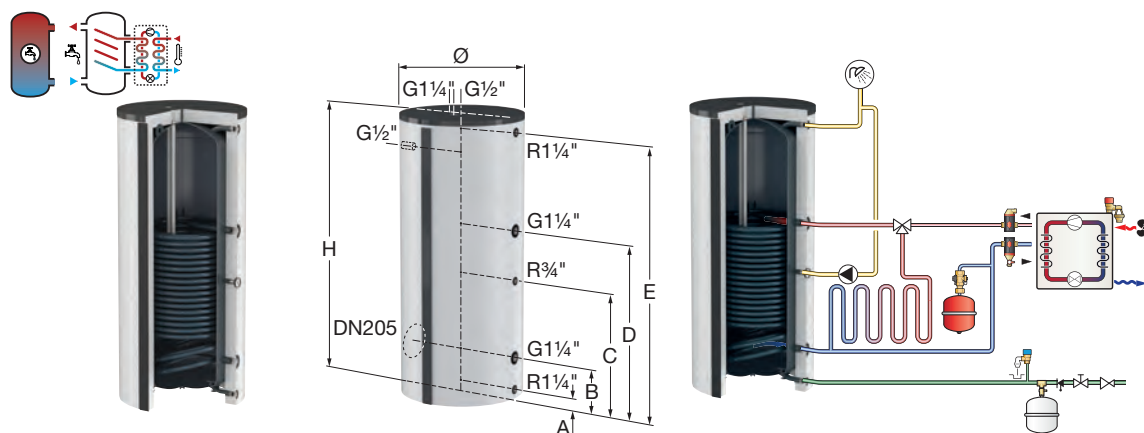
Duo HLS 750 - 1000

An indirectly heated and high yield water heater that is specially developed for combination with heat pumps. Including a permanently welded-in, extra large and double heat exchanger.

- High-quality glass lining according to DIN 4753/part 3 for potable hot water production and optimum corrosion protection by means of a standard Mg-anode.
- Equipped with a built-in thermometer.
- Equipped with a DN 205 inspection flange at the side, suitable for connecting additional heating elements; Ex Works - closed with a removeable blind flange.
- Feet adjustable in height for accurate levelling.
- Including a clamping strip with which a temperature sensor can be affixed at any chosen height to enable optimum heat efficiency of the water heater.
- The heating coil is designed to ensure full depth heating to prevent the accretion of Legionella bacteria.
- Circulation connection R ¾".
- Maximum working pressure: 10 bar (potable water vessel) / 16 bar (heating coil).
- Maximum working temperature: 95 °C (potable water vessel) / 110 °C (heating coil).

Insulation:

- Standard colour: white (RAL 9010).
- Including EPS insulating mantle (fire category B1) with a polypropylene outer shell (fire category B2).



Type	Capacity [l]	Dimensions *			Heating surface area [m²]	Heating capacity [kW] **	Water capacity [l/h] **	Insulation colour	Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting height [mm]							
Duo HLS 750	750	750	1880	2070	6.2	123.6	2146	white	300	1	18184
Duo HLS 1000	1000	800	2250	2320	7.6	150.5	2614	white	360	1	18187

* Dimensions excluding insulation.

** At 80 °C supply temperature and 60 °C potable water temperature.



Duo HLS 750 - 1000 - Connection diagram

Type	Distance from floor to connection centres				
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]
Duo HLS 750	60	320	890	1240	1880
Duo HLS 1000	70	330	900	1360	2140

Duo HLS - Performance

Technical specifications	Duo HLS				
	300	400	500	750	1000
Total heat loss (EN 12897) [W]	91	95	101	115	143
Energy label	C	C	C	C	C
Performance index (T => 60 °C) [NL] *	12.0	18.0	23.0	37.0	51.0
Continuous power (T => 45 °C) [kW] **	93.4	116.9	138.7	179.6	218.6
Continuous power (T => 60 °C) [kW] *	64.3	80.6	95.7	123.6	150.5
Continuous power (T => 70 °C) [kW] **	75.2	94.1	111.7	144.5	175.9
Peak flow (T => 40 °C) [l/10 min.] *	323	421	518	705	810
Peak flow (T => 60 °C) [l/10 min.] *	266	350	433	614	754
Continuous output (T => 40 °C) [l/h] *	2255	2824	3353	4330	5272
Continuous output (T => 40 °C) [l/h] **	2786	3487	4138	5356	6519
Continuous output (T => 45 °C) [l/h] **	2309	2891	3430	4440	5404
Continuous output (T => 60 °C) [l/h] *	1117	1401	1663	2146	2614
Continuous output (T => 70 °C) [l/h] **	1088	1362	1617	2091	2546
First hour output (T => 40 °C) [l/h] *	2202	2775	3312	4314	5203
First hour output (T => 60 °C) [l/h] *	1197	1518	1819	2403	2933
First hour output (T => 70 °C) [l/h] **	1171	1483	1778	2355	2875
Heat up time (T => 40 °C) [min.] **	6	7	7	8	9
Heat up time (T => 45 °C) [min.] **	8	8	9	10	11
Heating surface of the coil [m ²]	3.10	4.10	4.80	6.20	7.60
Pressure drop coil 80/60 °C [kPa]	11.6	18.4	26.8	17.7	27.1
Set drain rate [l/min.]	30	40	50	70	80
Heated potable water flow (T => 60 °C) [l/h] *	3000	3500	4000	6000	7000

* Hot leg temperature: 80 °C, cold water temperature: 10 °C.

** Hot leg temperature: 90 °C, cold water temperature: 10 °C.

WPS-E STAINLESS STEEL HEAT PUMP WATER HEATERS

WPS-E

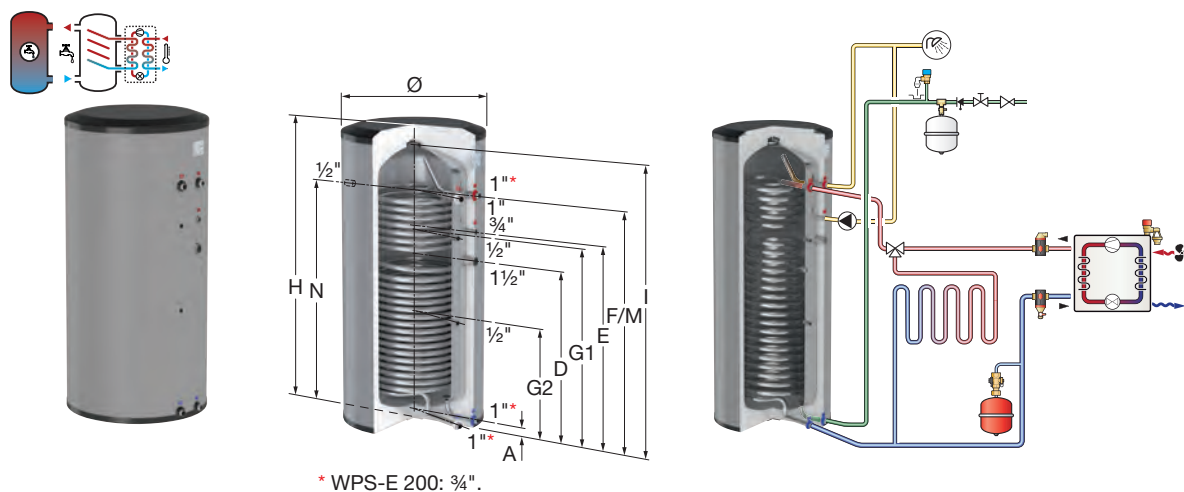
An indirectly heated water heater that can be used in combination with heat pumps.

A water heater specially developed for combination with heat pumps. The large surface area of the heating coils and their innovative Diabolo shape guarantee very efficient potable hot water production. This results in a short heat up time and guaranteed hot water performance.

- Efficient: Minimum heat loss and very fast heating up.
- Requires little maintenance and no anode.
- Light weight.
- Excellent stratification of the water in the vessel.
- High resistance to chloride (up to 250 ppm).
- Including an 1 ½" connection suitable for connecting an additional electric heating element.
- Maximum working pressure: 10 bar (potable water vessel) / 40 bar (heating coil).
- Maximum working temperature: 95 °C (potable water vessel) / 110 °C (heating coil).
- Stainless steel type: 1.4521.

Insulation:

- Standard colour: silver.
- Including graphite polystyrene (GPS) insulation (direct foam injection) with a polypropylene outer shell (fire category B2).



Type	Capacity [l]	Dimensions *			Insulation colour	Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting height [mm]				
WPS-E 200	181	595	1487	1558	silver	41	1	19930
WPS-E 300	283	675	1804	1884	silver	61	1	19931

* Dimensions including insulation.



WPS-E - Connection diagram

Type	Distance from floor to connection centres							
	A [mm]	D [mm]	E [mm]	F/M [mm]	G1 [mm]	G2 [mm]	N [mm]	I [mm]
WPS-E 200	50	900	1010	1240	953	553	1240	1425
WPS-E 300	53	1158	1293	1543	1258	728	1543	1728

WPS-E - Performance

Technical specifications	WPS-E	
	200	300
Heating surface area of the coil [m ²]	2.5	2.9
Continuous power output (DIN 4708) [kW]	41 / 47	45 / 52
Service water flow (10 - 45 °C) [l/h]	1008 / 1163	1104 / 1284
Total heat loss (EN 12897) [W]	48	55
Insulation thickness [mm]	70	85
Energy label	B	B
Heating water throughput [m ³ /h]	2 / 3	2 / 3
Pressure loss [mbar]	117 / 243	132 / 276
Performance index (60 °C) [NL]	6	9
Peak flow (T = 40 °C) [l/10 min.]*	707	868
Peak flow (T = 60 °C) [l/10 min.]*	424	543
Peak flow (T = 40 °C) [l/h]*	3472	4053
Peak flow (T = 60 °C) [l/h]*	1774	2103
Permanent flow (T = 40 °C) [l/h]*	3318	3822
Permanent flow (10 -> 40 °C, with water of 90 °C) [l/h]	3672	4260
Heat up time (10 -> 40 °C, with water of 90 °C) [min.]	3	3
Power output (at ΔT = 35 °C) [kW]	115.3	127.1
Heat up time (at ΔT = 35 °C) [min.]	4	5
Rated power output 85/65 °C coil [kW]	86.5	99.7
Continuous flow 85/65 °C [l/h]	474	1572
First hour continuous flow 85/65 °C [l]	648	1803
Pressure drop coil 85/65 °C [kPa]	35.3	51.5
Rated power output 90/70 °C coil [kW]	107.1	123.7
Continuous flow 90/70 °C [l/h]	293	1950
First hour continuous flow 90/70 °C [l]	467	2181
Pressure drop coil 90/70 °C [kPa]	51.8	75.9

* Hot leg temperature: 85 °C. Heating water throughput as per rated output 85/65 °C. Cold water temperature: 10 °C.

UHP LOW HEIGHT WATER HEATERS

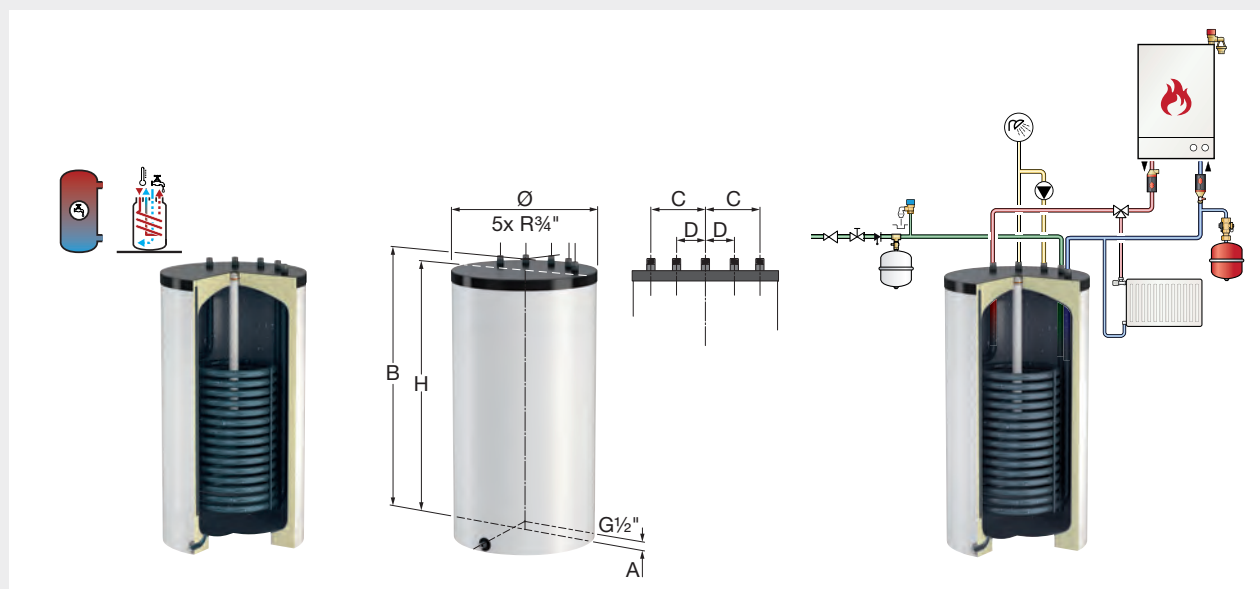
UHP

An indirectly heated water heater with all connections on top including a permanently welded-in heating coil.

- High-quality glass lining according to DIN 4753/part 3.
- High exchange performance by a very large heating surface area.
- Equipped with an immersion pipe for temperature sensor; drain connection at the side.
- All system connections are located at the top.
- Including a standard Mg-anode.
- Special version including a thermometer and cleaning & inspection flange available upon request.
- Maximum working pressure: 10 bar (potable water vessel) / 16 bar (heating coil).
- Maximum working temperature: 95 °C (potable water vessel) / 130 °C (heating coil).

Insulation:

- Standard colour: white (RAL 9010).
- Including hard foam insulation (direct foam injection) with a polystyrene outer shell.



Type	Capacity [l]	Dimensions *		Heating surface area [m²]	Heating capacity [kW] **	Water capacity [l/h] **	Insulation colour	Weight [kg]		Order Code
		Ø [mm]	H [mm]							
UHP 110	110	550	805	1.1	24.7	428	white	69	1	19069
UHP 160	160	550	1055	1.3	29.9	519	white	88	1	19075

* Dimensions including insulation.

** At 80 °C supply temperature and 60 °C potable water temperature.



UHP - Connection diagram

Type	Dimensions			
	A [mm]	B [mm]	C [mm]	D [mm]
UHP 110	35	805	165	95
UHP 160	35	1055	165	95

UHP - Performance

Technical specifications	UHP	
	110	160
Total heat loss (EN 12897) [W]	65	79
Energy label	C	C
Performance index (T => 60 °C) [NL] *	1.7	2.9
Continuous power (T => 45 °C) [kW] **	35.5	43.2
Continuous power (T => 60 °C) [kW] *	24.7	29.9
Continuous power (PW=> 70 °C) [kW] **	28.5	34.6
Peak flow (T => 40 °C) [l/10 min.] *	110	156
Peak flow (T => 60 °C) [l/10 min.] *	93	134
Continuous output (PW=> 40 °C) [l/h] *	866	1049
Continuous output (PW=> 40 °C) [l/h] **	1059	1286
Continuous output (T => 45 °C) [l/h] **	877	1068
Continuous output (T => 60 °C) [l/h] *	428	519
Continuous output (T => 70 °C) [l/h] **	413	501
First hour output (T => 40 °C) [l/h] *	832	1030
First hour output (T => 60 °C) [l/h] *	450	566
First hour output (T => 70 °C) [l/h] **	437	551
Heat up time (T => 40 °C) [min.] **	6	7
Heat up time (T => 45 °C) [min.] **	8	9
Heating surface of the coil [m ²]	1.10	1.30
Pressure drop coil 80/60 °C [kPa]	3.1	5.6
Heated potable water flow (T => 60 °C) [l/h] *	1000	1300
Set drain rate [l/min]	10	15

* Hot leg temperature: 80 °C, cold water temperature: 10 °C.

** Hot leg temperature: 90 °C, cold water temperature: 10 °C.

DUO SOLAR UPRIGHT WATER HEATERS

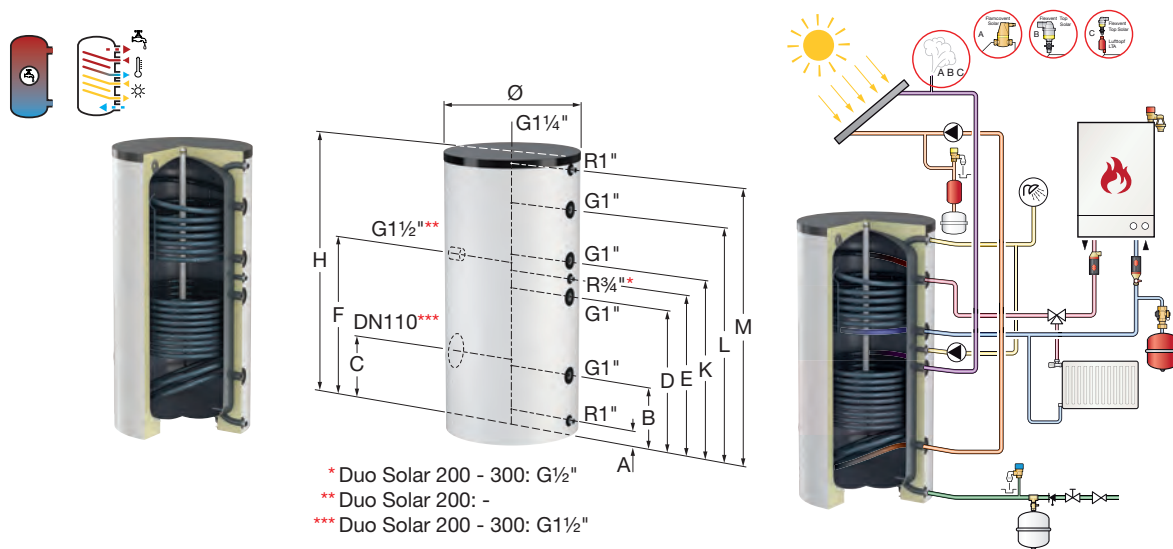
Duo Solar 200 - 500

An indirectly heated and upright water heater including two permanently welded-in heating coils, suitable for all modern heating systems. Special construction for combinations with solar systems.

- High-quality glass lining according to DIN 4753/part 3 for potable hot water production and optimum corrosion protection by means of a standard Mg-anode.
- Equipped with a built-in thermometer and immersion pipe.
- A set of adjustable feet is optionally available (Art.No. 18989).
- From 400 litres, equipped with a DN 110 inspection flange at the side, suitable for connecting additional heating elements; Ex Works - closed with removeable blind flange.
- The heating coil is designed to ensure full depth heating to prevent the accretion of Legionella bacteria.
- Maximum working pressure: 10 bar (potable water vessel) / 16 bar (heating coil).
- Maximum working temperature: 95 °C (potable water vessel) / 130 °C (heating coil).

Insulation:

- Standard colours: white (RAL 9010) and white aluminium (RAL 9006).
- Including hard foam insulation (direct foam injection) with a polystyrene outer shell.



Type	Capacity [l]	Dimensions *			Heating surface area [m²] **	Heating capacity [kW] ***	Water capacity [l/h] ***	Insulation colour	Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting height [mm]							
Duo Solar 200	200	560	1350	1500	0.5 / 0.9	12.0 / 18.6	208 / 323	white	96	1	18508
Duo Solar 200	200	560	1350	1500	0.5 / 0.9	12.0 / 18.6	208 / 323	white alu.	96	1	18509
Duo Solar 300	300	660	1620	1750	1.0 / 1.3	21.7 / 29.7	376 / 513	white	125	1	18431
Duo Solar 300	300	660	1620	1750	1.0 / 1.3	21.7 / 29.7	376 / 513	white alu.	125	1	18448
Duo Solar 400	400	750	1530	1715	1.0 / 1.6	23.6 / 35.4	410 / 615	white	176	1	18233
Duo Solar 400	400	750	1530	1715	1.0 / 1.6	23.6 / 35.4	410 / 615	white alu.	176	1	18367
Duo Solar 500	500	750	1730	1895	1.0 / 2.0	23.6 / 45.2	410 / 785	white	199	1	18239
Duo Solar 500	500	750	1730	1895	1.0 / 2.0	23.6 / 45.2	410 / 785	white alu.	199	1	18372

* Dimensions including insulation.

** Upper/lower heating surface area.

*** At 80 °C supply temperature and 60 °C potable water temperature.



Duo Solar 200 - 500 - Connection diagram

Type	Distance from floor to connection centres								
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]	L [mm]	M [mm]
Duo Solar 200	65	245	-	710	545	-	885	1085	1285
Duo Solar 300 Ø660	65	310	-	750	850	845	950	1270	1560
Duo Solar 400	70	330	345	770	860	870	970	1250	1470
Duo Solar 500	70	330	345	890	980	990	1090	1370	1670

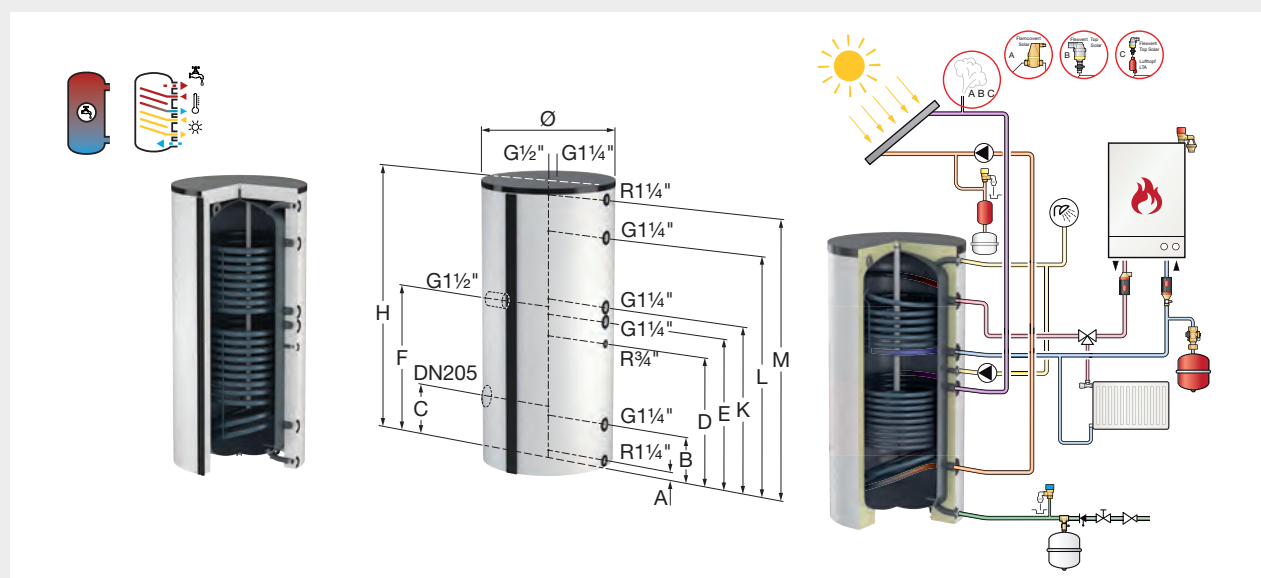
Duo Solar 750 - 1000

An indirectly heated and upright water heater including two permanently welded-in heating coils, suitable for all modern heating systems. Special construction for combinations with solar systems.

- High-quality glass lining according to DIN 4753/part 3 for potable hot water production and optimum corrosion protection by means of a standard Mg-anode.
- Feet adjustable in height for accurate levelling.
- Equipped with a built-in thermometer.
- Including a clamping strip with which a temperature sensor can be affixed at any chosen height to enable optimum heat efficiency of the water heater.
- Inspection flange at the side: DN 205, suitable for connecting additional heating elements; Ex Works - closed with a removeable blind flange.
- The heating coil is designed to ensure full depth heating to prevent the accretion of Legionella bacteria.
- Maximum working pressure: 10 bar (potable water vessel) / 16 bar (heating coil).
- Maximum working temperature: 95 °C (potable water vessel) / 110 °C (heating coil).

Insulation:

- Standard colours: white (RAL 9010) and white aluminium (RAL 9006).
- Including EPS insulating mantle (fire category B1) with a polypropylene outer shell (fire category B2).



Type	Capacity [l]	Dimensions *			Heating surface area [m²] **	Heating capacity [kW] ***	Water capacity [l/h] ***	Insulation colour	Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting height [mm]							
Duo Solar 750	750	750	1970	2070	2.0 / 2.7	40.3 / 67.1	700 / 1166	white	320	1	19320
Duo Solar 750	750	750	1970	2070	2.0 / 2.7	40.3 / 67.1	700 / 1166	white alu.	320	1	19321
Duo Solar 1000	1000	800	2230	2320	2.1 / 3.2	46.0 / 73.9	798 / 1283	white	420	1	19325
Duo Solar 1000	1000	800	2230	2320	2.1 / 3.2	46.0 / 73.9	798 / 1283	white alu.	420	1	19326

* Dimensions excluding insulation.

** Upper/lower heating surface area.

*** At 80 °C supply temperature and 60 °C potable water temperature.



Duo Solar 750 - 1000 - Connection diagram

Type	Distance from floor to connection centres								
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]	L [mm]	M [mm]
Duo Solar 750	60	320	405	890	1040	1200	1140	1620	1880
Duo Solar 1000	70	330	415	960	1260	1210	1260	1740	2140

Duo Solar - Performance

Technical specifications	Duo Solar					
	200	300	400	500	750	1000
Total heat loss (EN 12897) [W]	83	89	95	109	116	144
Energy label	C	C	C	C	C	C
Heating of vessel content by upper coil (non-solar) [l]	61	129	148	174	282	394
Performance index (T => 60 °C) [NL] *	0.9 / 4.0	2.9 / 8.6	3.4 / 14.0	4.3 / 20.0	11.0 / 29.0	17.0 / 42.0
Continuous power (T => 45 °C) [kW] **	17.4 / 26.8	31.5 / 42.8	34.4 / 51.3	34.4 / 65.4	58.5 / 97.7	66.3 / 107.5
Continuous power (T => 60 °C) [kW] *	12.0 / 18.6	21.7 / 29.5	23.6 / 35.4	23.6 / 45.2	40.3 / 67.1	46.0 / 73.9
Continuous power (T => 70 °C) [kW] **	13.9 / 21.5	25.2 / 34.3	27.5 / 41.1	27.5 / 52.4	46.9 / 78.2	53.5 / 86.1
Peak flow (T => 40 °C) [l/10 min.] *	96 / 147	165 / 200	202 / 294	214 / 300	373 / 574	443 / 600
Peak flow (T => 60 °C) [l/10 min.] *	72 / 144	133 / 200	160 / 287	176 / 300	298 / 549	378 / 600
Continuous output (T => 40 °C) [l/h] *	421 / 653	762 / 1038	831 / 1245	831 / 1588	1417 / 2362	1616 / 2599
Continuous output (T => 40 °C) [l/h] **	521 / 799	939 / 1279	1026 / 1532	1026 / 1953	1746 / 2917	1994 / 3211
Continuous output (T => 45 °C) [l/h] **	431 / 662	778 / 1059	850 / 1269	850 / 1617	1446 / 2415	1651 / 2659
Continuous output (T => 60 °C) [l/h] *	208 / 323	376 / 513	410 / 615	410 / 785	700 / 1166	798 / 1283
Continuous output (T => 70 °C) [l/h] **	202 / 312	365 / 497	398 / 595	398 / 759	678 / 1132	774 / 1246
First hour output (T => 40 °C) [l/h] *	447 / 691	800 / 1066	895 / 1331	906 / 1629	1554 / 2543	1790 / 2794
First hour output (T => 60 °C) [l/h] *	246 / 413	447 / 633	502 / 799	518 / 982	881 / 1521	1043 / 1734
First hour output (T => 70 °C) [l/h] **	240 / 403	437 / 620	490 / 782	507 / 961	861 / 1492	1021 / 1704
Heat up time (T => 40 °C) [min.] **	7 / 15	8 / 14	9 / 16	10 / 15	10 / 15	12 / 19
Heat up time (T => 45 °C) [min.] **	9 / 18	10 / 17	10 / 19	12 / 19	12 / 19	14 / 23
Heating surface of the coil [m ²]	0.50 / 0.90	1.00 / 1.30	1.00 / 1.60	1.00 / 2.00	2.00 / 2.70	2.10 / 2.30
Pressure drop coil 80/60 °C [kPa]	1.0 / 1.6	3.4 / 6.8	4.7 / 10.2	4.7 / 18.7	1.1 / 5.4	1.8 / 7.3
Set drain rate [l/min.]	15 / 15	20 / 20	30 / 30	30 / 30	60 / 60	60 / 60
Heated potable water flow (T => 60 °C) [l/h] *	850 / 800	1200 / 1500	1400 / 1700	1400 / 2100	2000 / 3900	2500 / 4400

* Hot leg temperature: 80 °C, cold water temperature: 10 °C.

** Hot leg temperature: 90 °C, cold water temperature: 10 °C.

DUO HLS-E SOLAR STAINLESS STEEL WATER HEATERS

Duo HLS-E Solar 200 - 500

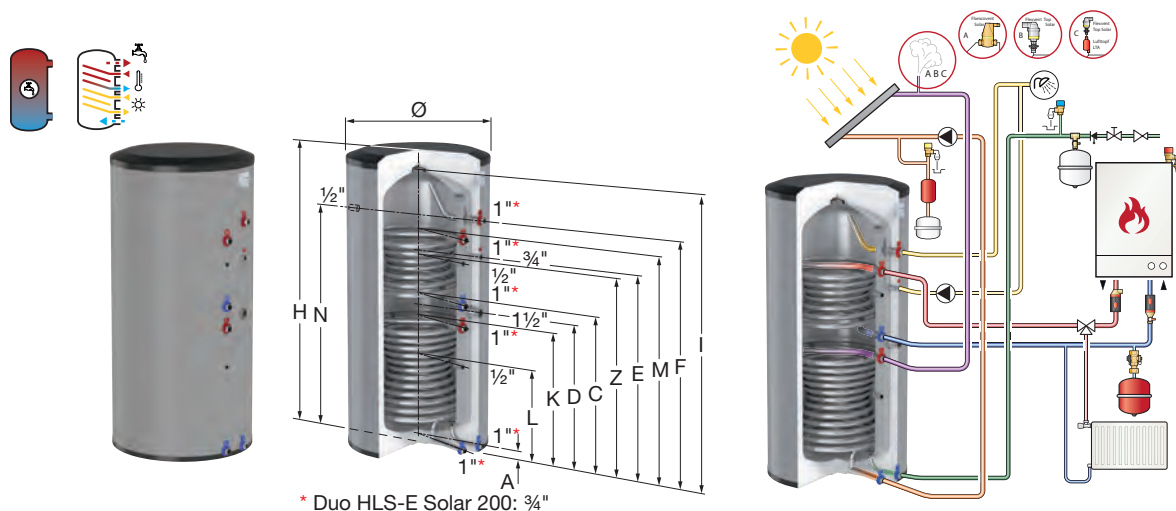
An indirectly heated water heater that can be combined with all heating installations.

The Diabolo-shaped coil guarantees an efficient heat exchange with a short heat up time. The Duo HLS-E Solar provides optimum performance combined with a high level of energy efficiency.

- Efficient: Minimum heat loss and very fast heating up.
- Requires little maintenance and no anode.
- Light weight.
- Excellent stratification of the water in the vessel.
- High resistance to chloride (up to 250 ppm).
- From 200 litres, including an 1 ½" connection suitable for connecting an additional electric heating element.
- Maximum working pressure: 10 bar (potable water vessel) / 40 bar (heating coil).
- Maximum working temperature: 95 °C (potable water vessel) / 130 °C (heating coil).
- Stainless steel type: 1.4521.

Insulation:

- Standard colours: white and silver.
- Including graphite polystyrene (GPS) insulation (direct foam injection) with a polypropylene outer shell (fire category B2).



Type	Capacity [l]	Ø [mm]	Dimensions *		Insulation colour	Weight [kg]		Order Code
			H [mm]	Tilting height [mm]				
Duo HLS-E Solar 200	191	595	1487	1558	white	37	1	19915
Duo HLS-E Solar 200	191	595	1487	1558	silver	37	1	19916
Duo HLS-E Solar 300	291	675	1804	1884	white	53	1	19917
Duo HLS-E Solar 300	291	675	1804	1884	silver	53	1	19918
Duo HLS-E Solar 400	386	795	1710	1844	white	76	1	19919
Duo HLS-E Solar 400	386	795	1710	1844	silver	76	1	19920
Duo HLS-E Solar 500	473	795	2020	2126	white	84	1	19921
Duo HLS-E Solar 500	473	795	2020	2126	silver	84	1	19922

* Dimensions including insulation.



Duo HLS-E Solar - Connection diagram

Type	Distance from floor to connection centres									
	A [mm]	L [mm]	K [mm]	D [mm]	C [mm]	Z [mm]	E [mm]	M [mm]	N [mm]	I [mm]
Duo HLS-E Solar 200	50	378	553	710	868	1010	1010	1108	1240	1425
Duo HLS-E Solar 300	53	458	658	798	933	1173	1293	1293	1543	1728
Duo HLS-E Solar 400	55	490	690	845	1001	1213	1228	1333	1413	1613
Duo HLS-E Solar 500	55	490	690	940	1191	1403	1523	1523	1723	1923

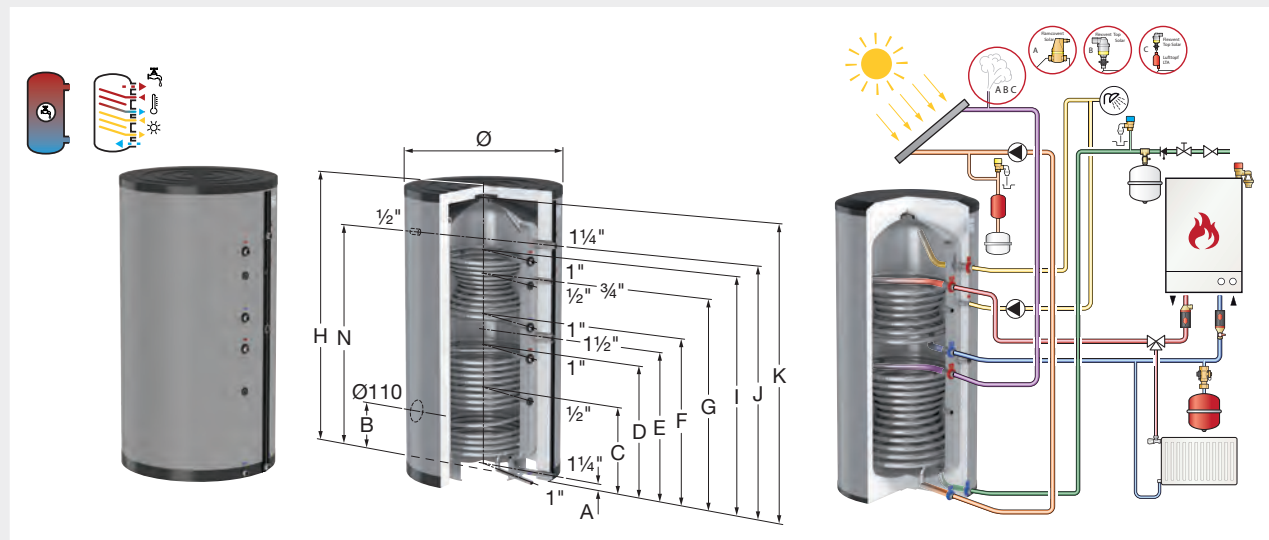
Duo HLS-E Solar 750 - 1000


An indirectly heated water heater that can be combined with all heating installations. The Diabolo-shaped coil guarantees an efficient heat exchange with a short heat up time. The Duo HLS-E Solar provides optimum performance combined with a high level of energy efficiency.

- Efficient: Minimum heat loss and very fast heating up.
- Requires little maintenance and no anode.
- Light weight.
- Excellent stratification of the water in the vessel.
- High resistance to chloride (up to 250 ppm).
- Including an 1 ½" connection suitable for connecting an additional electric heating element.
- Including an inspection flange DN 110 at the side.
- Maximum working pressure: 10 bar (potable water vessel) / 40 bar (heating coil).
- Maximum working temperature: 95 °C (potable water vessel) / 130 °C (heating coil).
- Stainless steel type: 1.4521.

Insulation:

- Standard colour: silver.
- Including graphite polystyrene (GPS) insulation with a polypropylene outer shell (fire category B1).



Type	Capacity [l]	Dimensions *			Insulation colour	Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting height [mm]				
Duo HLS-E Solar 750	736	990	1860	2098	silver	108	1	19423
Duo HLS-E Solar 1000	938	990	2284	2481	silver	124	1	19924

* Dimensions including insulation.



Duo HLS-E Solar - Connection diagram

Type	Distance from floor to connection centres										
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	I [mm]	J [mm]	K [mm]	N [mm]
Duo HLS-E Solar 750	50	413	568	838	936	1033	1293	1443	1518	1753	1518
Duo HLS-E Solar 1000	50	413	568	838	1061	1458	1718	1868	1943	2188	1943

Duo HLS-E Solar - Performance

Technical specifications	Duo HLS-E Solar					
	200	300	400	500	750	1000
Heating surface area of the bottom coil [m ²]	0.91	1.32	1.59	1.59	2.25	2.25
Heating surface area of the top coil [m ²]	0.5	0.88	0.89	0.89	1.58	1.58
Power output (DIN 4708) [kW]	24 / 42	44 / 65	46 / 85	46 / 85	70 / 130	70 / 130
Service water flow (10 - 45 °C) [l/h]	590 / 1031	1031 / 1596	1130 / 2088	1130 / 2088	1720 / 3193	1720 / 3193
Total heat loss (EN 12897) [W]	49	56	62	71	104	122
Insulation thickness [mm]	70	85	95	95	100	100
Energy label	B	B	B	B	C	C
Heating water throughput [m ³ /h]	2 / 2.5	3 / 3	3.5 / 4	4 / 4	4 / 5	4 / 5
Pressure loss [mbar]	61 / 125	188 / 260	98 / 190	125 / 190	215 / 380	215 / 380
Performance index (60 °C) [NL]	1 / 6	3.5 / 16	6 / 22	6 / 27	15 / 47	24 / 54
Peak flow (T = 40 °C) [l/10 min.] *	365	552	685	772	1211	1428
Peak flow (T = 60 °C) [l/10 min.] *	268	403	513	600	890	1107
Peak flow (T = 40 °C) [l/h] *	1320	2007	2370	2457	4001	4128
Peak flow (T = 60 °C) [l/h] *	738	1113	1338	1425	2075	2292
Permanent flow (T = 40 °C) [l/h] *	1146	1746	2022	2022	3348	3348
Permanent flow (10 -> 40 °C, with water of 90 °C) [l/h]	1272	1938	2250	2250	3240	3240
Heat up time (10 -> 40 °C, with water of 90 °C) [min.]	9	9	10	12	13	17
Power output (at ΔT = 35 °C) [kW]	38.2	58.3	67.3	67.3	97.2	97.2
Heat up time (at ΔT = 35 °C) [min.]	12	12	13	17	18	23
Rated power output 85/65 °C bottom coil [kW]	30.1	45.7	52.9	52.9	76.1	76.1
Rated power output 85/65 °C top coil [kW]	14.5	28.9	25.9	25.9	52.7	52.7
Continuous flow 85/65 °C [l/h]	474	720	834	834	1200	1200
First hour continuous flow 85/65 °C [l]	648	981	1182	1269	1853	2070
Pressure loss at bottom of coil 85/65 °C [kPa]	5.2	15.9	8.3	8.3	22.9	22.9
Pressure loss at top of coil 85/65 °C [kPa]	0.8	4.6	1.3	1.3	8	8
Rated power output 90/70 °C bottom of coil [kW]	37.3	56.3	65.4	65.4	93.9	93.9
Rated power output 90/70 °C top of coil [kW]	18.6	35.8	32.5	32.5	64.9	64.9
Flow 90/70 °C [l/h]	293	564	513	513	1023	1023
First hour continuous flow 90/70 °C [l]	467	825	861	948	1676	1893
Pressure loss at bottom of coil 90/70 °C [kPa]	7.6	23	12	12	34.1	34.1
Pressure loss at top of coil 90/70 °C [kPa]	1.2	6.7	2	2	11.5	11.5

* Hot leg temperature: 85 °C. Heating water throughput as per rated output 85/65 °C. Cold water temperature: 10 °C.

HLS SOLAR HIGH-YIELD WATER HEATERS

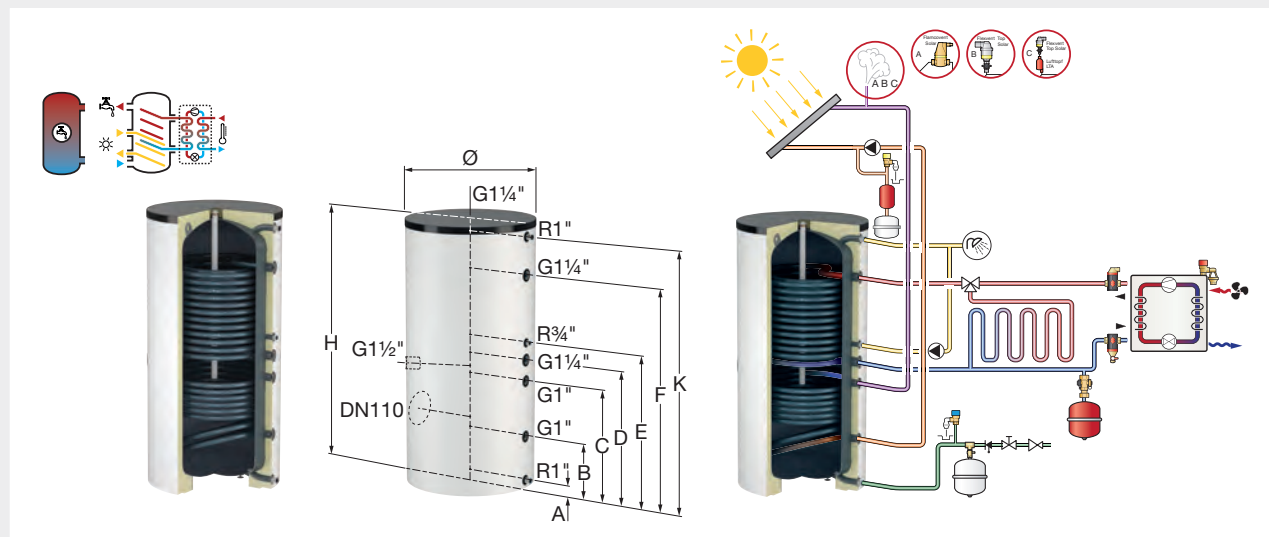
HLS Solar

An indirectly heated and high yield water heater that is specially developed for combining heat pumps with solar systems. Including a permanently welded-in, extra large and double heat exchanger for subsequent heating and additional, horizontal smooth-pipe heat exchanger for connection to the solar system.

- High-quality glass lining according to DIN 4753/part 3 for potable hot water production and optimum corrosion protection by means of a standard Mg anode.
- Equipped with a built-in thermometer and immersion pipe.
- The heating coil is designed to ensure full depth heating to prevent the accretion of Legionella bacteria.
- Including an 1 ½" sleeve for an optional connection of an EHK electric heating element.
- Inspection flange at the side: DN 110, suitable for connecting additional heating elements; Ex Works - closed with a removeable blind flange.
- A set of adjustable feet is optionally available (Art.No. 18989).
- Circulation connection R ¾".
- Maximum working pressure: 10 bar (potable water vessel) / 16 bar (heating coil).
- Maximum working temperature: 95 °C (potable water vessel) / 110 °C (heating coil).

Insulation:

- Standard colour: white (RAL 9010).
- Including hard foam insulation (direct foam injection) with a polystyrene outer shell.



Type	Capacity [l]	Dimensions *			Heating surface area [m²] **	Heating capacity [kW] ***	Water capacity [l/h] ***	Insulation colour	Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting height [mm]							
HLS Solar 400	400	750	1630	1715	3.0 / 1.2	59.1 / 25.1	1031 / 435	white	210	1	18126
HLS Solar 500	500	750	1830	1895	3.6 / 1.6	69.7 / 34.1	1211 / 592	white	240	1	18128

* Dimensions including insulation.

** Upper/lower heating surface area.

*** At 80 °C supply temperature and 60 °C potable water temperature.



HLS Solar - Connection diagram

Type	Distance from floor to connection centres						
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]
HLS Solar 400	65	320	640	760	860	1240	1455
HLS Solar 500	65	320	760	880	980	1440	1655

HLS Solar - Performance

Technical specifications	HLS Solar	
	400	500
Total heat loss (EN 12897) [W]	95	108
Energy label	C	C
Heating of vessel content by upper coil (non-solar) [l]	199	222
Performance index (T => 60 °C) [NL] *	11.0 / 12.0	15.0 / 18.0
Continuous power (T => 45 °C) [kW] **	86.1 / 36.3	101.1 / 49.3
Continuous power (T => 60 °C) [kW] *	59.4 / 25.1	69.7 / 34.1
Continuous power (T => 70 °C) [kW] **	69.3 / 29.1	81.4 / 39.5
Peak flow (T => 40 °C) [l/10 min.] *	322 / 290	344 / 300
Peak flow (T => 60 °C) [l/10 min.] *	240 / 285	260 / 300
Continuous output (T => 40 °C) [l/h] *	2079 / 884	2442 / 1197
Continuous output (T => 40 °C) [l/h] **	2567 / 1084	3015 / 1468
Continuous output (T => 45 °C) [l/h] **	2128 / 898	2499 / 1218
Continuous output (T => 60 °C) [l/h] *	1031 / 435	1211 / 592
Continuous output (T => 70 °C) [l/h] **	1003 / 421	1178 / 572
First hour output (T => 40 °C) [l/h] *	2054 / 1026	2379 / 1314
First hour output (T => 60 °C) [l/h] *	1099 / 647	1269 / 827
First hour output (T => 70 °C) [l/h] **	1073 / 636	1239 / 811
Heat up time (T => 40 °C) [min.] **	5 / 22	4 / 20
Heat up time (T => 45 °C) [min.] **	6 / 27	5 / 25
Heating surface of the coil [m²]	3.00 / 1.20	3.60 / 1.60
Pressure drop coil 80/60 °C [kPa]	8.6 / 4.1	12.5 / 8.2
Set drain rate [l/min.]	30 / 30	30 / 30
Heated potable water flow (T => 60 °C) [l/h] *	2600 / 1200	3000 / 1500

* Hot leg temperature: 80 °C, cold water temperature: 10 °C.

** Hot leg temperature: 90 °C, cold water temperature: 10 °C.

WPS-E Solar - Performance

Technical specifications	WPS-E Solar	
	300	500
Total heat loss (EN 12897) [W]	57	73
Insulation thickness [mm]	85	95
Energy label	B	B
Heating surface area [m ²]	3.13	3.7
Heating surface area solar coil [m ²]	0.38	0.75
Power output (DIN 4708) [kW]	47 / 55	52 / 62
Power output solar coil (DIN 4708) [kW]	9.8	10.5
Service water flow (10 - 45 °C) [l/h]	1164 / 1368	1284 / 1530
Service water flow - solar coil only (10 - 45 °C) [l/h]	246	258
Heating water throughput [m ³ /h]	2 / 3	2 / 3
Heating water throughput solar coil [m ³ /h]	0.24	0.24
Pressure loss [mbar]	142 / 294	165 / 342
Pressure loss solar coil [mbar]	2	2

DWH DIRECT WATER HEATERS

DWH 500 - 3000

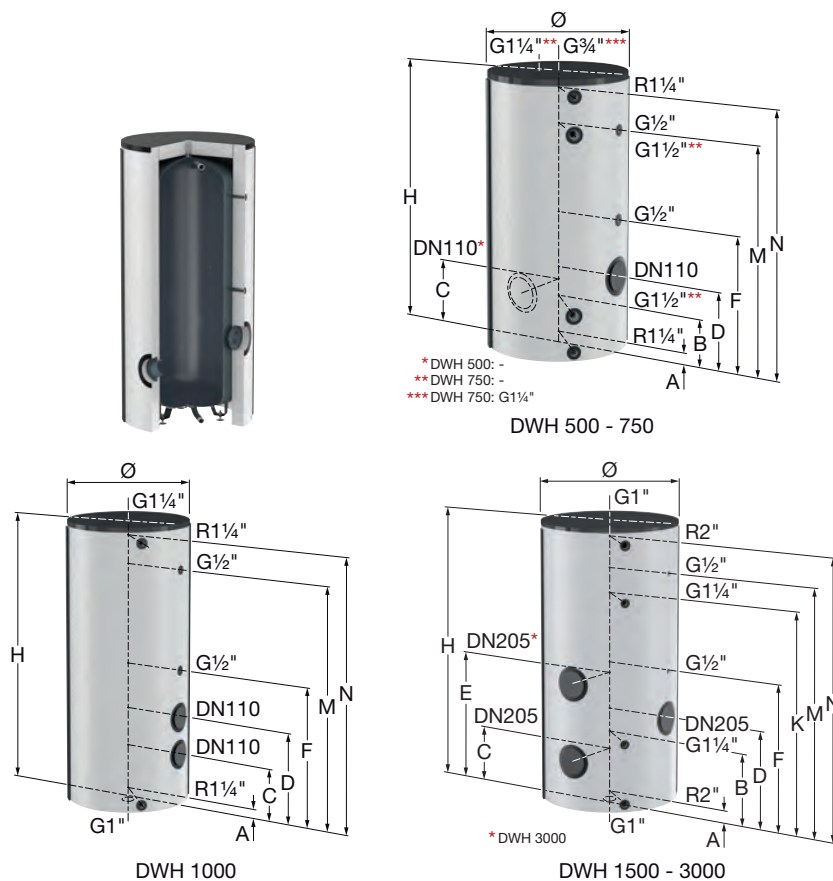
Direct water heaters for potable water installations, for use in systems in which heat can be exchanged by external heat exchangers.


All units are extremely compact and the connections are all conveniently placed 'in-line' to make installation easier, neater and, as a result, faster. This direct model can be fitted with two or more electric immersion heating elements.

- High quality single layer glass-lining to DIN 4753 Part 3 to provide hygienic hot water supply, optimum corrosion protection and minimal calcium build up.
- Connections for thermostat - thermometer - circulation.
- Maximum working pressure (cylinder): 10.0 bar.
- Maximum working temperature (cylinder): 95 °C.

Insulation:

- Standard colours: white (RAL 9010).
- Including EPS insulating mantle (fire category B1) with a polypropylene outer shell (fire category B2).



Type	Capacity [l]	Dimensions *		Weight [kg]		Order Code
		Ø [mm]	H. [mm]			
DWH 500	500	650	1680	110	1	17360
DWH 750	750	750	1920	175	1	17361
DWH 1000	1000	800	2180	205	1	17362
DWH 1500	1500	1000	2280	365	1	17363
DWH 2000	2000	1100	2320	420	1	17364
DWH 3000	3000	1200	2793	665	1	17365

* Dimensions excluding insulation.

DWH 500 - 3000 - Connection diagram

Type	Distance from floor to connection centres								
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]	M [mm]	N [mm]
DWH 500	60	285	-	485	-	830	1375	1375	1600
DWH 750	60	-	420	620	-	970	-	1620	1880
DWH 1000	70	-	430	730	-	1105	-	1900	2140
DWH 1500	70	690	490	890	-	1290	1890	1890	2240
DWH 2000	105	705	505	905	-	1305	1905	1905	2255
DWH 3000	95	720	520	920	1320	1320	2155	2405	2730

DWH - Performance

Technical specifications	DWH 500 - 3000					
	500	750	1000	1500	2000	3000
Total heat loss (EN 12897) [W]	89	119	147	161	183	n/a
Energy label	C	n/a	n/a	n/a	n/a	n/a

n/a = not applicable.

FWP COMBI WATER HEATERS

FWP 500 - 1500

Combined buffer and flow-through vessel. For combining several heating systems (such as solid fuel, oil and gas boilers) with potable water heating.

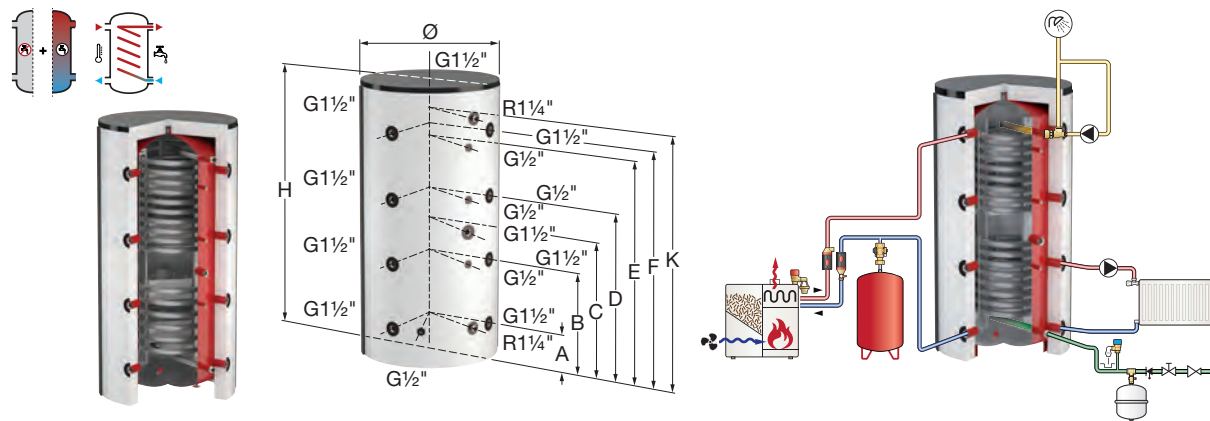
Potable water heating by means of stainless steel ribbed heating coil.

The capacity of the potable water coil is approx. 40 litres to guarantee the convenience of direct hot water supply.

- Maximum working pressure: 3 bar (buffer vessel) / 6 bar (potable water heating coil).
- Maximum working temperature: 95 °C.

Insulation (Excluded - Can be ordered separately (see Chapter 'Accessories for Water Heaters and Storage Vessels')):

- EPS insulating mantle (fire category B1) with a polypropylene outer shell in white (RAL 9010) / white aluminium (RAL 9006).



Type	Capacity [l]	Heating surface area [m²]	Dimensions *			Weight [kg]		Order Code
			Ø [mm]	H [mm]	Tilting height [mm]			
FWP 500	500	3.7	650	1650	1700	106	1	19373
FWP 750	750	3.7	790	1800	1850	126	1	18151
FWP 1000	1000	7.2	790	2200	2250	210	1	18161
FWP 1500	1500	7.4	1000	2320	2380	265	1	19377

* Dimensions excluding insulation.



FWP - Connection diagram

Type	Distance from floor to connection centres						
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]
FWP 500	180	600	770	1010	1350	1430	-
FWP 750	270	690	940	1100	1420	1520	1620
FWP 1000	270	820	1095	1370	1820	1920	2020
FWP 1500	340	890	1230	1440	1890	1990	2090

FWP - Performance

Technical specifications	FWP 500 - 1500			
	500	750	1000	1500
Total heat loss (EN 12897) [W]	93	109	141	161
Energy label	C	C	C	C

KPB COMBI WATER HEATERS

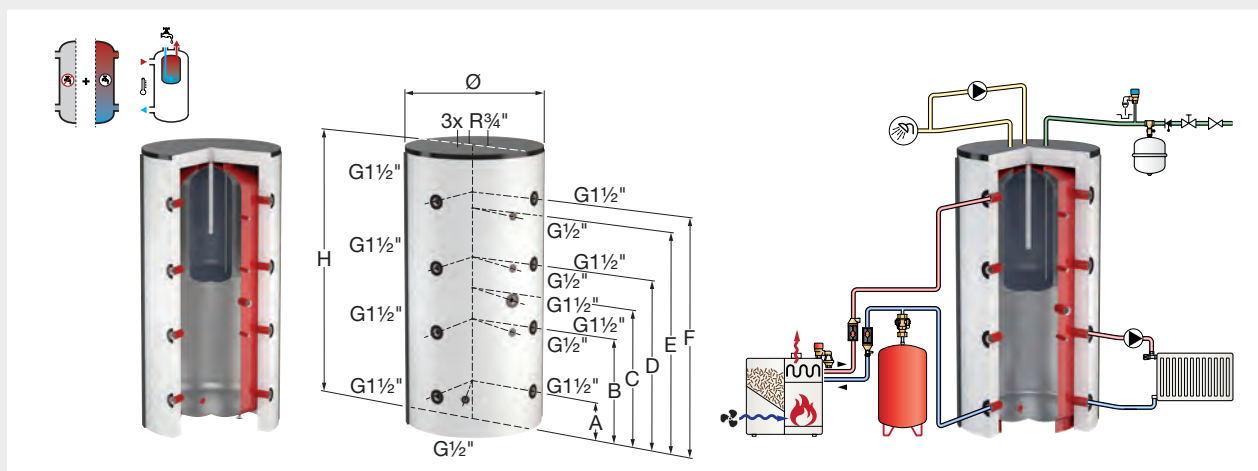
KPB 500 - 1000

Space-saving water heater and buffer vessel in one for combining several heating systems (such as solid fuel, oil and gas boilers) with potable water heating.

- Including adjustable feet for accurate levelling (< 600 litre) or on fixed feet (> 750 litre).
- Equipped with several connections and an immersion pipe for a temperature sensor.
- Cold water supply at the bottom to prevent turbulence and to maintain stratification.
- Including Mg-anode in the potable water vessel.
- Connections under a 90° angle, enabling an angular setting.
- Temperature sensor connections: G1½" (4x).
- Maximum working pressure: 3 bar (buffer vessel) / 10 bar (potable water vessel).
- Maximum working temperature: 95 °C.
- Buffer vessel made from steel (S235JR): Outside powder-coated, inside untreated.
- Potable water vessel made from steel (S235JR): Outside untreated, inside with high-quality glass lining according to DIN 4753/ part 3 for potable water.

Insulation (Excluded - Can be ordered separately (see Chapter 'Accessories for Water Heaters and Storage Vessels')):

- EPS insulating mantle (fire category B1) with a polypropylene outer shell in white (RAL 9010) / white aluminium (RAL 9006).



Type	Capacity		Dimensions *			Weight [kg]		Order Code
	Total [l]	Potable water [l]	Ø [mm]	H [mm]	Tilting height [mm]			
KPB 500/155	500	155	650	1610	1700	107	1	19361
KPB 600/155	600	155	650	2010	2100	130	1	19362
KPB 750/155	750	155	790	1760	1850	138	1	19363
KPB 850/175	850	175	790	1930	2000	180	1	19364
KPB 1000/215	1000	215	790	2180	2250	220	1	19365

* Dimensions excluding insulation.



KPB 500 - 1000 - Connection diagram

Type	Distance from floor to connection centres					
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]
KPB 500/155	180	600	770	1010	1330	1430
KPB 600/155	180	730	980	1280	1730	1830
KPB 750/155	270	690	940	1100	1420	1520
KPB 850/175	270	740	970	1200	1670	1920
KPB 1000/215	270	820	1095	1370	1820	1920

KPB 500 - 1000 - Performance

Technical specifications	KPB 500 - 1000				
	500/155	600/155	750/155	850/175	1000/215
Total heat loss (EN 12897) [W]	92	107	118	127	140
Energy label	C	C	C	C	C

DUO FWS COMBI WATER HEATERS

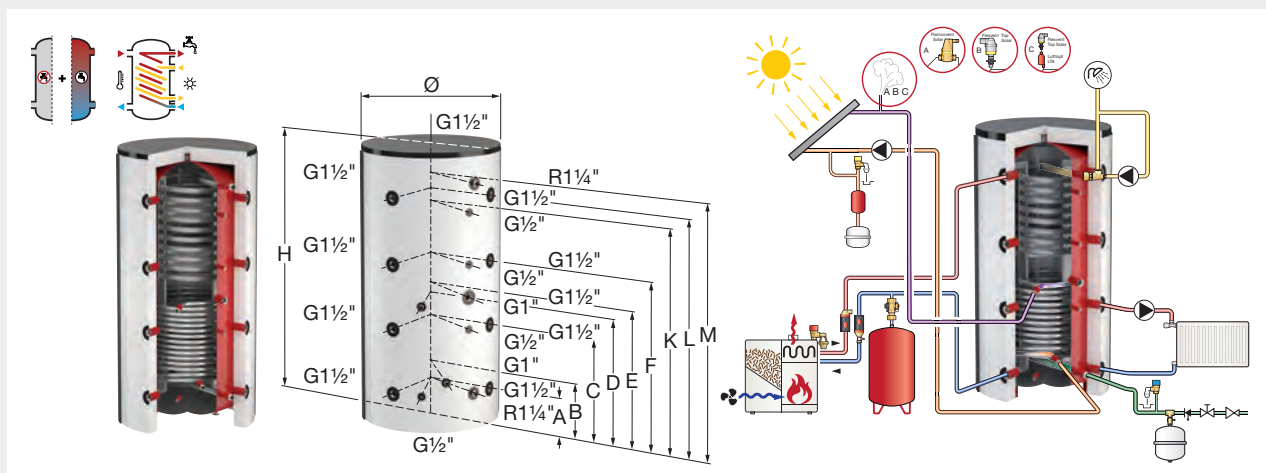
Duo FWS 500 - 1500

Combined buffer and flow-through vessel. For combining several heating systems (such as solid fuel, oil and gas boilers) and a second heating coil for separate additional heating of solar-energy installations in combination with potable water heating. Potable water heating by means of a stainless steel ribbed heating coil. The capacity of the potable water coil is approx. 40 litres to guarantee the convenience of direct hot water supply.

- Maximum working pressure: 3 bar (buffer vessel) / 6 bar (potable water coil) / 10 bar (solar system heating coil).
- Maximum working temperature: 95 °C (buffer vessel/potable water coil) / 110 °C (solar system heating coil).

Insulation (Excluded - Can be ordered separately (see Chapter 'Accessories for Water Heaters and Storage Vessels')):

- EPS insulating mantle (fire category B1) with a polypropylene outer shell in white (RAL 9010) / white aluminium (RAL 9006).



Type	Capacity [l]	Heating surface area		Dimensions *			Weight [kg]		Order Code
		Potable water [m²]	Solar [m²]	Ø [mm]	H [mm]	Tilting height [mm]			
Duo FWS 500	500	3.7	1.6	650	1650	1700	118	1	18162
Duo FWS 750	750	3.7	2.1	790	1800	1850	158	1	18190
Duo FWS 1000	1000	7.2	2.7	790	2200	2250	250	1	18195
Duo FWS 1500	1500	7.4	3.2	1000	2320	2380	309	1	19371

* Dimensions excluding insulation.



Duo FWS - Connection diagram

Type	Distance from floor to connection centres								
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]	L [mm]	M [mm]
Duo FWS 500	180	280	600	720	770	1010	1330	1430	1430
Duo FWS 750	270	370	690	890	940	1100	1420	1520	1620
Duo FWS 1000	270	370	820	1010	1095	1370	1820	1920	2020
Duo FWS 1500	340	440	890	1040	1230	1440	1890	1990	2090

Duo FWS - Performance

Technical specifications	Duo FWS 500 - 1500			
	500	750	1000	1500
Total heat loss (EN 12897) [W]	137	118	140	160
Energy label	D	C	C	C

KPS COMBI WATER HEATERS

KPS 500 - 1000

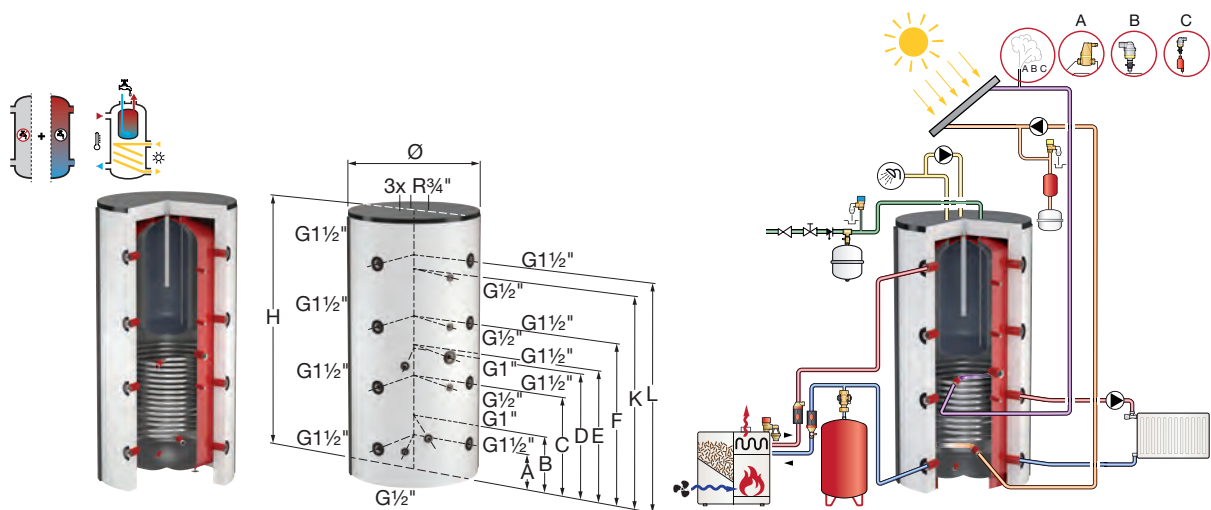
Space-saving water heater and buffer vessel in one for combining several heating systems (such as solid fuel, oil and gas boilers) with potable water heating.


Including a permanently welded-in heating coil for coupling to additional heating sources (such as a solar installation).

- Including adjustable feet for accurate levelling (< 600 litre) or on fixed feet (> 750 litre).
- Equipped with several connections and an immersion pipe for a temperature sensor.
- Cold water supply at the bottom to prevent turbulence and to maintain stratification.
- Including Mg-anode in the potable water vessel.
- Connections under a 90° angle, enabling an angular setting.
- Temperature sensor connections: G $\frac{1}{2}$ " (4x).
- Maximum working pressure: 3 bar (buffer vessel) / 10 bar (potable water vessel / heating coil).
- Maximum working temperature: 95 °C (buffer vessel) / potable water vessel) / 110 °C (heating coil).
- Buffer vessel made from steel (S235JR): Outside powder-coated, inside untreated.
- Potable water vessel made from steel (S235JR): Outside untreated, inside with high-quality glass lining according to DIN 4753/part 3 for potable water.

Insulation (Excluded - Can be ordered separately (see Chapter 'Accessories for Water Heaters and Storage Vessels')):

- EPS insulating mantle (fire category B1) with a polypropylene outer shell in white (RAL 9010) / white aluminium (RAL 9006).



Type	Capacity		Dimensions *			Heating surface area of coil [m²]	Weight [kg]		Order Code
	Total [l]	Potable water [l]	Ø [mm]	H [mm]	Tilting height [mm]				
KPS 500/155	500	155	650	1610	1700	1.6	138	1	19110
KPS 600/155	600	155	650	2010	2100	2.0	160	1	19366
KPS 750/155	750	155	790	1760	1850	2.1	170	1	19080
KPS 850/175	850	175	790	1930	2000	2.3	215	1	19367
KPS 1000/215	1000	215	790	2180	2250	2.7	260	1	19090

* Dimensions excluding insulation.



KPS 500 - 1000 - Connection diagram

Type	Distance from floor to connection centres							
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]	L [mm]
KPS 500/155	180	280	600	770	770	1010	1330	1430
KPS 600/155	180	280	730	880	980	1280	1730	1830
KPS 750/155	270	370	690	890	940	1100	1420	1520
KPS 850/175	270	370	740	920	970	1200	1570	1670
KPS 1000/215	270	370	820	1010	1095	1370	1820	1920

KPS 500 - 1000 - Performance

Technical specifications	KPS 500 - 1000				
	500/155	600/155	750/155	850/175	1000/215
Total heat loss (EN 12897) [W]	136	108	118	126	139
Energy label	D	C	C	C	C

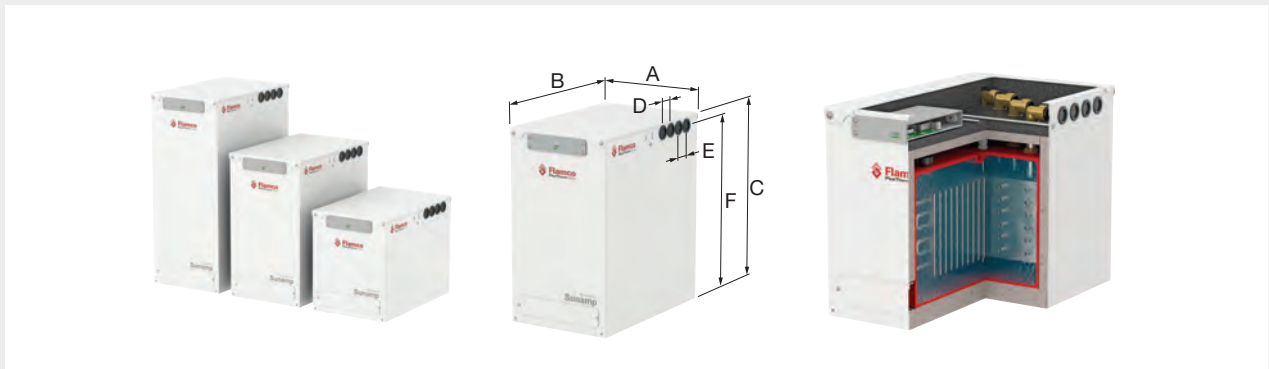
FLEXTHERM ECO


FlexTherm Eco

Ultra compact, thermal battery for the storage of heat for domestic hot water.

FlexTherm Eco is a thermal charging station. It converts electricity directly into heat and stores it for the provision of hot water. With its compact design and efficient operation, FlexTherm Eco fits in every home and is a very energy efficient appliance (energy label A+ for inactivity losses).

- The FlexTherm Eco fits with its compact dimensions in every home and needs only a third the space of an average water heater.
- The battery is easy to install (a water point and a 230V electrical connection are sufficient) and requires little maintenance (no moving parts). The user can charge it up and run it down continuously with no loss of performance.
- The appliance works quickly and efficiently thanks to the high heat absorption and release, and has an extremely low heat loss, thanks to the vacuum insulation panel.
- The FlexTherm Eco heats up in just 2.5 hours.
- The appliance is also clean and environmentally friendly because it does not combust any gases, contains no toxic materials and is 100% recyclable.
- Minimum/Maximum working pressure: 1,5 - 10 bar.
- Minimum/Maximum working temperature: 0 °C / 80 °C.
- Connections: 230V (16A).



Type	Capacity [kWh]	Connections D-E (4x)	Axial distance D-E [mm]	Dimensions				Weight [kg]		Order Code
				A [mm]	B [mm]	C [mm]	F [mm]			
FlexTherm Eco 3E	3.5	22 copper	50	360	570	445	411	70	4	18200
FlexTherm Eco 6E	7.5	22 copper	50	360	570	645	611	120	4	18201
FlexTherm Eco 9E	10.5	22 copper	50	360	570	880	846	170	4	18202



FlexTherm Eco - Performance

Technical specifications	FlexTherm Eco		
	3E	6E	9E
Energy label (by inactivity losses)	A ⁺	A ⁺	A ⁺
Storage capacity [Tc=75 °C] [kWh]	3.5	7.0	10.5
Water content - Low power circuit (B-C) [l]	1.30	2.36	3.46
Water content - High power circuit (A-D) [l]	2.24	4.48	6.76
Power - Low power circuit (B-C) [kW]	7	12	18
Power - High power circuit (A-D) [kW]	15	25	35
V40, Volume of hot water available at 40 °C [l]	85	185	300
Heat loss rate 24h [kWh/24h]	0.449	0.649	0.738
Heat loss rate 1h [W]	18.7	27.0	30.7
Recommended maximum HW flow rate [l/min]	6	15	20
Minimum cold water supply pressure at inlet to the heat battery [bar]	1.0	1.5	1.5
Maximum working pressure [bar]	10	10	10
Pressure loss: Kv value for the low power circuit (LPC)	1.623	1.255	1.066
Pressure loss: Kv value for the high power circuit (HPC)	2.871	2.356	1.951
Minimum heat source flow temperature [°C]	65	65	65
Maximum heat source flow temperature [°C]	80	80	80
Hot water outlet temperature at design flow rate [°C]	50 - 55	50 - 55	50 - 55
Heat battery controller: CC power supply rating at 230V, AC, 50Hz [A]	6	6	6
Heat battery controller: Electric heater supply rating at 230V, AC, 50Hz [A]	16	16	16
Standby power consumption [W]	< 1.0	< 1.0	< 1.0
Power rating of the heater at 230V, AC, 50Hz [kW]	2.8	2.8	2.8
Weight Phase Change Material (PCM) [kg]	40	75	110

Accessories for Water Heaters and Storage Vessels

[illegible]

[illegible]

- = Can be used without additional accessories.
 - A = Can be built in using DN 110 flange adapter including sleeve/socket G 1½" (order code 18967); alternatively can be fitted directly into sleeve/socket G 1½" above the lower coil (Mg anode must be replaced with maintenance-free anode from EHK 3 in 400 and 500 litre model).
 - B = Can be built in using DN 110 flange adapter including sleeve/socket G 1½" (order code 18967, for stainless steel calorifiers in combination with stainless steel reducing flange DN 110 including socket G 1½" (order code 19458)).
 - C = Can be fitted directly into sleeve/socket G 1½" above the lower coil, or with the Duo, Duo Solar <400 in between the lower coil.
 - D = For Duo 1000 Ø 850 (old model) only.
 - E = Can be fitted directly into sleeve/socket G 1½" above the lower coil; Mg anode must be replaced with maintenance-free anode in 400/500 litre models.
 - I = Use in combination with IVS insulation coupling only; a prerequisite for glass lined water heaters.
 - K = For models with cleaning flange only.
 - R = Can be built in using adapter flange. DN 205/DN 110 (order code 18920).
- ¹⁾ Standard here means that the plunge pipe is already built in. (Varies in length depending on the type).

Accessories for Water Heaters and Storage Vessels

Type			
		Inspection port	
		Reducing Flange	
		Gasket DN 110-F / DN 110 m. socket G 1½"	
		EHF 2.5	
		EHF 3	
		EHF 3,8	
		EHF 5	
		EHF 6	
		EHF 7,5	
		EHF 10	
		EHF 12	
		EHF 15	
		EHF 25	
		EHF 45	
		TH 80/100	
		TH 50/40	
		Built-in thermometer	
		ATH External thermostat	
		RWT 4.6 Ribbed tube heat exchanger	
		Plunge pipe ¹⁾	
		TR ½" L = 300 mm	
		TR ¾" L = 200 mm	
		MGA 500-M	
		MGA 700-M	
		MGA 700-L 22	
		MGA 900-M	
		MGA 1100-M	
		MGA 1500-M	
		MGA 1500-L 22	
		EHK 2	
		EHK 3	
		EHK 4.5	
		EHK 6	
		EHK 7.5	
		EHK 9	
		EHK-E 3	
		EHK-E 4,5	
		EHK-E 6	
		EHK-E 8	
		EHK-E 10	
		FSA 400	
		FSA 800	
		FSA 401	
		FSA 801	
		IVS - G ½"	
		IVS - G ¾"	
		IVS - G 1"	
		Foot-height adjuster	
		PSV buffer vessel connector	
PS	200		
	300		
	500		
	600		
	750		
	825		
	850		
1000			
1200			
1500			
1800			
2000			
3000			
4000			
5000			
PS-R	300		
	500		
	600		
	750		
	850		
	1000		
	1200		
	1500		
2000			
PS-T	600		
	750		
	850		
	1000		
	1200		
	1500		
2000			
PS-K	500		
	750		
	1000		
	1500		
	2000		
	2500		
	3000		

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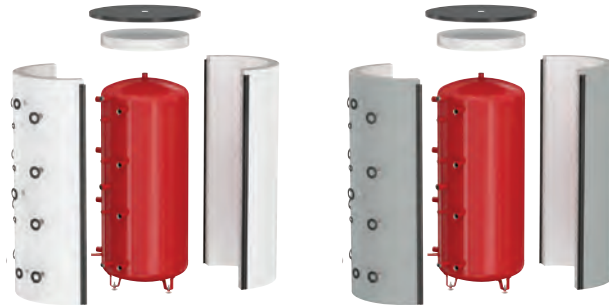
- = Can be used without additional accessories.


INSULATION MANTLES

EPS insulating mantle

EPS insulating mantle with a polypropylene outer shell and lid (white, RAL 9010 / white aluminium, RAL 9006).

- Approximately 25% reduction of heat loss compared to soft foam insulation.
- EPS insulating mantle: fire category B1 according to DIN 4102.
- Thermal conductivity = 0.032 W/(m.K) according to DIN EN 12667.
- Easy to install using a zip.



Type	Colour	Thickness [mm]		Order Code
200 PS	white	80	1	18675
200 PS	white aluminium	80	1	18676
300 PS, PS-R	white	80	1	18678
300 PS, PS-R	white aluminium	80	1	18679
500 PS, PS-R, KPB, KPS, Duo FWS, FWP	white	80	1	18681
500 PS, PS-R, KPB, KPS, Duo FWS, FWP	white aluminium	80	1	18682
600 PS, PS-R, PS-T, KPB, KPS	white	80	1	18684
600 PS, PS-R, PS-T, KPB, KPS	white aluminium	80	1	18685
750 PS, PS-R, PS-T, KPB, KPS, Duo FWS, FWP	white	80	1	18687
750 PS, PS-R, PS-T, KPB, KPS, Duo FWS, FWP	white aluminium	80	1	18688
850 PS, PS-R, PS-T, KPB, KPS	white	80	1	18690
850 PS, PS-R, PS-T, KPB, KPS	white aluminium	80	1	18691
1000 (Ø 790) PS, PS-R, PS-T, KPB, KPS, Duo FWS, FWP	white	80	1	18693
1000 (Ø 790) PS, PS-R, PS-T, KPB, KPS, Duo FWS, FWP	white aluminium	80	1	18694
1000 (Ø 850) PS, PS-R, PS-T	white	80	1	18696
1000 (Ø 850) PS, PS-R, PS-T	white aluminium	80	1	18697
1200 PS, PS-R, PS-T	white	100	1	18699
1200 PS, PS-R, PS-T	white aluminium	100	1	18700
1500 PS, PS-R, PS-T, Duo FWS, FWP	white	100	1	18702
1500 PS, PS-R, PS-T, Duo FWS, FWP	white aluminium	100	1	18703
1800 PS	white	100	1	18705
1800 PS	white aluminium	100	1	18706
2000 PS, PS-R, PS-T	white	100	1	18708
2000 PS, PS-R, PS-T	white aluminium	100	1	18709
3000 PS	white	100	1	18711
3000 PS	white aluminium	100	1	18712
4000 PS	white	100	1	18714
4000 PS	white aluminium	100	1	18715
5000 PS	white	100	1	18717
5000 PS	white aluminium	100	1	18718

25mm Vapour-tight insulation mantle

Vapour-tight insulation for use in cooling water installations.

- Fire category B1 according to DIN 4102.
- λ – value according to DIN EN 12667:
0.031 W/(m.K) at -20 °C
0.035 W/(m.K) at +20 °C
- Temperature range (min./max.): -200 °C / +105 °C.
- Diffusion resistance according to EN 12086 (DIN 52615): $\mu = 10000$.
- Thickness: 25 mm (if used as insulation).
- Corrosion risk according to DIN 1988/7: pH neutral.




Type	Colour		Order Code
500 PS-K	black	1	18270
750 PS-K	black	1	18271
1000 PS-K	black	1	18272
1500 PS-K	black	1	18273
2000 PS-K	black	1	18274
2500 PS-K	black	1	18275
3000 PS-K	black	1	18276

Insulating Connection Cap

Insulating cap (EPP) for unused connections of Flamco Water Heaters and Storage Vessels.




Type	For connection	\varnothing [mm]		Order Code
Type 1	$\leq 1 \frac{1}{2}"$	100	1	18938
Type 2	$1 \frac{1}{2}" < x \leq 2"$	232	1	18939

FLANGES AND GASKETS

Reducing flange

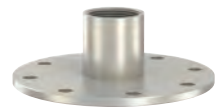


- With high quality glass lining.
- Including gasket and M12 bolts.

Type		Order Code
Reducing flange DN 205 / DN 110	1	18920
Reducing flange DN 110 / G 1 1/2 *	1	18967
Reducing flange DN 205 / G 1 1/2 *	1	18969

* Including socket G 1 1/2". For mounting the screw-in heating element EHK.

Reducing flange - Stainless steel



Flange DN 110 with G 1 1/2" connection. The G 1 1/2" connection of the flange allows to combine accessories such as an additional immersion heater (EHK-E) with a stainless steel calorifier.

- Stainless steel 1.4301.
- For LS-E 750 - 1000, Duo HLS-E 750 - 1000 and Duo HLS-E Solar 750 - 1000.

Type		Order Code
Reducing flange DN 110 / G 1 1/2" - Stainless steel	1	19458

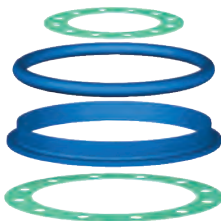
Blind flange



- With high quality glass lining.
- Including gasket and bolts.

Type		Order Code
Blind flange DN 110	1	18980
Blind flange DN 205	1	18922

Gaskets



Type		Order Code
Gasket DN 110 - Surface-sealing	1	18990
Gasket DN 110 - Lip seal	1	18993
Gasket DN 120	1	18992
Gasket DN 205	1	18923

PRESCOR T&P VALVE

The Prescor T&P temperature and pressure relief valves control and limit the temperature and pressure of the hot water contained in a domestic water heater or storage vessel and prevent it from being able to reach temperatures that are too high.

On reaching the settings, the valve discharges a sufficient amount of water into the atmosphere so that the temperature and pressure return within the system's operating limits.

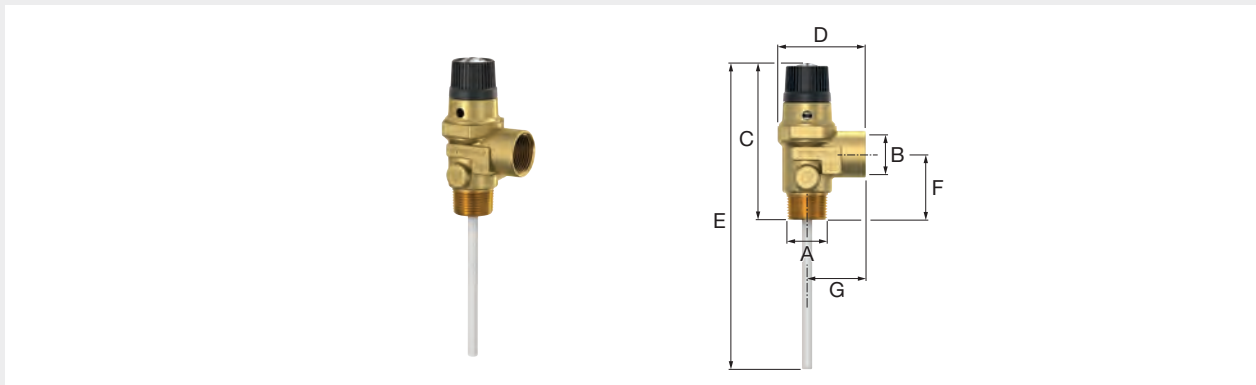
The valve opens the outlet on reaching the settings for:


- **Temperature:** the thermostat compound inside the temperature sensor, submerged in the hot water storage heater, expands as the temperature increases. This expansion causes a thrust pin to move and act on the obturator, opening the valve.
- **Pressure:** The obturator, opposed by a set spring, raises on reaching the pressure setting and opens the outlet completely. The pressure setting is chosen according to the maximum permissible pressure in the system.

As the temperature and pressure decrease, the opposite action occurs with the valve subsequently reclosing within the set tolerances.

Prescor T&P

- Opening temperature: 89 °C / 96 °C.
- Minimum/Maximum working temperature: -10 °C / 120 °C.
- Peak load: 140 °C.




Type	Set pressure [bar]	Connection		Dimensions					Heating capacity [kW]		Order Code
		A	B	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]			
Prescor T&P - 3.5 bar	3.5	22 mm	22 mm	110		198	51	47	23	1	27135
Prescor T&P - 7 bar	7.0	R 3/4"	G 3/4" F	101		198	42	38	23	1	27146

HEATING ELEMENTS

EHF heating element

Electric heating element (Incoloy) including flange.




Type	Power supply [V]	Power output [kW]	Built-in length [mm]	System connection		Order Code
EHF 2.5	400	2.5	450	DN 110	1	18910
EHF 3	400	3.0	450	DN 110	1	18911
EHF 3.8	400	3.8	450	DN 110	1	18912
EHF 5	400	5.0	450	DN 110	1	18913
EHF 6	400	6.0	450	DN 110	1	18914
EHF 7.5	400	7.5	450	DN 110	1	18915
EHF 10	400	10.0	450	DN 110	1	18916
EHF 12 *	400	12.0	530	DN 110	1	18917
EHF 15 *	400	15.0	630	DN 110	1	17340
EHF 25 *	400	12.5 / 25	620	DN 205	1	17346

* External relays for temperature regulation and temperature limiter are mandatory.

EHK heating element

Electrical screw-in heating element for glass lined calorifiers.



Type	Power supply [V]	Power output [kW]	Built-in length [mm]	Connection		Order Code
EHK 2 ^{1) 2)}	230	2.0	320	G 1 1/2"	1	18930
EHK 3 ^{1) 2)}	400	3.0	390	G 1 1/2"	1	18931
EHK 4.5 ^{1) 2)}	400	4.5	470	G 1 1/2"	1	18932
EHK 6 ²⁾	400	6.0	620	G 1 1/2"	1	18933
EHK 7.5	400	7.5	720	G 1 1/2"	1	18934
EHK 9	400	9.0	780	G 1 1/2"	1	18935

¹⁾ EHK 2 - 4.5 for building into Duo 120 - 300, Duo Solar 300: Also order a reducing flange DN 110 including G 1 1/2" (18967).


²⁾ Duo/Duo Solar 300 and over may be fitted with a built-in element using a G 1 1/2" connection above the lower heater exchanger. In this case the Mg anode should be replaced with an FSE type anode within vessels of 400 and 500 litres in which elements EHK 3 and above are used. The EHK 6 may only be used in cylinders of 400 litres and above.

EHK-E stainless steel heating element

Electrical screw-in heating element for stainless steel calorifiers.

- Reducing flange DN 110 including G 1 1/2" connection (order code 19458) can be ordered separately.




Type	Power supply [V]	Power output [kW]	Built-in length [mm]	Connection		Order Code
EHK-E 3	400	3.0	290	G 1 1/2"	1	19453
EHK-E 4.5	400	4.5	350	G 1 1/2"	1	19454
EHK-E 6	400	6.0	450	G 1 1/2"	1	19455
EHK-E 8	400	8.0	650	G 1 1/2"	1	19456
EHK-E 10	400	10.0	750	G 1 1/2"	1	19457

RWT ribbed heating coil

- With blind flange.
- When installed in glass lined calorifiers, insulating fittings are required.



Type	Connection		Built-in length [mm]	Heating surface area [m²]		Order Code
	Flange [DN]	Thread				
RWT 4.6	205	G 1" M	790	4.6	1	18944

IVS insulation coupling

- Set for ribbed heating coil RWT.
- 1 set = 2 pieces.




Type		Order Code
IVS - G 1/2	1	18945
IVS - G 3/4	1	18946
IVS - G 1	1	18947

THERMOSTATS AND THERMOMETERS

TH thermometer




Type		Order Code
TH 50/40	1	18928
TH 80/150 1/2" *	1	18926
Built-in thermometer with capillary sensor	1	18927

* Including immersion pipe.

TR immersion pipe for temperature sensor




Type	Connection	Length [mm]	Inner diameter [mm]		Order Code
TR G 1/2 / 300	G 1/2"	300	10	1	18955
TR G 3/4 / 200	G 3/4"	200	10	1	18956

ATH wall-mounted thermostat



- Including safety temperature limiter.
- Temperature range (min./max.): 30 °C / 90 °C.
- Power supply 230V / 50 Hz.


Type	Switching load [A]	Connection		Order Code
ATH	16	1/2"	1	18951

ANODES

FSA no-maintenance anode




- Power supply 230V / 50 Hz.

Type	Suitable for	Connection	Built-in length [mm]		Order Code
FSA 400	Duo 120-500, Duo Solar 200-500, HLS Solar 400, UHP 110-160, LS 200-750, KPS, KPB	G 3/4" M	400	1	18960
FSA 800	Duo/Duo Solar 750-1000, HLS Solar 500, LS 1000	G 3/4" M	800	1	18961
FSA 401	UHP 110-160, TS 120-200	M 8 M	400	1	18962
FSA 801	Duo 1000 (Ø 850)	M 8 M	800	1	18963

Magnesium anode (MgA)



- Replaceable magnesium anode.


Type	Application	Connection	Built-in length [mm]		Order Code
MgA 500 - M	Duo 120-300, LS 200-500, UHP 110-160, KPS, KPB	G 1 1/4" M	500	1	18970
MgA 700 - M	Duo 400-500, Duo Solar 300-400, LS 750	G 1 1/4" M	700	1	18971
MgA 700 - L 22	TS 120-200, UHP (B) 110-160	M 8 M	700	1	18974
MgA 900 - M	Duo Solar 500, LS 1000, Duo HLS 300-400, HLS-Solar 400	G 1 1/4" M	900	1	18973
MgA 1100 - M	Duo HLS 500, Duo Solar 500	G 1 1/4" M	1100	1	18977
MgA 1500 - M	Duo/Duo Solar 750 - 1000	G 1 1/4" M	1500	1	18975
MgA 1500 - L	Duo 1000 (Ø 850)	M 8 M	1500	1	18976

OTHER ACCESSORIES

Foot height adjuster



- Set of three adjustable feet.


Type	Application		Order Code
Foot height adjuster	Duo 120 - 500, Duo Solar 200 - 500, Duo HLS 300 - 500, HLS Solar	1	18989

PSV connector



For connecting two or more PS 500 - 2000 or PS-R 750 - 2000.

- Complete with plastic connectors and gasket on both sides.
- Maximum length: 300 mm.
- Maximum working pressure: PN 6.
- Maximum working temperature: 80 °C.
- Maximum torque: 35 Nm.


Type	Connection		Order Code
PSV	1 1/2" M	1	18996

Circulation set



The set consists of various bronze fittings and a ribbed stainless steel pipe with brazed bronze double nipples for connecting the recirculation pipe to the hot water outlet connection.

- For Duo FWS and FWP.

Type		Order Code
Circulation set	1	18937

Oval lid for service hatch - Stainless steel

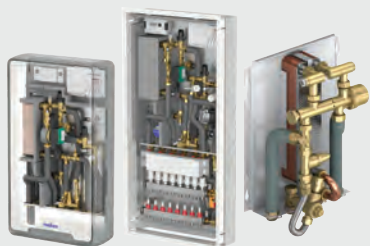


Oval lid for stainless steel calorifiers.

- For LS-E, Duo HLS-E, Duo HLS-E Solar, WPS-E and WPS-E Solar.
- Complete with gasket and fixing strap.

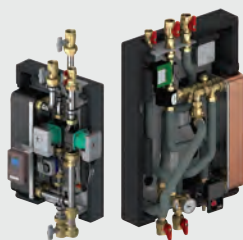
Type		Order Code
Oval lid for service hatch - stainless steel	1	19460

Interface Stations



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Fresh Water Stations



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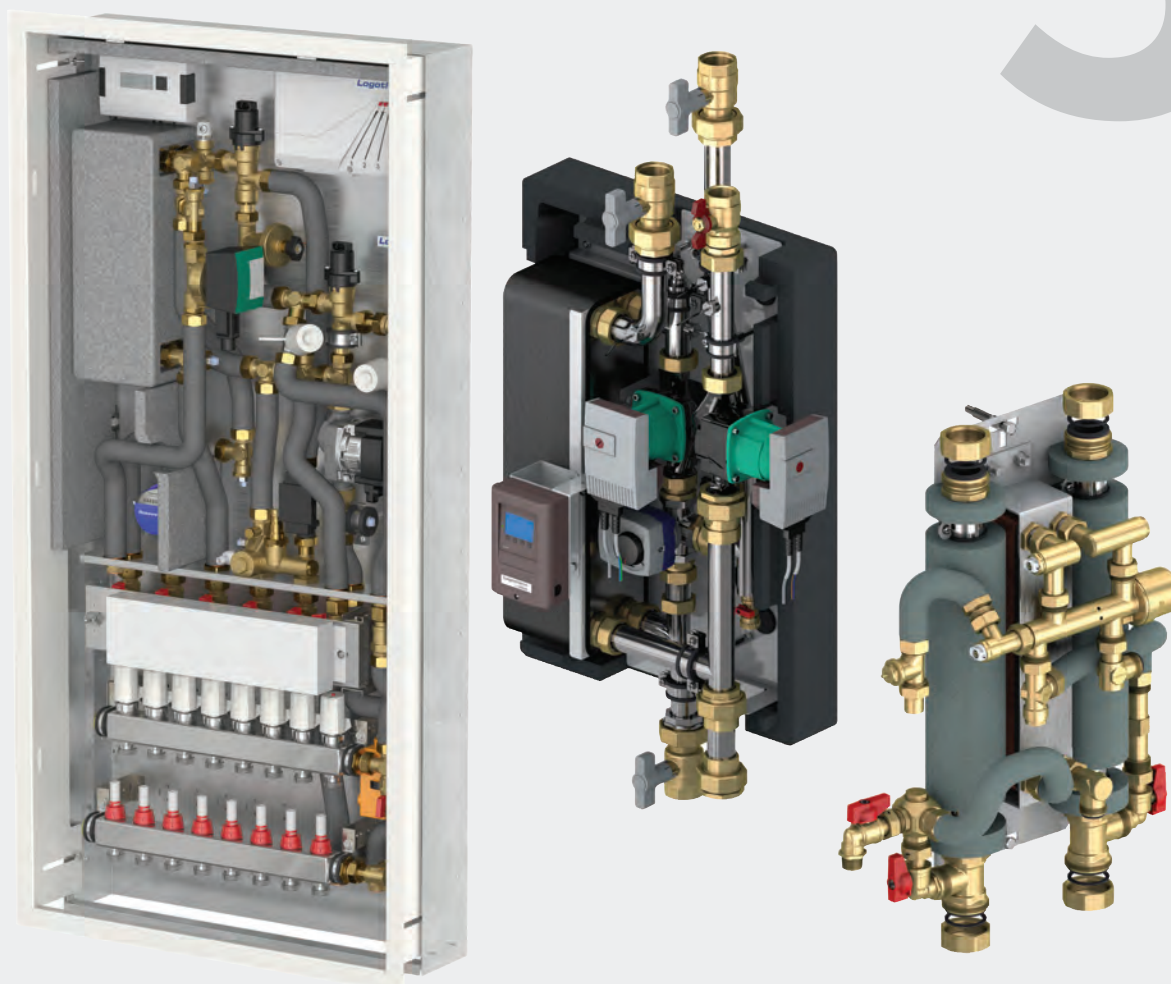
Substations



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Transfer Stations

5



The Logotherm home stations are efficient and compact home stations for various central applications in the field of district and local heating and freshwater production. Freshwater stations and decentralized applications use home stations for demand-oriented hot water, distribution of heat, and the transfer and distribution of cooling energy. Depending on the application and the requirement, these products are available with different control techniques from hydraulic, thermostatic or electronic control (with many other control and communication functions).

OVERVIEW OF HEAT INTERFACE UNITS (HIU)

Overview of KS completed stations (incl. housing, ball valve connection set, etc.) for direct assembly and hydraulic integration as well as final stations, which can be configured to your object-specific requirements with regard to additional / complementary products. You will also find information on performance ranges and primary equipment features of Logotherm home stations.

Hydraulically controlled

The hydraulic control system is regulated with differential pressure using the necessary proportional flow controller (PM-controller), thus ensuring immediate hot water preparation on draw-off thanks to proportional regulation of the primary flow rate.

- Operates without additional auxiliary energy (electrical power).
- Priority switching for hot water preparation.
- Quick and reliable (high control rate).
- Avoids standby losses in the heat exchanger.
- Simple, tried-and-tested technology (in use for more than 20 years).

Logotherm interface stations are available on request with heat exchangers for potable water, among others with high conductivity values (>500 µs/cm)!



Type	Hot water output		Heating-capacity [kW] ²	DHW-circulation ³	Radio permeable ⁴	Type of assembly			Heating circuit		
	[l/min] ¹	[kW] ¹				Surface-mounted	Flush-mounted	Line	Unmixed	Mixed	2 heating circuit
LogoComfort KS 600 *	20	50	10	-	-	✓	✓	-	✓	-	-
LogoComfort KS 600+ *	20	50	10	-	-	✓	✓	-	-	✓	✓
LogoComfort 500	15	37	10	-	✓	✓	✓	-	✓	-	-
LogoComfort 600	20	50	10	✓	✓	✓	✓	-	✓	-	-
LogoComfort 600+	15	37	10	✓	✓	✓	✓	-	-	✓	✓
LogoComfort 600+	20	50	10	✓	✓	✓	✓	-	-	✓	✓
LogoPack	15	37	10	-	✓	-	✓	✓	✓	-	-
LogoVital 35	15	37	-	-	✓	✓	✓	-	-	-	-
LogoVital 45	20	50	-	✓	-	✓	✓	-	-	-	-
LogoVital 65	24	65	-	✓	✓	✓	✓	-	-	-	-

* Complete station (including housing, ball valve connector set).

¹⁾ The achievable outputs depend on the basic parameters of the network.

²⁾ With 20 K spread.

³⁾ Optional.

⁴⁾ Possible with special housing.

Electrically controlled

The electric control system is operated with a microprocessor-regulated controller, thus ensuring immediate hot water preparation on draw-off thanks to temperature-based regulation of the primary flow rate.

- Only minimal primary cold water pressure required.
- Priority switching for hot water preparation.
- Regulation of the set hot water temperature precisely to the degree at all times, irrespective of changes in cold water or primary temperature (e.g. summer/winter operation).
- There are no sensitive moving components installed in the hot and cold water.
- Various control functions such as weather-compensated heating control, screed heating function, etc. possible (depending on version and type).

Logotherm interface stations are available on request with heat exchangers for potable water, among others with high conductivity values ($>500 \mu\text{S}/\text{cm}$)!



Type	Hot water output		Heating-capacity [kW] ²	Installation depth from 110 mm	DHW-circulation ⁴	Radio permeable ⁵	Data-logging ⁴	Type of assembly		Heating circuit		
	[l/min] ¹	[kW] ¹						Surface-mounted	Flush-mounted	Un-mixed	Mixed	2nd-heating-circuit
LogoAktiv Plus	12	35	20	-	✓	✓	✓	✓	✓	✓	✓	-
LogoAktiv Plus	18	50	20	-	✓	✓	✓	✓	✓	✓	✓	-
LogoAktiv Plus	26.5	70	20	-	✓	✓	✓	✓	✓	✓	✓	-
LogoMatic G2 CS L-Line UC*	17	59	10	✓	-	-	✓	✓	✓	✓	-	-
LogoMatic G2 CS L-Line MC*	17	59	10	✓	-	-	✓	✓	✓	-	✓	✓
LogoMatic G2 S-Line UC	12	42	10	✓	✓	✓	✓	✓	✓	✓	-	-
LogoMatic G2 S-Line MC	12	42	10	✓	✓	✓	✓	✓	✓	-	✓	✓
LogoMatic G2 M-Line UC	17	59	10	✓	✓	✓	✓	✓	✓	✓	-	-
LogoMatic G2 M-Line MC	17	59	10	✓	✓	✓	✓	✓	✓	-	✓	✓
LogoMatic G2 L-Line UC	22	77	10	✓	✓	✓	✓	✓	✓	✓	-	-
LogoMatic G2 L-Line MC	22	77	10	✓	✓	✓	✓	✓	✓	-	✓	✓
LogoEco E H-HW	10	35	21 ³	-	-	✓	-	✓	-	✓	-	-
LogoEco E HW	10	35	-	-	-	✓	-	✓	-	-	-	-

* Complete station (including housing, ball valve connector set).

¹⁾ The achievable outputs depend on the basic parameters of the network.

²⁾ With 20 K spread.

³⁾ With 30 K spread.

⁴⁾ Optional.

⁵⁾ Possible with special housing.

Thermostatically controlled

The thermostatic control technology is working temperature-controlled with the necessary thermostatic valve and thus ensures the constant supply of hot water during tapping based on temperature-dependent regulation of the primary volume flow.

- Is working without additional auxiliary energy (electrical current).
- Only low primary pressures needed.
- Controls to the hot water temperature setting, independent of changes in the cold water or primary temperature (e.g. summer/winter operation).
- There are no sensitive moving components installed in the cold and hot water.

Logotherm heat interface units are available on request with heat exchangers for drinking water with resistance against high conductivity values ($> 500 \mu\text{s/cm}$)!



Type	Hot water output		Heating-capacity [kW] ²	Installation depth from 110 mm	Wireless-reading ³	Type of assembly		Heating circuit		
	[l/min] ¹	[kW] ¹				Surface-mounted	Flush-mounted	Unmixed	Mixed	2nd-heating-circuit
LogoThermic CS M-Line UC	20	50	10	✓	-	✓	✓	✓	-	-
LogoThermic CS M-Line MC	20	50	10	-	-	✓	✓	-	✓	✓
LogoThermic S-Line UC	15	37	10	✓	✓	✓	✓	✓	-	-
LogoThermic S-Line MC	15	37	10	✓	✓	✓	✓	-	✓	✓
LogoThermic M-Line UC	20	50	10	✓	✓	✓	✓	✓	-	-
LogoThermic M-Line MC	20	50	10	✓	✓	✓	✓	-	✓	✓

¹⁾ The achievable power depends on the basic parameters of the network.

²⁾ At 20 K spread.

³⁾ Possible due to special housing.

THE LOGOTHERM PRINCIPLE

An individual heat source (boiler system, CHP, local/district heating transfer unit or similar) supplies the interface stations with heating-circuit water via a heating line. These decentrally distribute the thermal energy directly with the user (residential or commercial unit), control the heat requirement and/or generate hygienic, safe, hot water via a plate heat exchanger according to the continuous flow principle.

LOGOCOMFORT KS COMPLETED STATIONS

LogoComfort KS completed stations

The LogoComfort 600 and 600+ complete stations are compact, ready-to-fit, surface-mounted and decentralised interface stations in which the hot water preparation and heating of the living space are controlled proportionally according to volume. They include the housing and ball-valve connection set, enabling quick selection and delivery, as well as easy handling.

The LogoComfort 600 is available with static heating circuit, the LogoComfort 600+ with a direct mixing circuit and 6 underfloor manifolds or with direct mixing circuit and 9 underfloor manifolds, as well as a second static heating circuit.

LogoComfort complete station offered as surface-mounted or flush-mounted versions, or with copper-brazed or stainless steel-brazed heat exchangers.

- Hydraulically controlled.
- Max. heating/sanitary pressure: 6 bar/PN 10.
- Max. permissible heating/sanitary temperatures: 110 °C/110 °C.
- Heating capacity (at 20 K): 10 kW.
- Hot water output: 15* - 17** - 20*** l/min. (or 36* - 46** - 50*** kW)


* Defined with a supply temperature of 55 °C and a heating of 35 K (other flow regulators are required).

** Defined with a supply temperature of 65 °C and a heating of 40 K.

*** Defined with a supply temperature of 65 °C and a heating of 35 K (other flow regulators are required).

Logotherm interface stations can be configured with optional features upon request.



Type	Model	Heat-exchanger	Type of assembly		Order Code
LogoComfort KS 600 RH-AP	Static heating circuit (st. HC)	Copper	Surface-mounted	1	M11104HKAP
LogoComfort KS 600 RH-UP	Static heating circuit (st. HC)	Copper	Flush-mounted	1	M11104HKUP
LogoComfort KS 600+ FBH-AP	Mixing circuit (MC) with 6 manifolds	Copper	Surface-mounted	1	M11104.6MKAP
LogoComfort KS 600+ FBH-UP	Mixing circuit (MC) with 6 manifolds	Copper	Flush-mounted	1	M11104.6MKUP
LogoComfort KS 600 FBH/RH-AP	Mixing circuit with 9 manifolds and st. HC	Copper	Surface-mounted	1	M11104.9MKAP
LogoComfort KS 600 FBH/RH-UP	Mixing circuit with 9 manifolds and st. HC	Copper	Flush-mounted	1	M11104.9MKUP
LogoComfort KS 600 RH-AP	Static heating circuit (st. HC)	Stainless steel	Surface-mounted	1	M11104HKAPES
LogoComfort KS 600 RH-UP	Static heating circuit (st. HC)	Stainless steel	Flush-mounted	1	M11104HKUPES
LogoComfort KS 600+ FBH-AP	Mixing circuit (MC) with 6 manifolds	Stainless steel	Surface-mounted	1	M11104.6MKAPES
LogoComfort KS 600+ FBH-UP	Mixing circuit (MC) with 6 manifolds	Stainless steel	Flush-mounted	1	M11104.6MKUPES
LogoComfort KS 600 FBH/RH-AP	Mixing circuit with 9 manifolds and st. HC	Stainless steel	Surface-mounted	1	M11104.9MKAPES
LogoComfort KS 600 FBH/RH-UP	Mixing circuit with 9 manifolds and st. HC	Stainless steel	Flush-mounted	1	M11104.9MKUPES



Technical data – LogoComfort KS

	LogoComfort KS		
	600 RH	600+ FBH	600 FBH/RH
Dimensions of surface-mounted version (width x height x depth) [mm]	600 x 800 x 210	600 x 1000 x 210	850 x 1210 x 210
Dimensions of flush-mounted version (width x height x depth*) [mm]	610 x 835 x 175-220	610 x 1175 x 180-220	845 x 1175 x 195-220
Bottom connections	3/4"	3/4"	3/4"
Static heating circuit (st. HC)	✓	✓	✓
Mixer circuit with regulated servomotor, flow line temperature sensor, high-efficiency pump	-	✓	✓
Underfloor manifold with 6 outlet pieces (3/4" M Euro cone, 0.5-5l/min., 6 bar)	-	✓	-
Underfloor manifold with 9 outlet pieces (3/4" M Euro cone, 0.5-5l/min., 6 bar)	-	-	✓
Stainless-steel plate heat exchanger, vertical design to reduce the risk of calcification	✓	✓	✓
Control valve for heating (zone valve for connection to living space controller)	✓	✓	✓
Bleed valve with hose connection on the heating side	✓	✓	✓
Spool piece (3/4" x 110 mm) for an optional heat meter	✓	✓	✓
Pipework made from insulated stainless-steel corrugated pipes	✓	✓	✓
Mounted on base plate, with absolutely no mechanical stress, and inspected	✓	✓	✓
Dirt trap with stainless-steel sieve insert (including emptying function)	✓	✓	✓
Second cold water connection for the cold water supply of the apartment	✓	✓	✓
Spool piece (3/4" x 110 mm) for an optional cold water meter	✓	✓	✓
Keep warm function of the primary heating-circuit water inlet via an adjustable circulation bridge (35-65 °C)	✓	✓	✓
Differential pressure regulator/balancer (control range 10-40 kPa) for autom. hydr. station balancing	✓	✓	✓
Volume flow restrictor	✓	✓	✓
7 ball valves DN 20 with sensor mounting for the heat flow meter, domestic water ball valves, DVGW-approved	✓	✓	✓

* Width: dimension of front cover, cut-out dimension bigger. Height: dimension of front cover, or adjustable in height. Feet. Depth: adjustable.

Optional accessory overview LogoComfort KS

Optional accessories available for each station with the variant management system.


	LogoComfort KS			Order Code
	600 RH	600+ FBH	600 FBH/RH	
Meiflex SST 3/4 F/F x 500	Optional	Optional	Optional	M4325.1227.50
Double nipple DN16	Optional	Optional	Optional	M43.66124D

Prewiring concept - LogoComfort

Prewiring concept per interface station with FBH including:

- FBH terminal strip (IP44; supply voltage of actuator 230 V).
- Pump logic module.
- Hinged mounting plate for the terminal strip (for access to all assemblies).
- Safety temperature limiter (STL) with thermal actuator.
- Professional wiring and supply within the selected station.

Attention: The required actuators according to the number of floor heating circuits must be ordered separately!

Type		Order Code
For use with up to 8 zones (up to 18 actuators and therefore several can be connected per zone)	1	MB10560.01
For use with up to 10 zones (up to 18 actuators and therefore several can be connected per zone)	1	MB10560.02

LOGOCOMFORT SERIES


LogoComfort final stations

The LogoComfort 500, 600 and 600+ are compact, ready-connected and decentralised interface stations in which the hot water preparation and heating of the living space are controlled proportionally according to volume. LogoComfort 500 and 600 are available with static heating circuit (or optionally with mixing circuit configurable with add-on modules) and the LogoComfort 600+ with direct mixing circuit.

- Hydraulically controlled.
- Max. Heating / sanitary pressure: PN 10 / PN 10.
- Max. permissible heating / sanitary temperatures: 110 °C/110 °C.
- Heating capacity (at 20 K): 10 kW.

Logotherm interface stations with optional features can be configured upon request.



Type	Model	Hot water output					Order Code
		[l/min] *	[kW] *	[l/min] **	[kW] **		
LogoComfort 500	Static heating circuit (st. HC) and with 7 ball valves (DN20)	12	35	15	37	1	M11203.1
LogoComfort 500	Static heating circuit (st. HC) and with 7 ball valves (DN20) and circulation bridge (35-65°C)	12	35	15	37	1	M11204.1
LogoComfort 500	Static heating circuit (st. HC)	12	35	15	37	1	M11203.4
LogoComfort 500	Static heating circuit (st. HC) and circulation bridge (35-65°C)	12	35	15	37	1	M11204.9
LogoComfort 600	Static heating circuit (st. HC)	17	46	20	50	1	M11104.21
LogoComfort 600+	Mixing circuit (MC)	12	35	15	37	1	M11104.31
LogoComfort 600+	Mixing circuit (MC)	17	46	20	50	1	M11104.33

* Defined for a flow line temperature of 65 °C and heating of 40 K.

** Defined with a supply temperature of 65 °C and a heating of 35 K (other flow regulator are required).



Technical data – LogoComfort final stations

	LogoComfort final stations		
	500	600	600+
Dimensions (of the housings to be taken into account) (width x height x depth*) [mm]	480 x 637 x 175	567 x 635 x 175	567 x 657 x 175
Bottom connections	3/4"	3/4"	3/4"
Stainless-steel plate heat exchanger (copper-soldered), vertical design to reduce the risk of calcification	✓	✓	✓
PM controller with priority switching, anti-calcification coating and DVGW approval	✓	✓	✓
Control valve for heating water (zone valve for connection to living space controller)	✓	✓	✓
Bleed valve with hose connection on the heating side	✓	✓	✓
Spool piece (3/4" x 110 mm) for an optional heat meter	✓	✓	✓
Volume flow restrictor	✓	✓	✓
Pipework made from insulated stainless-steel corrugated pipes	✓	✓	✓
Mounted on base plate, with absolutely no mechanical stress, and inspected	✓	✓	✓
Dirt trap with stainless-steel sieve insert and emptying function	2	2	1
Second cold water connection for for the cold water supply of the apartment	✓	✓	✓
Spool piece (3/4" x 110 mm) for an optional cold water meter	✓	✓	✓
Differential pressure regulator – balancer (control range- 10 - 40 KPa) for autom. hydr. station balancing	✓	✓	✓


* Depending on the configuration and type of housing.

Prewiring concept - LogoComfort

Prewiring concept per interface station with FBH including:

- FBH terminal strip (IP44; supply voltage of actuator 230 V).
- Pump logic module.
- Hinged mounting plate for the terminal strip (for access to all assemblies).
- Safety temperature limiter (STL) with thermal actuator.
- Professional wiring and supply within the selected station.

Attention: The required actuators according to the number of floor heating circuits must be ordered separately!

Type		Order Code
For use with up to 8 zones (up to 18 actuators and therefore several can be connected per zone)	1	MB10560.01
For use with up to 10 zones (up to 18 actuators and therefore several can be connected per zone)	1	MB10560.02

Optional accessory overview LogoComfort final stations

Optional accessories available for each station with the variant management system.

	LogoComfort final stations			Order Code
	500	600	600+	
Connection group - M 13HE (thermostatically controlled mixer circuit with HE pump) up to 10 heating circuits	-	Optional	-	M10512.2
Connection group - M 13HE (thermostatically controlled mixer circuit with HE pump) 11 to 12 heating circuits	-	Optional	-	M10512.23
Additional connection for stat. heating circuit only up to manifold for 7 heating circuits, upwards of 8 heating circuits only in conjunction with 600 base	-	-	Optional	-
Heat exchanger (HE) for domestic water with high conductivity at 12 l/min.	Optional	-	Optional	MM10230.5SC
Heat exchanger (HE) for domestic water with high conductivity at 17 l/min.	-	Optional	Optional	MM10232.58ES
Connection group - M 27HE (thermostatically controlled mixer circuit with controlled actuator and HE pump) up to 10 heating circuits	-	Optional	-	M10512.21
Connection group - M 27HE (thermostatically controlled mixer circuit with controlled actuator and HE pump) 11 to 12 heating circuits	-	Optional	-	M10512.24
Domestic water circulation (pre-installed at the factory) with separate timer	-	Optional	Optional	M8
Connection group - M 12HE (thermostatically controlled mixer circuit with actuator and HE pump) up to 10 heating circuits *	-	Optional	-	M10512.22
Connection group - M 12HE (thermostatically controlled mixer circuit with actuator and HE pump) 11 to 12 heating circuits *	-	Optional	-	M10512.25
Corner mounting rail – wall-mounted & flush-mounted	-	-	Optional	M10203.161
Flush-mounted LC mounting rail for connection	-	Optional	Optional	M10203.12

* An external controller is required to control the mixing circuit.

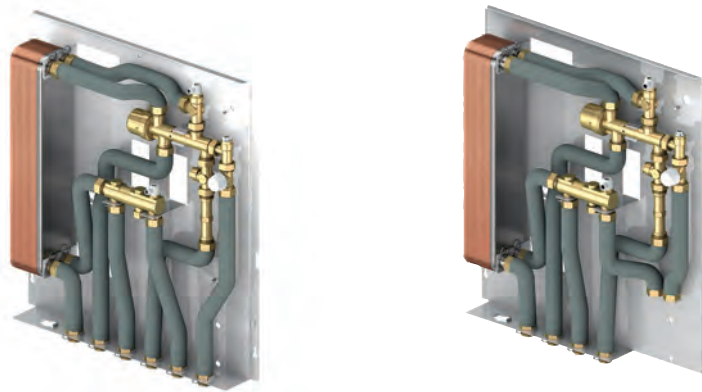
LogoComfort basic stations


Basic station for individual equipment.

The basic station can be equipped with additional elements. These are installed in the factory and delivered as a complete station.

Comprising:

- Stainless steel-plate heat exchanger.
- PF-controller with priority switching.
- Anti-calcification coating and DVGW approval.
- Control valve for heating water (apartment)/zone valve.
- Bleed valve heating side.
- Adaptor for heat meter.
- Volume flow restrictor for hot water
- Pipework made from insulated stainless steel corrugated pipes.
- Fully mounted on base plate and inspected.
- Heating capacity 10 kW (20 K).



Type	Hot water output					Order Code
	[l/min] *	[kW] *	[l/min] **	[kW] **		
LogoComfort 600 basic station	12	35	15	37	1	M11301
LogoComfort 600 basic station	17	46	20	50	1	M11303
LogoComfort 600+ basic station	12	35	15	37	1	M11304
LogoComfort 600+ basic station	17	46	20	50	1	M11306

* Defined at a flow temperature of 65 °C and a heating of 40 K.

** Defined at a flow temperature of 65 °C and a heating of 35 K.



Additional elements LogoComfort basic stations

The basic station can be equipped with additional elements. These are installed in the factory and delivered as a complete station.


Typ	For LogoComfort basic stations			Order Code
	500	600	600+	
Mixer circuit with actuator and HE pump	-	-	Optional	MM12HE
Thermostatically controlled mixer circuit with HE pump	-	-	Optional	MM13HE
Mixer circuit with regulated servomotor, FL temp. sensor, HE pump	-	-	Optional	MM27HE
2x dirt traps with drainage	Optional	Optional	-	MM1
Second cold water connection	Optional	Optional	Optional	MM2
Adjustable circulation bridge 35-65 °C	Optional	Optional	Optional	MM4
Balancer (differential pressure regulator)	Optional	Optional	Optional	MM5
Scalding protection	Optional	Optional	Optional	MM6
Domestic water circulation with timer	-	Optional	Optional	MM8
Heat exchanger (HE) for domestic water with high conductivity at 12 l/min.	Optional	-	Optional	MM10230.5SC
Heat exchanger (HE) for domestic water with high conductivity at 17 l/min.	-	Optional	Optional	MM10232.58ES
Connection at top with 7 connection lines (frame depth 50 mm) minimum price per connection line	Optional	Optional	-	MM9
2nd adaptor for cold water meter for stations with M2 module	Optional	Optional	Optional	M10253.8
Return line temperature limiter 35 - 65 °C	Optional	Optional	Optional	MM11
Straight-way ball valve set 5 x DN20 (FL ball valve for mounting of HFM sensor) DVGW-approved domestic water ball valves	Optional	Optional	Optional	MM19
Straight-way ball valve set 7 x DN20 (FL ball valve for mounting of HFM sensor) DVGW-approved domestic water ball valves	Optional	Optional	-	MM23
1x dirt trap with drainage	-	-	Optional **	MM26
Additional connection for static heating circuit only up to manifold for 5 heating circuits, upwards of 6 heating circuits only in conjunction with Basis 600	-	Optional	Optional	MM28
PWT insulated 35 kW	-	Optional	Optional	M10230.51
PWT insulated 46 kW	-	Optional	Optional	M10232.592
Meiflex SST $\frac{3}{4}$ F/F x 500	Optional	Optional	Optional	M4325.1227.50
Double nipple DN16	Optional	Optional	Optional	M43.66124D

Prewiring concept - LogoComfort

Prewiring concept per interface station with FBH including:

- FBH terminal strip (IP44; supply voltage of actuator 230 V).
- Pump logic module.
- Hinged mounting plate for the terminal strip (for access to all assemblies).
- Safety temperature limiter (STL) with thermal actuator.
- Professional wiring and supply within the selected station.

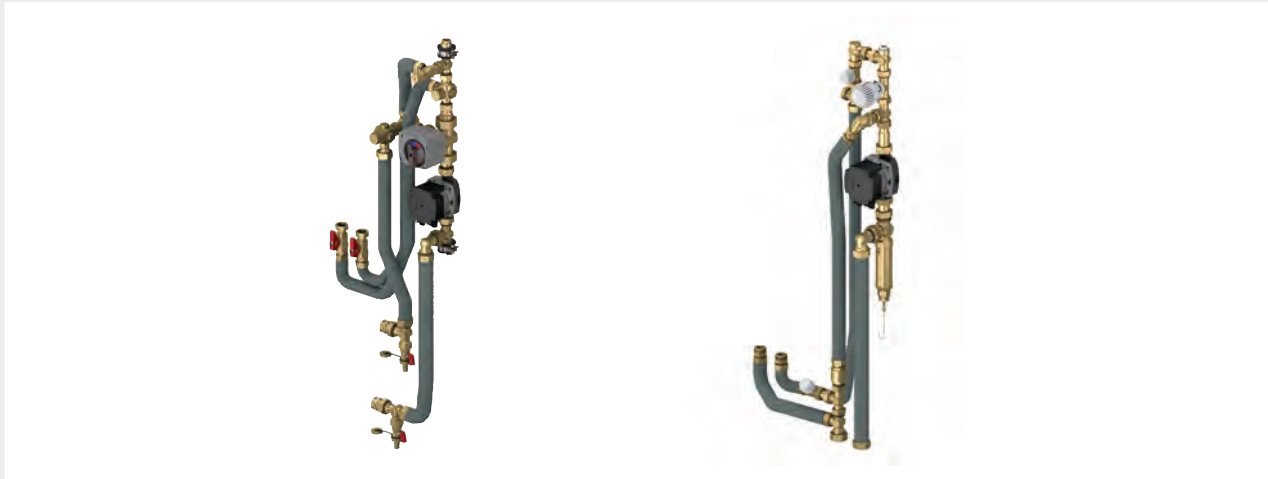
Attention: The required actuators according to the number of floor heating circuits must be ordered separately!


Type		Order Code
For use with up to 8 zones (up to 18 actuators and therefore several can be connected per zone)	1	MB10560.01
For use with up to 10 zones (up to 18 actuators and therefore several can be connected per zone)	1	MB10560.02

Connection sets for LogoComfort for manifold as mixer circuit

Connection sets for manifold as mixer circuit for flow line temperature control.

- For LogoComfort 600.
- With HE-pump and additional connection for static heating circuit.
- Mixing circuit applications are only possible with the LogoComfort 600.




Type	Model	Heating circuits		Order Code
Connection groups – M 13HE	Mixer circuit with thermostatic valve (M 13HE)	Up to 10 heating circuits	1	M10512.2
Connection groups – M 13HE	Mixer circuit with thermostatic valve (M 13HE)	11 to 12 heating circuits	1	M10512.23
Connection groups – M 27HE	Mixer circuit with regulated servomotor (M 27HE)	Up to 10 heating circuits	1	M10512.21
Connection groups – M 27HE	Mixer circuit with regulated servomotor (M 27HE)	11 to 12 heating circuits	1	M10512.24
Connection groups – M 12HE	Mixer circuit with servomotor (M 12HE) *	Up to 10 heating circuits	1	M10512.22
Connection groups – M 12HE	Mixer circuit with servomotor (M 12HE) *	11 to 12 heating circuits	1	M10512.25

* An external controller is required to control the mixing circuit.

Ball valves




Type	Model		Order Code
Ball valves 7 x DN 20	Ball valves 7 × DN 20 straight with heat flow meter sensor mounting, domestic water ball valves DVGW-certified.	1	M10252.32

Mounting rails for LogoComfort




Surface-mounted and flush-mounted.

Type	For	Model		Order Code
Mounting rail – surface-mounted & flush-mounted	LogoComfort 500	Ball valves 7 × DN 20 straight with heat flow meter sensor mounting, domestic water ball valves DVGW-certified.	1	M10203.160
Mounting rail – surface-mounted & flush-mounted	LogoComfort 600	Ball valves 7 × DN 20 straight with heat flow meter sensor mounting, domestic water ball valves DVGW-certified.	1	M10203.158
Mounting rail – surface-mounted & flush-mounted	LogoComfort 600+	Ball valves 7 × DN 20 straight with heat flow meter sensor mounting, domestic water ball valves DVGW-certified.	1	M10203.386

Flushing hose




For flushing the network

Type	Model		Order Code
Meiflex SST 3/4 F/F x 500	3/4" F x 3/4" F, 500 mm	1	M4325.1227.50

Flushing connections

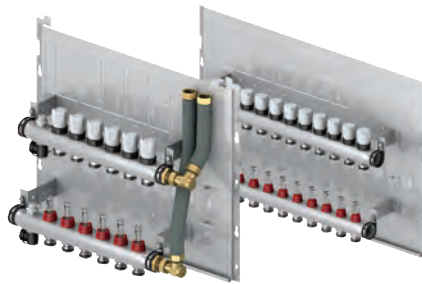



- MS flat sealing, 3/4".

Type		Order Code
Double nipple DN16	10	M43.66124D

Underfloor manifold

All underfloor manifolds are pre-assembled on a base plate and are fitted with the heating circuits specified below.



Type	Number of heating circuits	Model	LogoComfort 600+	LogoComfort 600		Order Code
Underfloor manifold 3B	3	B	✓	-	1	MM14
Underfloor manifold 4B	4	B	✓	-	1	MM15
Underfloor manifold 5B	5	B	✓	-	1	MM16
Underfloor manifold 6B	6	B	✓	-	1	MM17
Underfloor manifold 7B	7	B	✓	-	1	MTS-11301.17
Underfloor manifold 8B	8	B	✓	-	1	MTS-11301.18
Underfloor manifold 3E	3	E	-	✓*	1	M10512.3
Underfloor manifold 4E	4	E	-	✓*	1	M10512.4
Underfloor manifold 5E	5	E	-	✓*	1	M10512.5
Underfloor manifold 6E	6	E	-	✓*	1	M10512.6
Underfloor manifold 7E	7	E	-	✓*	1	M10512.7
Underfloor manifold 8E	8	E	-	✓*	1	M10512.8
Underfloor manifold 9E	9	E	-	✓*	1	M10512.9
Underfloor manifold 10E	10	E	-	✓*	1	M10512.10
Underfloor manifold 11E	11	E	-	✓*	1	M10512.31
Underfloor manifold 12E	12	E	-	✓*	1	M10512.32

* Application for stations in wide version >600 mm.

Technical data, underfloor manifold

Specifications	Underfloor manifold	
	Type B	Type E
Width x height [mm] (dimensions of the housings to be taken into account)	600 x 450	792 x 500
Connection to the heating circuits	3/4" M - Eurokonus	3/4" M - Eurokonus
Arrangement of the supply connections:	top	side
Heating circuit manifold material	Stainless steel	Stainless steel
Control range flow rate limiter [l/min.]	0.5 - 5	0.5 - 5
Max. pressure load (bar)	6	6
Integrated zone valve	-	-
Valve inserts M30 x 1.5 with manual adjustment flaps	✓	✓

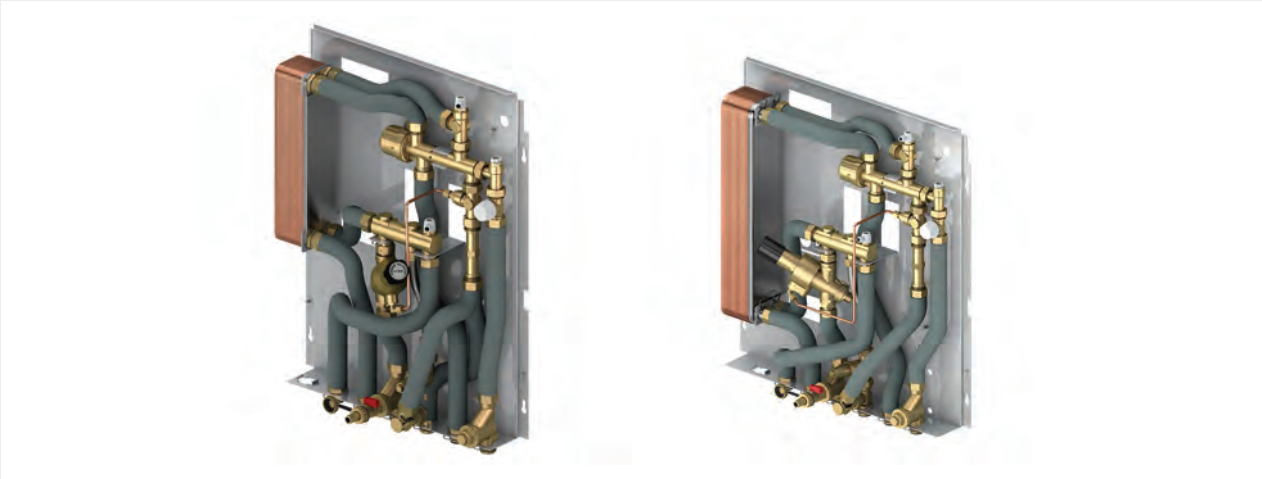
LogoComfort thermal heat exchanger (BE)


LogoComfort thermal heat exchangers (BE) are compact, plug-and-play, decentralised interface stations, in which the hot water preparation and heating of the living space are controlled proportionally according to volume. They are surface-mounted installations that can be used to replace existing boilers. The interface station connections are designed to ensure easy replacement.

Comprising:

- Stainless steel-plate heat exchanger.
 - PF-controller with priority switching, anti-calcification coating and DVGW approval.
 - Control valve for heating water (apartment)/zone valve.
 - Bleed valve heating side.
 - Adaptor for heat meter.
 - Volume flow restrictor for hot water.
 - Dirt trap with drainage device.
 - Pipework made from insulated stainless steel corrugated pipes.
 - DVGW-approved domestic water ball valves.
 - Fully mounted on base plate and inspected.
-
- Heating capacity 10 kW (20 K).
 - Max. heating/sanitary pressure: PN 10 / PN 10.
 - Max. permissible heating/sanitary temperatures: 110 °C/110 °C.

Dimensions of LogoComfort TTG type 1 and type 2 (please note housing dimensions) (width x height x depth): 480 x 637 x 175 mm.
 Dimensions of LogoComfort TTG type 3 and type 4 (please note housing dimensions) (width x height x depth): 576 x 635 x 175 mm.



Type	Model	Hot water output					Order Code
		[l/min] *	[kW] *	[l/min] **	[kW] **		
LogoComfort BE Typ 2	With adjustable circulation bridge 35 - 65 °C	12	35	15	37	1	M11202.3TAGB
LogoComfort BE Typ 4	With adjustable circulation bridge 35 - 65 °C	17	46	20	50	1	M11202.4TAGB

* Defined at a flow temperature of 65 °C and a heating of 40 K.




Optional accessory overview LogoComfort BE

Optional accessories available for each station with the variant management system.

	LogoComfort BE		Order Code
	Type hot water output 12 [l/min]	Type hot water output 17 [l/min]	
Heat exchanger (HE) for domestic water with high conductivity	MM10230.5SC	MM10232.58ES	-
Ball valves 6 x DN 20	Optional	Optional	M10252.35
Connector set, flush-mounted (TTG)	Optional	Optional	MB-46123.1TAG
Wall-mounted cladding 4	Optional	-	M11200.1L
Wall-mounted cladding 6	-	Optional	M11200.2L
Wall-mounted cladding 11	Optional	-	M11200.1KL
Wall-mounted cladding 14	-	Optional	M11200.2KL
Room temperature controller Salus HTRP230	Optional	Optional	M10561.31
Electro-thermal actuator	Optional	Optional	M10560.98
STM, underfloor heating circuit	Optional	Optional	M10560.94
Controller set 1	Optional	Optional	M10561.3
Controller set 2	Optional	Optional	M10560.65
Controller set 4	Optional	Optional	M10560.7
Controller set 5	Optional	Optional	M10561.4
Controller set 6	Optional	Optional	M10561.5
Controller set 7	Optional	Optional	M10561.51

Connection set flush-mounted for LogoComfort BE

- Stainless steel corrugated pipe DN 16, 2 m.
- FixLock double nipple, 6 pcs.
- FixLock screw fitting set, 2 pcs.
- Elbow R ½ F/M, 2 pcs.
- Elbow R ¾ F/M, 2 pcs.

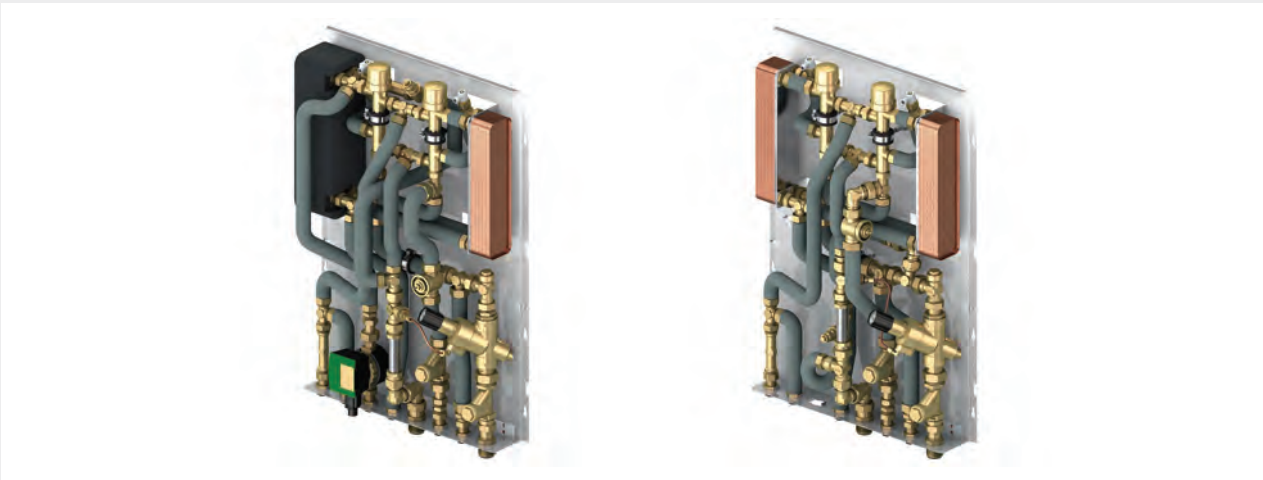
Type		Order Code
Connection set surface-mounted (BE)	1	MB-46123TAG


LogoComfort special variant (HP)

The LogoComfort for increased hot water demand is a compact, plug-and-play, surface-mounted, decentralised interface station in which the hot water preparation and heating of the living space are controlled proportionally according to volume. This interface station has a high hot water preparation and heating output for guaranteeing a high degree of comfort.

Comprising:

- 2 stainless steel-plate heat exchangers.
 - 2 PF-controllers with priority switching, anti-calcification coating and DVGW approval.
 - Adaptor for heat meter (1" x 130 mm) & cold water meter (3/4" x 110 mm), suitable for continuous use.
 - 2 volume flow restrictors for hot water 12 l/min.
 - Dirt trap.
 - Pipework made from insulated stainless steel corrugated pipes.
 - Differential pressure regulator (balancer).
 - Adjustable circulation bridge 35 - 65 °C.
 - DVGW-approved domestic water ball valves.
 - Fully mounted on base plate and inspected.
 - FL ball valve as mount for heat flow meter sensor.
 - Heating capacity 20 kW (20 K).
-
- Max. heating/sanitary pressure: PN 10 / PN 10.
 - Max. permissible heating/sanitary temperatures: 110 °C/110 °C.
 - Dimensions (please note housing dimensions) (width x height x depth): 576 x 845 x 190mm.



Type	Model	Hot water output			Order Code
		[l/min] *	[kW] *		
LogoComfort HP Typ 1	With drinkwater circulation	24	65	1	M11104.34
LogoComfort HP Typ 2	Without drinkwater circulation	24	65	1	M11104.35

* Defined at a flow temperature of 65 °C and a heating of 40 K.




Optional accessory overview LogoComfort HP

Optional accessories available for each station with the variant management system.

	LogoComfort HP		Order Code
	Without circulation	With circulation	
Ball valves with HFM sensor mount, DVGW-approved DW ball valves, 5 x DN20 and 2 x DN 25 straight	Optional	-	M10252.321
Ball valves with HFM sensor mount, DVGW-approved DW ball valves, 6 x DN20 and 2 x DN 25 straight	-	Optional	M10252.331
Meiflex SST 3/4 F/F x 500	Optional	Optional	M4325.1227.50
Double nipple DN16	Optional	Optional	Optional

Wall-mounted cladding




Type	With door	Long ¹⁾	Wireless ²⁾	Dimensions				Order Code
				Width [mm]	Height [mm]	Depth [mm]		
Surface-mounted cladding 6	-	✓	-	600	1000	210	1	M11200.2L
Surface-mounted cladding 10	-	✓	-	850	1210	210	1	M11100.77
Surface-mounted cladding 14	-	✓	✓	600	1000	210	1	M11200.2KL

¹⁾ Height ≥ 1,000 mm.

²⁾ Housing with the option of wireless meter reading for consumption metering thanks to plastic insert.

Flush-mounted cladding



Type	With door	Long ¹⁾	Wireless ²⁾	Dimensions				Order Code
				Width [mm]	Height [mm]	Depth [mm]		
The extended cover into the wall	-	-	-	610	118	150-220	1	M11100.4
Flush-mounted cladding 5	-	✓	-	825	1175	150 - 220	1	M11100.76

¹⁾ Height ≥ 1,000 mm.


²⁾ Housing with the option of wireless meter reading for consumption metering thanks to plastic insert.

Height-adjustable feet



For flush-mounted covers.


- Adjustability: 100 - 170 mm.

Type	Width [mm]		Order Code
Height-adjustable feet 2	610	1	M11100.21
Cladding for manifold 1	600	1	M11100.71

Connection sets for an existing manifolds



Mixing circuit for flow line temperature control with HE pump and additional connection for static heating circuit.

Type		Order Code
Connection group thermostatic (M 13HE)	1	M10512.11
Connection group with actuator (M 12HE)	1	M10512.12
Connection group with controlled actuator (M 27HE)	1	M10512.13

Note: Connection set for LogoComfort higher domestic hot water performances. Installation and delivery only possible with an flush mounting case M11100.76 or/and with a surface mounting case M11100.77.

LogoComfort special variant (4RS)


LogoComfort for use in 4-line systems in which the hot water preparation from the high-temperature line is controlled proportionally according to volume and the external heating circuit manifold is supplied via the low-temperature line.

- Max. heating/sanitary pressure: PN 10 / PN 10.
- Max. permissible heating/sanitary temperatures: 110 °C/110 °C.
- Dimensions (please note housing dimensions) (width x height x depth): 580 x 695 x 175.

Comprising:

- Stainless steel-plate heat exchanger.
- PF-controller with pre-adjustment option, anti-calcification coating and DVGW approval.
- Bleed valve heating side.
- Adaptors for high temperature heat meters, cold water and hot water meters.
- Volume flow restrictor for hot water 17 l/min.
- Pipework made from insulated stainless steel corrugated pipes.
- Ball valves 5 x DN 20 straight.
- Fully mounted on base plate and inspected.
- DVGW-approved domestic water ball valves.
- Second cold water connection for residential building.



Type	Model	Hot water output					Order Code
		[l/min] *	[kW] *	[l/min] **	[kW] **		
LogoComfort S 4RS Type 1	Without circulation bridge	17	46	20	50	1	M10231.42LV2
LogoComfort S 4RS Type 2	With adjustable circulation bridge 45 - 65 °C	17	46	20	50	1	M10231.42LV

* Defined at a flow temperature of 65 ° C and a heating of 40 K.



Optional accessory overview LogoComfort 4RS


Optional accessories available for each station with the variant management system.

	LogoComfort 4RS		Order Code
	Without circulation	With circulation	
Meiflex SST 3/4 F/F x 500	Optional	Optional	M4325.1227.50
Double nipple DN16	Optional	Optional	M43.66124D
Wall-mounted cladding 6	Optional	Optional	M11200.2L
Wall-mounted cladding 9	Optional	Optional	M11100.5
Wall-mounted cladding 14	Optional	Optional	M11200.2KL
Additional cover for manifold	Optional	Optional	M11100.5
Flush-mounted cladding 3	Optional	Optional	M11100.4
Flush-mounted cladding 9	Optional	Optional	M11100.4K
Flush-mounted cladding 11	Optional	Optional	M11100.24
Flush-mounted cladding 15	Optional	Optional	M11100.24K
Flush-mounted cladding 1a	Optional	Optional	M11200.2
Heat exchanger (HE) for domestic water with high conductivity	Optional	Optional	MM10232.58ES

Underfloor manifold

All underfloor manifolds are pre-assembled on a base plate and are fitted with the heating circuits specified below.



Type	Number of heating circuits	Model		Order Code
Underfloor manifold 4C	4	C	1	MTS-11301.23
Underfloor manifold 5C	5	C	1	MTS-11301.22
Underfloor manifold 5D	5	D	1	M10513.5
Underfloor manifold 6C	6	C	1	MTS-11301.21
Underfloor manifold 6D	6	D	1	M10513.6
Underfloor manifold 7C	7	C	1	MTS-11301.24
Underfloor manifold 7D	7	D	1	M10513.7
Underfloor manifold 8D	8	D	1	M10513.8
Underfloor manifold 9D	9	D	1	M10513.9
Underfloor manifold 10D	10	D	1	M10513.10
Underfloor manifold 11D	11	D	1	M10513.11

Note: The surface and concealed hoods should be selected according to the width of the distributor.

Technical data, underfloor manifold

Specifications	Underfloor manifold	
	Type C	Type D
Width x height [mm] (dimensions of the housings to be taken into account)	600 x 450	792 x 500
Connection to the heating circuits	3/4" M - Eurokonus	3/4" M - Eurokonus
Arrangement of the supply connections:	bottom	bottom
Heating circuit manifold material	Stainless steel	Stainless steel
Control range flow rate limiter [l/min.]	0.5 - 5	0.5 - 5
Max. pressure load (bar)	6	6
Integrated zone valve	-	-
Valve inserts M30 x 1.5 with manual adjustment flaps	✓	✓
Incl. adaptors for converting to flat sealing 3/4" male thread connection to the heating circuits	-	-
For mounting under the device in combination with housing 11100.72, 11100.73 and connection group	-	-
Adaptor for heat flow meter	✓	✓
Bleeding and drainage	✓	-


LOGOPACK

LogoPack

The LogoPack units are compact, ready-to-fit, decentralised interface stations in which the hot water preparation and heating of the living space are controlled proportionally according to volume, designed for riser line installation in restricted spaces (duct installation).

- Hydraulically controlled.
- Max. Heating / sanitary pressure: PN 10 / PN 10.
- Max. permissible heating / sanitary temperatures: 110 °C/110 °C.
- Heating capacity (at 20 K): 10 kW.



Type	Hot water output					Order Code
	[l/min] *	[kW] *	[l/min] **	[kW] **		
LogoPack type C	12	35	15	37	1	M10260.24LPFOR
LogoPack type C1	12	35	15	37	1	M10260.26LPOR

* Defined for a flow line temperature of 65 °C and heating of 40 K.

** Defined with a supply temperature of 65 °C and a heating of 35 K (other flow regulator are required).



Technical data – LogoPack

	LogoPack	
	Type C	Type C1
Dimensions (width x height x depth) [mm]	430 x 500 x 200	365 x 500 x 245
Axial distance of riser lines (FL & RL)	170	90
Riser line connections	1 1/2" M	1 1/2" M
Sanitary connections (flat sealing)	3/4" M	3/4" M
Dwelling heating circuit connections	1/2" M	1/2" M
Stainless-steel plate heat exchanger (copper-soldered), vertical design to reduce the risk of calcification	✓	✓
PM controller with priority switching, anti-calcification coating and DVGW approval	✓	✓
Control valve for heating water (zone valve for connection to living space controller)	✓	✓
Bleed valve with hose connection on the heating side	✓	✓
Spool piece (3/4" x 110 mm) for an optional heat meter	✓	✓
Volume flow restrictor	✓	✓
Pipework made from insulated stainless-steel corrugated pipes	✓	✓
Integrated flow line and return line risers made from insulated stainless-steel corrugated pipes	✓	✓
Fully mounted and inspected	✓	✓
Dirt trap with stainless steel sieve insert	✓	✓

Optional accessory overview LogoPack


Optional accessories available for each station with the variant management system.

	LogoPack		Order Code
	Typ C	Typ C1	
Inspection frame 1	-	Optional	M66200.6
Inspection frame 3	Optional	Optional	M66200.7
Heat exchanger (HE) for domestic water with high conductivity	Optional	Optional	MM10230.5SC
Room temperature controller Salus HTRP230	Optional	Optional	M10561.31
Electro-thermal actuator	Optional	Optional	M10560.98
STM, underfloor heating circuit	Optional	Optional	M10560.94
Controller set 1	Optional	Optional	M10561.3
Controller set 2	Optional	Optional	M10560.65
Controller set 4	Optional	Optional	M10560.7
Controller set 5	Optional	Optional	M10561.4
Controller set 6	Optional	Optional	M10561.5
Controller set 7	Optional	Optional	M10561.51


Short end sections



- As line end with circulation bridge (35 – 65 °C).

Type	For	Model		Order Code
Short-circuit sections	LogoPack	Top with bleed valves	1	M10522.2
Short-circuit sections	LogoPack	Bottom with drainage device	1	M10523.2

Union fittings

Type	Model		Order Code
Union fittings	Pair of half shells on FixLock, DN 32 for devices prior to 11/96 (LogoPack)	1	M90180.1
Union fittings	1 x LogoPack DN 40, on corrugated pipe DN 40 (including half shell)	1	ME-46119.7

Differential pressure regulator (balancer)



- 0.5 m pilot line, return flow ball valve with pilot line connection.

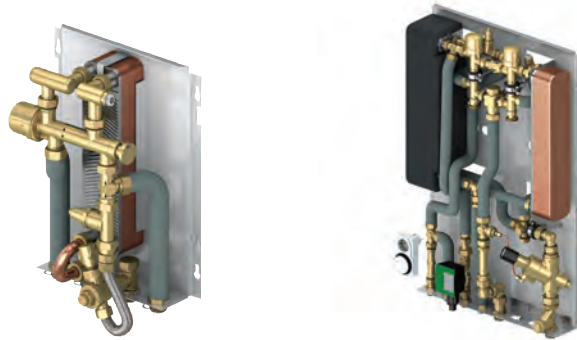
Type	For	Model		Order Code
Differential pressure regulator (balancer)	LogoPack	Set DN 20 for individual connection	1	M18120
Differential pressure regulator (balancer)	LogoPack	Set DN 32 for max. 5 stations	1	M18140


LOGOVITAL

LogoVital

The LogoVital are compact, ready-to-fit, surface-mounted and decentralised interface stations in which the hot water preparation is controlled proportionally according to volume. These interface stations are also available with a high hot water preparation output to guarantee a high degree of comfort.

- Hydraulically controlled.
- Max. Heating / sanitary pressure: PN 10 / PN 10.
- Max. permissible heating / sanitary temperatures: 110 °C / 110 °C.



Type	Model	Hot water output					Order Code
		[l/min] *	[kW] *	[l/min] **	[kW] **		
LogoVital type 1	-	12	35	15	37	1	M10231.35WWB
LogoVital type 2	-	17	46	20	50	1	M10231.41WWB
LogoVital type 3	Without domestic water circulation	24	65	-	-	1	M10231.49
LogoVital type 4	With domestic water circulation	24	65	-	-	1	M10231.50

* Defined for a flow line temperature of 65 °C and heating of 40 K.

** Defined with a supply temperature of 65 °C and a heating of 35 K (other flow regulator are required).



Technical data – LogoVital

	LogoVital			
	Type 1	Type 2	Type 3	Type 4
Dimensions (of the housings to be taken into account) (width x height x depth *) [mm]	298 x 391 x 170	428 x 528 x 190	580 x 925 x 150	580 x 925 x 188
Connections – cold water/hot water and circulation (where featured) bottom	3/4"	3/4"	3/4"	3/4"
Connections – flow and return line building connection network bottom	3/4"	3/4"	1"	1"
Stainless-steel plate heat exchanger (copper-soldered), vertical design to reduce the risk of calcification	1	1	2	2
PM controller with priority switching, anti-calcification coating and DVGW approval	1	1	2	2
Bleed valve with hose connection on the heating side	✓	✓	✓	✓
Spool piece (1" x 130 mm) for an optional heat meter	-	-	✓	✓
Volume flow restrictor	✓	✓	✓	✓
Pipework made from insulated stainless-steel corrugated pipes	✓	✓	✓	✓
Mounted on base plate, with absolutely no mechanical stress, and inspected	✓	✓	✓	✓
Dirt trap with stainless-steel sieve insert	✓	✓	✓	✓
Spool piece (3/4" x 110 mm) for an optional cold water meter	M10252.51**	-	✓	✓
Adjustable circulation bridge (35-65 °C)	M10252.22**	M10252.23**	-	✓
Differential pressure regulator – balancer (control range- 10 - 40 KPa) for autom. hydr. station balancing	-	-	✓	✓
Domestic water circulation with separate timer, heat exchanger insulation and adjustable circulation bridge (35 - 65 °C) for keep warm function in the primary heating circuit	M10252.44**	M10252.45**	-	✓

* Depending on the configuration and type of housing.

** Optional assemblies, which can be ordered and integrated

Optional accessory overview LogoVital


Optional accessories available for each station with the variant management system.

	LogoVital				Order Code
	Type 1	Type 2	Type 3	Type 4	
Heat exchanger (HE) for domestic water with high conductivity	MM10230.5SC	MM10230.5SC	on request	on request	M10252.51
MBS adaptor 3/4" x 110mm LogoVital Type 1	Optional	-	-	-	M10252.51
Wall-mounted cladding 1	Optional	-	-	-	M10203.132
Wall-mounted cladding 2	-	Optional	-	-	M10203.133
Wall-mounted cladding 6	-	-	Optional	Optional	M11200.2L
Wall-mounted cladding 14	-	-	Optional	Optional	M11200.2KL
Wall-mounted cladding 3	-	-	Optional	Optional	M11100.4
Flush-mounted cladding 10*	-	-	Optional	Optional	M11100.23
Height-adjustable feet 2	-	-	Optional	Optional	M11100.21

* An external controller is required to control the mixing circuit.

Ball valves for LogoVital




Type	For	Model		Order Code
Ball valves 4 x DN 20	LogoVital Typ 1 - Typ 2	Domestic water ball valves DVGW-certified, 4 x DN 20 straight	1	M10252.3
Angle ball valves	-	Domestic water ball valves DVGW-certified, 4 x DN 20 straight	1	M10252.31
Ball valves 3 x DN 20 / 2 x DN 25	LogoVital Typ 3 - Typ 4	Domestic water ball valves DVGW-certified 3 x DN 20 & 2 x DN 25 straight	1	M10252.341

Scalding protection




- Thermal water mixer (adjustment range 35-60 °C) for hot water limitation.
- Max. 10 bar, 3/4" M.

Type	For		Order Code
Scalding protection	LogoVital Typ 1 - Typ 2	1	M69050.9

Wall-mounted cladding




Type	With door	Long ¹⁾	Wireless ²⁾	Dimensions				Order Code
				Width [mm]	Height [mm]	Depth [mm]		
Surface-mounted cladding 1	-	-	-	310	500	170	1	M10203.132
Surface-mounted cladding 2	-	-	-	440	637	190	1	M10203.133


¹⁾ Housing with the option of wireless meter reading for consumption metering thanks to plastic insert.

²⁾ Height ≥ 1,000 mm.

Potable water circulation for LogoVital

Type	Hot water output		Order Code
Potable water circulation with circulation pump	35	1	M10252.44
Potable water circulation with circulation pump	35	1	M10252.45

Circulation bridge (45 - 65 °C) for LogoVital

Type		Order Code
Circulation bridge	1	M10252.22
Circulation bridge	1	M10252.23

LogoVital LPT


LogoVital LPT for use in low-energy houses with proportional-volume-regulated hot water preparation.

- Max. heating/sanitary pressure: PN 10 / PN 10.
- Max. permissible heating/sanitary temperatures: 110 °C / 110 °C.
- Dimensions (please note housing dimensions) (width x height x depth): 480 x 695 x 175mm.

Comprising:

- Stainless steel plate heat exchanger.
- PF-controller with pre-adjustment option, anti-calcification coating and DVGW approval.
- Bleed valve on the heating side.
- Adaptor for the heat meter, (110 mm x3/4").
- Adaptors for cold water and hot water meters.
- Flow rate limiter for hot water: 12 l/min.
- Pipework made from insulated stainless steel corrugated pipes.
- Ball valves: 5 x DN 20 straight.
- DVGW-approved domestic water ball valves.
- Fully mounted on base plate and inspected.



Type	Version	Hot water output					Order Code
		[l/min] *	[kW] *	[l/min] **	[kW] **		
LogoVital LPT Type 1	without circulation bridge	12	30	17	42	1	M10231.41LV2
LogoVital LPT Type 2	with adjustable circulation bridge 35 - 65 °C	12	30	17	42	1	M10231.41LV
LogoVital LPT Type 3 ***	without circulation bridge	-	-	12	29	1	M10231.41LV6
LogoVital LPT Type 4 ***	with adjustable circulation bridge 35 - 65 °C	-	-	12	29	1	M10231.41LV4

* Defined with a supply temperature of 50 °C and a heating of 35 K.

** Defined with a supply temperature of 60 °C and a heating of 35 K (other flow regulator are required).

*** With a small heat exchanger.



Optional accessory overview LogoVital LPT

Optional accessories available for each station with the variant management system.

	LogoVital LPT				Order Code
	Type 1	Type 2	Type 3	Type 4	
Wall-mounted cladding 3	Optional	Optional	Optional	Optional	M11200.1
Wall-mounted cladding 11	Optional	Optional	Optional	Optional	M11200.1K
Flush-mounted cladding 1a	Optional	Optional	Optional	Optional	M11200.2
Flush-mounted cladding 6	Optional	Optional	Optional	Optional	M11200.2K

LOGOMATIC G2

The LogoMatic G2 range is a new generation of highly efficient, compact, plug-and-play, decentralised and wall-mounted thermal interface stations which offer electronically controlled hot water preparation, in line with the latest standards of hygiene, and space heating. Courtesy of its adjustable primary volume flow rate and the associated primary energy capability, the LogoMatic G2 uses the minimum amount of energy required in hot water preparation; depending on the primary network conditions, it can further reduce the return line temperatures, thereby improving the network efficiency of the system as a whole. Also built into the system is adaptive hot water priority, automatic switching to increase customer comfort.

The LogoMatic Comfort series offers 3 different output classes:

- The S-Line.
- The M-Line.
- The L-Line.

Each output class is offered as follows:

- As a ready-to-use thermal interface station with a wide choice of complementary products.
- With the supply of an unmixed heating circuit (UC) for radiator heating systems, a mixed circuit (MC) for underfloor heating systems or combined for both types of heating system (MC-UC).
- With or without domestic hot water circulation (DHW-C).
- With a simple copper-brazed (CU) or sealed (SX) plate heat exchanger.
- As a possible station for flush-mounted installation (F) by means of a coated steel housing or for surface use (SI) by means of a fully insulated housing including white designer front panel.

Additional features:

- The LogoMatic G2 M-Line is also available as a complete thermal interface station including various complementary products such as a ball valve connection set, a surface- or flush-mounted installation housing and, depending on the type, a suitable flush-mounted manifold!
- Available as a surface-mounted or “invisible”, space-saving flush-mounted version (from a depth of 110 mm, meaning that integration into lightweight walls is also possible).
- State of the art thanks to electronic control (APP control* possible).
- Highly efficient by virtue of its construction, type of control system and full EPP insulation.
- For indirect hot water preparation & direct heat supply.
- A high level of comfort thanks to the station’s adjustable primary heat retention function (not via the heat exchanger and measurement circuit of the hot water meter).
- Optional wireless consumption monitoring using an insulation housing with wireless transmission (available to order).
- No sensitive moving parts in the domestic water supply for optimised operation with a long service life.
- Optional thermal separation of the cold water connections to reduce the influence of heat on the cold water (in the case of the use of insulation housings).
- Differential-pressure-controlled primary circuit for secondary heating.

Control function:

- Automatic receipt of a commissioning log with setting values displayed as a CSV file.
- Domestic water circulation with various setting and duration options.
- Hot water circuit can be switched into disinfection mode (only when domestic hot water circulation is in use).
- Adjustable hot water temperatures (30-60°C).
- Frost protection function.
- Profile function (floor screed heating function).
- Heat demand via reference room control (ON/OFF via a potential-free contact).
- Heat demand via weather-dependent heating circulation control.
- Heating control via fixed value control.
- Alarm and fault output.
- Data communication by Mod-Bus (in planning).
- Domestic water circulation with various setting and duration options.
- Control by APP* and connection via Bluetooth for ease of commissioning using commissioning assistant, for firmware updates, etc.

*For control by APP and generation of the interface between the terminal device and the LogoMatic G2, the terminal device must satisfy the following requirements


- iOS firmware version 12 or higher
- Android firmware version 6 or higher
- Possibility of access by the APP to the camera
- Bluetooth 4.0 or Bluetooth LE

LogoMatic G2 complete stations

Can be combined with:

- Various underfloor manifolds from 3 to 12 mixing circuits.
- When using mixed circuits, it can be combined with another unmixed heating circuit for the supply of e.g. a towel radiator with a higher primary temperature.
- Various painted steel housings as surface-mounted and flush-mounted versions as well as fully insulated surface-mounted housing with white design front panel.
- Mounting rails to support during the installation phase and final assembly.
- Simple ball valve connection sets.
- Various consumption records for cold water and thermal energy (heat meter).
- Pre-wiring concepts for the pre-wiring of underfloor manifolds, terminal strips, etc.



Type	Version		Type of heating	DHW-C	Type of heat exchanger	Type of mounting			DHW performance [l/min. / kW]				Order Code
	Line	CS				F	S	SI	2.1	2.2	2.3		
LM G2	M-Line	✓	UC	-	CU	-	-	✓	16/39	17/42	17/47	1	M11114.1HKAP
LM G2	M-Line	✓	UC	-	CU	✓	-	-	16/39	17/42	17/47	1	M11114.1HKUP
LM G2	M-Line	✓	6MC	-	CU	-	-	✓	16/39	17/42	17/47	1	M11114.61MKAP
LM G2	M-Line	✓	6MC	-	CU	✓	-	-	16/39	17/42	17/47	1	M11114.61MKUP
LM G2	M-Line	✓	8MC-UC	-	CU	-	-	✓	16/39	17/42	17/47	1	M11114.81MKAP
LM G2	M-Line	✓	8MC-UC	-	CU	✓	-	-	16/39	17/42	17/47	1	M11114.81MKUP
LM G2	M-Line	✓	UC	-	SX	-	-	✓	16/39	17/42	17/47	1	M11114.1HKAPSX
LM G2	M-Line	✓	UC	-	SX	✓	-	-	16/39	17/42	17/47	1	M11114.1HKUPSX
LM G2	M-Line	✓	6MC	-	SX	-	-	✓	16/39	17/42	17/47	1	M11114.61MKAPSX
LM G2	M-Line	✓	6MC	-	SX	✓	-	-	16/39	17/42	17/47	1	M11114.61MKUPSX
LM G2	M-Line	✓	8MC-UC	-	SX	-	-	✓	16/39	17/42	17/47	1	M11114.81MKAPSX
LM G2	M-Line	✓	8MC-UC	-	SX	✓	-	-	16/39	17/42	17/47	1	M11114.81MKUPSX

CS = complete stations, UC = unmixed heating circuit, MC = mixed heating circuit, F = flush mounting version, S = surface mounting version, SI = surface mounting version for a insulated case / cover, DHWC = domestic hot water circulation, CU = cooper soldered plate heat exchanger, SX = sealed cooper soldered plate heat exchanger

2.1 Defined at a prim. flow temp. of 55°C and a DHW temperature increase of 35 K.

2.2 Defined at a prim. flow temp. of 65°C and a DHW temperature increase of 40 K.

2.3 Defined at a prim. flow temp. of 65°C and a DHW temperature increase of 35 K.


Note: all illustrations are similar to real design. It is possible that the equipment and scope of delivery may vary. The scope of delivery are defined in the product description.


LogoMatic G2 final stations

Can be combined with:

- Various underfloor manifolds from 3 to 12 mixing circuits.
- When using mixed circuits, it can be combined with another unmixed heating circuit for the supply of e.g. a towel radiator with a higher primary temperature.
- Various painted steel housings as surface-mounted and flush-mounted versions as well as fully insulated surface-mounted housing with white design front panel.
- Mounting rails to support during the installation phase and final assembly.
- Simple ball valve connection sets.
- Various consumption records for cold water and thermal energy (heat meter).
- Pre-wiring concepts for the pre-wiring of underfloor manifolds, terminal strips, etc.



Type	Version		Type of heating	DHW-C	Type of heat exchanger	Type of mounting			DHW performance [l/min. / kW]				Order Code
	Line	CS				F	S	SI	2.1	2.2	2.3		
LM G2	S-Line	-	UC	-	CU	✓	✓	-	12 / 29	12 / 29	12 / 33	1	M11114.4
LM G2	S-Line	-	MC	-	CU	✓	✓	-	12 / 29	12 / 29	12 / 33	1	M11114.5
LM G2	S-Line	-	MC-UC	-	CU	✓	✓	-	12 / 29	12 / 29	12 / 33	1	M11114.6
LM G2	M-Line	-	UC	-	CU	✓	✓	-	16 / 39	17 / 42	17 / 47	1	M11114.41
LM G2	M-Line	-	MC	-	CU	✓	✓	-	16 / 39	17 / 42	17 / 47	1	M11114.51
LM G2	M-Line	-	MC-UC	-	CU	✓	✓	-	16 / 39	17 / 42	17 / 47	1	M11114.61
LM G2	L-Line	-	UC	-	CU	✓	✓	-	22 / 54	22 / 54	22 / 61	1	M11114.42
LM G2	L-Line	-	MC	-	CU	✓	✓	-	22 / 54	22 / 54	22 / 61	1	M11114.52
LM G2	L-Line	-	MC-UC	-	CU	✓	✓	-	22 / 54	22 / 54	22 / 61	1	M11114.62
LM G2	S-Line	-	UC	-	CU	-	-	✓	12 / 29	12 / 29	12 / 33	1	M11114.43
LM G2	S-Line	-	MC	-	CU	-	-	✓	12 / 29	12 / 29	12 / 33	1	M11114.53
LM G2	S-Line	-	MC-UC	-	CU	-	-	✓	12 / 29	12 / 29	12 / 33	1	M11114.63
LM G2	M-Line	-	UC	-	CU	-	-	✓	16 / 39	17 / 42	17 / 47	1	M11114.44
LM G2	M-Line	-	MC	-	CU	-	-	✓	16 / 39	17 / 42	17 / 47	1	M11114.54
LM G2	M-Line	-	MC-UC	-	CU	-	-	✓	16 / 39	17 / 42	17 / 47	1	M11114.64
LM G2	L-Line	-	UC	-	CU	-	-	✓	22 / 54	22 / 54	22 / 61	1	M11114.45
LM G2	L-Line	-	MC	-	CU	-	-	✓	22 / 54	22 / 54	22 / 61	1	M11114.55
LM G2	L-Line	-	MC-UC	-	CU	-	-	✓	22 / 54	22 / 54	22 / 61	1	M11114.65

Type	Version		Type of heating	DHW-C	Type of heat exchanger	Type of mounting			DHW performance [l/min. / kW]				Order Code
	Line	CS				F	S	SI	2.1	2.2	2.3		
LM G2	S-Line	-	UC	✓	CU	✓	✓	-	12 / 29	12 / 29	12 / 33	1	M11114.401
LM G2	S-Line	-	MC	✓	CU	✓	✓	-	12 / 29	12 / 29	12 / 33	1	M11114.501
LM G2	S-Line	-	MC-UC	✓	CU	✓	✓	-	12 / 29	12 / 29	12 / 33	1	M11114.601
LM G2	M-Line	-	UC	✓	CU	✓	✓	-	12 / 29	12 / 29	12 / 33	1	M11114.411
LM G2	M-Line	-	MC	✓	CU	✓	✓	-	16 / 39	17 / 42	17 / 47	1	M11114.511
LM G2	M-Line	-	MC-UC	✓	CU	✓	✓	-	16 / 39	17 / 42	17 / 47	1	M11114.611
LM G2	L-Line	-	UC	✓	CU	✓	✓	-	22 / 54	22 / 54	22 / 61	1	M11114.421
LM G2	L-Line	-	MC	✓	CU	✓	✓	-	22 / 54	22 / 54	22 / 61	1	M11114.521
LM G2	L-Line	-	MC-UC	✓	CU	✓	✓	-	22 / 54	22 / 54	22 / 61	1	M11114.621
LM G2	S-Line	-	UC	✓	CU	-	-	✓	12 / 29	12 / 29	12 / 33	1	M11114.431
LM G2	S-Line	-	MC	✓	CU	-	-	✓	12 / 29	12 / 29	12 / 33	1	M11114.531
LM G2	S-Line	-	MC-UC	✓	CU	-	-	✓	12 / 29	12 / 29	12 / 33	1	M11114.631
LM G2	M-Line	-	UC	✓	CU	-	-	✓	16 / 39	17 / 42	17 / 47	1	M11114.441
LM G2	M-Line	-	MC	✓	CU	-	-	✓	16 / 39	17 / 42	17 / 47	1	M11114.541
LM G2	M-Line	-	MC-UC	✓	CU	-	-	✓	16 / 39	17 / 42	17 / 47	1	M11114.641
LM G2	L-Line	-	UC	✓	CU	-	-	✓	22 / 54	22 / 54	22 / 61	1	M11114.451
LM G2	L-Line	-	MC	✓	CU	-	-	✓	22 / 54	22 / 54	22 / 61	1	M11114.551
LM G2	L-Line	-	MC-UC	✓	CU	-	-	✓	22 / 54	22 / 54	22 / 61	1	M11114.651
LM G2	S-Line	-	UC	-	SX	✓	✓	-	12 / 29	12 / 29	12 / 33	1	M11114.402
LM G2	S-Line	-	MC	-	SX	✓	✓	-	12 / 29	12 / 29	12 / 33	1	M11114.502
LM G2	S-Line	-	MC-UC	-	SX	✓	✓	-	12 / 29	12 / 29	12 / 33	1	M11114.602
LM G2	M-Line	-	UC	-	SX	✓	✓	-	16 / 39	17 / 42	17 / 47	1	M11114.412
LM G2	M-Line	-	MC	-	SX	✓	✓	-	16 / 39	17 / 42	17 / 47	1	M11114.512
LM G2	M-Line	-	MC-UC	-	SX	✓	✓	-	16 / 39	17 / 42	17 / 47	1	M11114.612
LM G2	L-Line	-	UC	-	SX	✓	✓	-	22 / 54	22 / 54	22 / 61	1	M11114.422
LM G2	L-Line	-	MC	-	SX	✓	✓	-	22 / 54	22 / 54	22 / 61	1	M11114.522
LM G2	L-Line	-	MC-UC	-	SX	✓	✓	-	22 / 54	22 / 54	22 / 61	1	M11114.622
LM G2	S-Line	-	UC	-	SX	-	-	✓	12 / 29	12 / 29	12 / 33	1	M11114.432
LM G2	S-Line	-	MC	-	SX	-	-	✓	12 / 29	12 / 29	12 / 33	1	M11114.532
LM G2	S-Line	-	MC-UC	-	SX	-	-	✓	12 / 29	12 / 29	12 / 33	1	M11114.632
LM G2	M-Line	-	UC	-	SX	-	-	✓	16 / 39	17 / 42	17 / 47	1	M11114.442
LM G2	M-Line	-	MC	-	SX	-	-	✓	16 / 39	17 / 42	17 / 47	1	M11114.542
LM G2	M-Line	-	MC-UC	-	SX	-	-	✓	16 / 39	17 / 42	17 / 47	1	M11114.642
LM G2	L-Line	-	UC	-	SX	-	-	✓	22 / 54	22 / 54	22 / 61	1	M11114.452
LM G2	L-Line	-	MC	-	SX	-	-	✓	22 / 54	22 / 54	22 / 61	1	M11114.552
LM G2	L-Line	-	MC-UC	-	SX	-	-	✓	22 / 54	22 / 54	22 / 61	1	M11114.652
LM G2	S-Line	-	UC	✓	SX	✓	✓	-	12 / 29	12 / 29	12 / 33	1	M11114.403
LM G2	S-Line	-	MC	✓	SX	✓	✓	-	12 / 29	12 / 29	12 / 33	1	M11114.503
LM G2	S-Line	-	MC-UC	✓	SX	✓	✓	-	12 / 29	12 / 29	12 / 33	1	M11114.603
LM G2	M-Line	-	UC	✓	SX	✓	✓	-	16 / 39	17 / 42	17 / 47	1	M11114.413
LM G2	M-Line	-	MC	✓	SX	✓	✓	-	16 / 39	17 / 42	17 / 47	1	M11114.513
LM G2	M-Line	-	MC-UC	✓	SX	✓	✓	-	16 / 39	17 / 42	17 / 47	1	M11114.613
LM G2	L-Line	-	UC	✓	SX	✓	✓	-	22 / 54	22 / 54	22 / 61	1	M11114.423
LM G2	L-Line	-	MC	✓	SX	✓	✓	-	22 / 54	22 / 54	22 / 61	1	M11114.523
LM G2	L-Line	-	MC-UC	✓	SX	✓	✓	-	22 / 54	22 / 54	22 / 61	1	M11114.623
LM G2	S-Line	-	UC	✓	SX	-	-	✓	12 / 29	12 / 29	12 / 33	1	M11114.433
LM G2	S-Line	-	MC	✓	SX	-	-	✓	12 / 29	12 / 29	12 / 33	1	M11114.533
LM G2	S-Line	-	MC-UC	✓	SX	-	-	✓	12 / 29	12 / 29	12 / 33	1	M11114.633
LM G2	M-Line	-	UC	✓	SX	-	-	✓	16 / 39	17 / 42	17 / 47	1	M11114.443
LM G2	M-Line	-	MC	✓	SX	-	-	✓	16 / 39	17 / 42	17 / 47	1	M11114.543
LM G2	M-Line	-	MC-UC	✓	SX	-	-	✓	16 / 39	17 / 42	17 / 47	1	M11114.643
LM G2	L-Line	-	UC	✓	SX	-	-	✓	22 / 54	22 / 54	22 / 61	1	M11114.453
LM G2	L-Line	-	MC	✓	SX	-	-	✓	22 / 54	22 / 54	22 / 61	1	M11114.553
LM G2	L-Line	-	MC-UC	✓	SX	-	-	✓	22 / 54	22 / 54	22 / 61	1	M11114.653

CS = complete stations, UC = unmixed heating circuit, MC = mixed heating circuit, F = flush mounting version, S = surface mounting version, SI = surface mounting version for a insulated case / cover, DHWC = domestic hot water circulation, CU = cooper soldered plate heat exchanger, SX = sealed cooper soldered plate heat exchanger

2.1 Defined at a prim. flow temp. of 55°C and a DHW temperature increase of 35 K.

2.2 Defined at a prim. flow temp. of 65°C and a DHW temperature increase of 40 K.

2.3 Defined at a prim. flow temp. of 65°C and a DHW temperature increase of 35 K.

Note: all illustrations are similar to real design. It is possible that the equipment and scope of delivery may vary. The scope of delivery are defined in the product description.

Technical data – LogoMatic G2

	Final stations			Complete stations		
	UC	MC	MC-UC	UC	MC	MC-UC
Surface mountable version: width [mm]	500 ¹⁾	500 ¹⁾	500 ¹⁾	600	600	600
Surface mountable version: heights [mm]	760 ¹⁾	760 ¹⁾	760 ¹⁾	1,050	1,375	1,375
Surface mountable version: depth [mm]	115 ¹⁾	115 ¹⁾	115 ¹⁾	220	220	220
Flush mountable version: width [mm]	576 ¹⁾	576 ¹⁾	576 ¹⁾	610 ²⁾	610 ²⁾	610 ²⁾
Flush mountable version: heights [mm]	775 ¹⁾	775 ¹⁾	775 ¹⁾	935 ²⁾	1.300 ²⁾	1.300 ²⁾
Flush mountable version: depth [mm]	110 ¹⁾	110 ¹⁾	110 ¹⁾	110-160 ²⁾	130-210 ²⁾	130-210 ²⁾
Connection with bottom placement	3/4" M	3/4" M	3/4" M	3/4" F	3/4" F	3/4" F
Max. pressure load: heating circuit (prim. & sec.) and sanitary	PN10	PN10	PN10	PN10	PN10	PN10
Min. differential pressure (heating primary side)	0.03 bar	0.03 bar	0.03 bar	0.03 bar	0.03 bar	0.03 bar
Max. differential pressure (heating primary side)	2.5 bar	2.5 bar	2.5 bar	2.5 bar	2.5 bar	2.5 bar
Max. temperature load: heating (prim. & sec.) and sanitary	100 °C	100 °C	100 °C	100 °C	100 °C	100 °C

¹⁾ Dimensions of the single HIU without case / cover. For the dimensions of the case / cover, please check the technical data of the cases / covers.

²⁾ Width: dimension of the front cover (cut-out dimension larger). Height: dimension of front cover (without height adjustable feet). Depth: adjustable.

Technical equipment and functional description – LogoMatic G2

	Final stations			Complete stations		
	UC	MC	MC-UC	UC	MC	MC-UC
Microprocessor controller (230V 50Hz) with displaying of the status on the station, parameter backup, frost protection function, commissioning assistant, displaying of alarms & faults, real-time clock for high accuracy, APP-based setting option, option of displaying for all sensor values as well as control of all actuators and testing of the sensors by using the APP ¹⁾	✓	✓	✓	✓	✓	✓
Preset tap domestic hot water temperature (recommendation DVGW W551) - setting range 30-60 °C ²⁾	✓	✓	✓	✓	✓	✓
Radiator heating circuit supply, unmixed heating circuit (UC)	✓	-	✓	✓	-	✓
Mixer circuit (MC) with injection circuit (setting range 20-65 °C ³⁾ and HE pump (anti blocking function)	-	✓	✓	-	✓	✓
Underfloor manifold with 6 circuits (3/4" M, 0.5-5 l/min, 6 bar)	Optional	Optional	Optional	-	✓	-
Underfloor manifold with 8 circuits (3/4" M, 0.5-5 l/min, 6 bar)	Optional	Optional	Optional	-	-	✓
Electrically fast and continuously adapting control valve with adaptive priority control for domestic hot water	✓	✓	✓	✓	✓	✓
Directly immersed sensors for a fast reaction	✓	✓	✓	✓	✓	✓
Achievable low primary return temperatures during the DHW preparation based on the electronic regulation of the primary energy supply (depending on the primary conditions)	✓	✓	✓	✓	✓	✓
Controllable heating operation via external controller (potential-free signal of 230V as an ON / OFF function)	✓	✓	✓	✓	✓	✓
Controllable heating operation via external controller (0-10V as modulating controlling)	✓	✓	✓	✓	✓	✓
Weather compensating heating circuit controlling ³⁾	-	✓	✓	-	✓	✓
Exact quantity-based domestic hot water preparation by using a robust turbine flow sensor (1-30 l/min.)	✓	✓	✓	✓	✓	✓
Stainless steel plate heat exchanger, vertical positioning for reducing of risks of calcification	✓	✓	✓	✓	✓	✓
Control valve for heating (zone valve for connection to living space control)	✓	✓	✓	✓	✓	✓
Venting spots with hose connection at the primary heating side	✓	✓	✓	✓	✓	✓
Spool piece for a heat meter (3/4" × 110mm) and sensor pocket (M10x1)	✓	✓	✓	✓	✓	✓
Saving energy with pipes made of insulated corrugated stainless steel	✓	✓	✓	✓	✓	✓
Completely mechanically assembled on a base plate and tested	✓	✓	✓	✓	✓	✓
Strainer with stainless steel sieve insert (including drainage function) for high operational reliability	✓	✓	✓	✓	✓	✓
Second cold water connection for the apartment	✓	✓	✓	✓	✓	✓
Spool piece for a cold water meter (3/4" × 110mm)	✓	✓	✓	✓	✓	✓
Keep warm function of the primary heating water supply (not inside the measuring circuit of the heat meter) via an adjustable circulation bridge (35-65 °C)	✓	✓	✓	✓	✓	✓
Differential pressure control valve (range 5-25 kPa) for autom. hydr. alignment of the secondary heating circuit	✓	✓	✓	✓	✓	✓
Volume flow limiter for a domestic hot water regulation ⁴⁾	✓	✓	✓	✓	✓	✓
7 ball valves DN20, one with a sensor pocket for the heat meter & some of them are drinking water ball valves (DVGW tested)	Optional	Optional	Optional	✓	✓	✓
Adjustable screed heating function	-	✓	✓	-	✓	✓
Internal data storage with log function	✓	✓	✓	✓	✓	✓
Domestic hot water circulation (including insulation of the heat exchanger) with various adjustable control options (time window, DVGW compliant, etc.) ¹⁾ and data logging as well as a possible disinfection	"DHW-C" Version	"DHW-C" Version	"DHW-C" Version	-	-	-
Surface-mounted housing (isolated with white front cover) - version SI	Optional	Optional	Optional	SI o. F	SI o. F	SI o. F
Surface-mounted housing (coated steel, white) - version S	Optional	Optional	Optional	-	-	-
Flush-mounted housing (coated steel, white) - Version F	Optional	Optional	Optional	SI o. F	SI o. F	SI o. F

¹⁾ Use of the Flamconnect APP and connection via Bluetooth. Check end upfront that the device is suitability.

²⁾ Width: dimension of the front cover (cut-out dimension larger). Height: dimension of front cover (without height adjustable feet). Depth: adjustable.

³⁾ Preset values can be changed by using the existing APP.

⁴⁾ Except the L-Line version.

Covers / cases

The LogoMatic G2 complete stations can be combined with various housings as a flush-mounted version ("F" or "UP" version) or as a wall-mounted version ("S" or "AP" version and as a designer insulation housing, the "SI" version). This allows us to provide project-specific equipment and to adapt the stations to the room and design concept or the space requirements at the installation site. Moreover, it is also possible to combine the stations with wireless-permeable housings to permit the use of consumption meters such as water and heat meters with wireless communication.

Cladding: steel painted white (RAL 9016) and plastic panel in white (RAL 9016) for wireless applications.



Type	With door	Long ¹⁾	Radio permeable ²⁾	Width [mm]	Dimensions Height [mm]	Depth [mm]		Order Code
Flush-mounted cladding 16	-	-	-	610 ³⁾ (655) ⁴⁾	935 ³⁾ (953) ⁴⁾	110 - 160 ⁵⁾	1	M11100.38
Flush-mounted cladding 17	-	-	✓	610 ³⁾ (655) ⁴⁾	935 ³⁾ (953) ⁴⁾	110 - 160 ⁵⁾	1	M11100.38K
Flush-mounted cladding 18	-	✓	-	610 ³⁾ (655) ⁴⁾	1300 ³⁾ (1327) ⁴⁾	110 - 160 ⁵⁾	1	M11100.39
Flush-mounted cladding 19	-	✓	✓	610 ³⁾ (655) ⁴⁾	1300 ³⁾ (1327) ⁴⁾	110 - 160 ⁵⁾	1	M11100.39K
Flush-mounted cladding 20	-	✓	-	847 ³⁾ (890) ⁴⁾	1300 ³⁾ (1327) ⁴⁾	150 - 245 ⁵⁾	1	M11100.42
Flush-mounted cladding 21	-	✓	✓	847 ³⁾ (890) ⁴⁾	1300 ³⁾ (1327) ⁴⁾	150 - 245 ⁵⁾	1	M11100.29K
LogoMatic G2 Iso pack F ⁷⁾	-	-	-	-	-	-	1	M66306.667
Height-adjustable feet 2 ⁸⁾	-	-	-	610	-	-	1	M11100.21
Height-adjustable feet 3 ⁸⁾	-	-	-	825	-	-	1	M11100.71
Surface-mounted cladding 16	-	-	-	600	935	210	1	M11100.11
Surface-mounted cladding 17	-	-	✓	600	935	210	1	M11100.11K
Surface-mounted cladding 18	-	✓	-	600	1330	210	1	M11100.46
Surface-mounted cladding 19	-	✓	✓	600	1330	210	1	M11100.46K
Surface-mounted cladding 20	-	✓	-	850	1330	210	1	M11100.43
Surface-mounted cladding 21	-	✓	✓	850	1330	210	1	M11100.43K
LogoMatic G2 Iso case short SI ⁶⁾	-	-	✓	600	1050	220	1	M66306.665
LogoMatic G2 Iso case long SI ⁶⁾	-	✓	✓	600	1375	220	1	M66306.666

¹⁾ Height > 1,100 mm

²⁾ Housing with the option of wireless meter reading for consumption metering thanks to plastic insert or designer insulation housing.

³⁾ With flush-mounted versions, this gives the cut-out dimensions required to embed the station in the wall.

⁴⁾ With flush-mounted versions, this gives the dimensions of the panel which is visible from the outside.

⁵⁾ With flush-mounted versions, the depth is freely adjustable in accordance with the information.

⁶⁾ The designer insulation housings listed (LogoMatic G2 Iso case) are available as wall-mounted versions and guarantee highly efficient operation thanks to their 30mm wall thickness. All our designer insulation housings come with a white designer front panel and are thus attractive to look at.

⁷⁾ For the existing flush-mounted versions, you can opt for internal insulation in the housing (LogoMatic G2 Iso pack F) for increased efficiency and the associated protection from heat radiation, which is preinstalled and fully set up in the housing at the point of ordering.

⁸⁾ For the existing flush-mounted versions there are height-adjustable feet with a setting range of 100 to 170 mm. You are welcome to enquire about alternative versions for other setting ranges.

Covers / cases artikelmatrix

Type	Integration underfloor manifolds	max. heating circuits	UP / F	LogoMatic G2 AP / S	AP isol. / SI
Flush-mounted cladding 16	-	-	✓	-	-
Flush-mounted cladding 17	-	-	✓	-	-
Flush-mounted cladding 18	✓	<8	✓	-	-
Flush-mounted cladding 19	✓	<8	✓	-	-
Flush-mounted cladding 20	✓	<12	✓	-	-
Flush-mounted cladding 21	✓	<12	✓	-	-
LogoMatic G2 Iso pack F ⁷⁾	-	-	✓	-	-
Height-adjustable feet 2 ⁸⁾	-	-	✓	-	-
Height-adjustable feet 3 ⁸⁾	-	-	✓	-	-
Surface-mounted cladding 16	-	-	-	✓	-
Surface-mounted cladding 17	-	-	-	✓	-
Surface-mounted cladding 18	✓	<8	-	✓	-
Surface-mounted cladding 19	✓	<8	-	✓	-
Surface-mounted cladding 20	✓	<12	-	✓	-
Surface-mounted cladding 21	✓	<12	-	✓	-
LogoMatic G2 Iso case short SI ⁶⁾	-	-	-	-	✓
LogoMatic G2 Iso case long SI ⁶⁾	✓	<8	-	-	✓


F or UP = application for flush-mounted version, S or AP = application for wall-mounted version, SI or AP isol. = application for wall-mounted version as insulated housing

Under floor heating manifolds

The Logomatic G2 complete stations permit combination with a wide range of complementary products for further functionalities and equipment for enhanced comfort and easier, optimised integration into building or installation technology. For instance, floor manifolds and prewiring concepts can be combined with one another and with the station to save both time and space in installation. Moreover, mounting rails and extensions to the 2nd static heating circuit allow for easier preinstallation.

All underfloor manifolds are pre-assembled on a base plate and are fitted with the heating circuits specified below.



Type	Application		heating circuits	Version	Logomatic G2			Order Code
	MC	UC			UP / F and AP / S	AP insul. / SI		
Logomatic G2 UFH-M 3MC FS	✓	-	3	F	✓	-	1	M10515.31
Logomatic G2 UFH-M 4MC FS	✓	-	4	F	✓	-	1	M10515.41
Logomatic G2 UFH-M 5MC FS	✓	-	5	F	✓	-	1	M10515.51
Logomatic G2 UFH-M 6MC FS	✓	-	6	F	✓	-	1	M10515.61
Logomatic G2 UFH-M 7MC FS	✓	-	7	F	✓	-	1	M10515.71
Logomatic G2 UFH-M 8MC FS	✓	-	8	F	✓	-	1	M10515.81
Logomatic G2 UFH-M 9MC FS	✓	-	9	E	✓	-	1	M10515.91
Logomatic G2 UFH-M 10MC FS	✓	-	10	E	✓	-	1	M10515.101
Logomatic G2 UFH-M 11MC FS	✓	-	11	E	✓	-	1	M10515.111
Logomatic G2 UFH-M 12MC FS	✓	-	12	E	✓	-	1	M10515.121
Logomatic G2 UFH-M 3MC SI	✓	-	3	G	-	✓	1	M10515.32
Logomatic G2 UFH-M 4MC SI	✓	-	4	G	-	✓	1	M10515.42
Logomatic G2 UFH-M 5MC SI	✓	-	5	G	-	✓	1	M10515.52
Logomatic G2 UFH-M 6MC SI	✓	-	6	G	-	✓	1	M10515.62
Logomatic G2 UFH-M 7MC SI	✓	-	7	G	-	✓	1	M10515.72
Logomatic G2 UFH-M 8MC SI	✓	-	8	G	-	✓	1	M10515.82

UC = unmixed heating circuit, MC = mixed heating circuit. F or UP = application for flush-mounted version, S or AP = application for wall-mounted version, SI or AP insul. = application for wall-mounted version as insulation housing, UFH-M = floor manifold for mixed heating circuits, PW concept = prewiring concept, UC-L = extension for 2nd static heating circuit, FFR = mounting rails, BV = ball valve set.

Technical data, underfloor manifold

	Underfloor manifold		
	Type F	Type E	Type G
Width x height x depth [mm] (dimensions of the housings to be taken into account)	576 x 503 x 140 ¹⁾	792 x 430 x 140 ¹⁾	500 x 452 x 140 ²⁾
Connection to the heating circuits	3/4" M - Eurokonus	3/4" M - Eurokonus	3/4" M - Eurokonus
Arrangement of the supply connections:	top	top	top
Heating circuit manifold material	Stainless steel	Stainless steel	Stainless steel
Control range flow rate limiter [l/min.]	0.5 - 5	0.5 - 5	0.5 - 5
Max. pressure load (bar)	PN6	PN6	PN6
Max. temperature load [°C]	100	100	100
Valve inserts M30 x 1.5 with manual adjustment flaps	✓	✓	✓

¹⁾ = installation depth increases to 160mm if prewiring packages are used or increases in general if floor terminal blocks and their mounts are installed.

²⁾ = these floor manifolds are used with wall-mounted stations. The wall-mounted housings supplied by our company require an increased installation depth. Therefore, please take the housing dimensions into account!

Pre-wiring concepts

Pre-wiring concept for LogoMatic G2 (with included underfloor heating manifold) incl.:

- FBH terminal strip (IP44; supply voltage of actuator 230 V).
- Pump logic module.
- Hinged mounting plate for the terminal strip (for access to all assemblies).
- Safety temperature limiter (STL) with thermal actuator.
- Professional wiring and supply within the selected station.

Attention: The required actuators for the underfloor heating circuits must be ordered separately!



Type	Application		Application heating circuits	Model	LogoMatic G2			Order Code
	MC	UC			UP / F and AP / S	AP insul. / SI		
LogoMatic G2 PW concept 8MC FS	✓	-	8	A	✓	-	1	MB-10560.06
LogoMatic G2 PW concept 12MC FS	✓	-	12	B	✓	-	1	MB-10560.07
LogoMatic G2 PW concept 8MC SI	✓	-	8	A	-	✓	1	MB-10560.08

UC = unmixed heating circuit, MC = mixed heating circuit. F or UP = application for flush-mounted version, S or AP = application for wall-mounted version, SI or AP insul. = application for wall-mounted version as insulation housing, UFH-M = floor manifold for mixed heating circuits, PW concept = prewiring concept, UC-L = extension for 2nd static heating circuit, FFR = mounting rails, BV = ball valve set.

Technical data - Pre-wiring concepts

	Prewiring concept	
	Type A	Type B
For use with up to 8 zones (up to 18 actuators and therefore several can be connected per zone)	✓	-
For use with up to 10 zones (up to 18 actuators and therefore several can be connected per zone)	-	✓

Extension for second static heating circuit

Second static heating circuit including zone valve.

Type	Application		Application heating circuits	Version	LogoMatic G2			Order Code
	MC	UC			UP / F and AP / S	AP insul. / SI		
LogoMatic G2 UC-L 8MC FS	-	✓	1	A	✓	-	1	M10253.19
LogoMatic G2 UC-L 12MC FS	-	✓	1	B	✓	-	1	M10253.20
LogoMatic G2 UC-L 8MC SI	-	✓	1	A	-	✓	1	M10253.21


UC = unmixed heating circuit, MC = mixed heating circuit. F or UP = application for flush-mounted version, S or AP = application for wall-mounted version, SI or AP insul. = application for wall-mounted version as insulation housing, UFH-M = floor manifold for mixed heating circuits, PW concept = prewiring concept, UC-L = extension for 2nd static heating circuit, FFR = mounting rails, BV = ball valve set.

Technical data - Second static heating circuit

	Second static heating circuit	
	Type A	Type B
Application for floor manifolds with up to 8 zones (mixed circuits)	✓	-
Application for floor manifolds with up to 12 zones (mixed circuits)	-	✓

First fix rails & ball valves

Including ball valves with DVGW-certified domestic water ball valves (straight model and male thread).

Type	Application		Application heating circuits	Model	LogoMatic G2			Order Code
	MC	UC			UP / F and AP / S	AP insul. / SI		
LogoMatic G2 FFR 7BV FS	✓	✓	-	A	✓	-	1	M10203.749
LogoMatic G2 FFR 7BV SI	✓	✓	-	A	-	✓	1	M10203.762
LogoMatic G2 BV-SET 5BV	-	-	-	B	✓	✓	1	M10252.39
LogoMatic G2 BV-SET 7BV	✓	✓	-	B	✓	✓	1	M10252.391

UC = unmixed heating circuit, MC = mixed heating circuit. F or UP = application for flush-mounted version, S or AP = application for wall-mounted version, SI or AP insul. = application for wall-mounted version as insulation housing, UFH-M = floor manifold for mixed heating circuits, PW concept = prewiring concept, UC-L = extension for 2nd static heating circuit, FFR = mounting rails, BV = ball valve set.

Technical data - First fix rails

	Mounting rails and ball valve sets	
	Type A	Type B
Mounting rails for preinstallation including 7 ball valves	✓	-
Ball valve set with 7 ball valves	-	✓

LogoMatic G2 S-Line performance table DHW preparation: DHW temperature increase from 10 °C till 45 °C (35 Kelvin)

Primary flow temperature [°C]	47.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
DHW performance [l/min]	5.8	8.7	12.0	12.0	12.0	12.0	12.0	12.0	12.0
DHW performance [kW]	14.1	21.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3
Primary flow rate [l/min]	17.8	17.8	16.7	12.4	10.1	8.7	7.6	6.8	6.2
Primary return temperature [°C]	36	22	30	26	24	22	20	19	17
Primary pressure loss [kPa]	50	50	44	24	16	12	9	7	6
Domestic water pressure loss [kPa]	21	54	100	100	100	100	100	100	100
Calculated mixing water volume at 38°C ¹⁾ [l/min]	7.2	10.9	15.0	15.0	15.0	15.0	15.0	15.0	15.0

¹⁾ The calculated mixing water volume is an indication of the max. water volume at 38°C (tapping at the single taps and not at the HIU).

LogoMatic G2 S-Line performance table DHW preparation: DHW temperature increase from 10 °C till 50 °C (40 Kelvin)

Primary flow temperature [°C]		52	55	60	65	70	75	80	85
DHW performance [l/min]	-	5.6	8.4	11.9	12.0	12.0	12.0	12.0	12.0
DHW performance [kW]	-	15.6	23.4	33.2	33.4	33.4	33.4	33.4	33.4
Primary flow rate [l/min]	-	17.8	17.8	17.8	13.4	11.0	9.4	8.3	7.4
Primary return temperature [°C]	-	39	36	33	29	26	24	22	21
Primary pressure loss [kPa]	-	50	50	50	29	19	14	11	9
Domestic water pressure loss [kPa]	-	20	49	100	100	100	100	100	100
Calculated mixing water volume at 38°C ¹⁾ [l/min]	-	8.0	12.0	17.0	17.1	17.1	17.1	17.1	17.1

¹⁾ The calculated mixing water volume is an indication of the max. water volume at 38°C (tapping at the single taps and not at the HIU).

LogoMatic G2 S-Line performance table DHW preparation: DHW temperature increase from 10 °C till 55 °C (45 Kelvin)

Primary flow temperature [°C]			57	60	65	70	75	80	85
DHW performance [l/min]	-	-	5.5	8.1	11.4	12.0	12.0	12.0	12.0
DHW performance [kW]	-	-	17.1	25.4	35.7	37.6	37.6	37.6	37.6
Primary flow rate [l/min]	-	-	17.8	17.8	17.8	14.3	11.7	10.1	8.9
Primary return temperature [°C]	-	-	43	39	36	32	29	26	24
Primary pressure loss [kPa]	-	-	50	50	50	32	22	16	13
Domestic water pressure loss [kPa]	-	-	19	46	96	100	100	100	100
Calculated mixing water volume at 38°C ¹⁾ [l/min]	-	-	8.8	13.0	18.3	19.3	19.3	19.3	19.3

¹⁾ The calculated mixing water volume is an indication of the max. water volume at 38°C (tapping at the single taps and not at the HIU).

LogoMatic G2 S-Line performance table DHW preparation: DHW temperature increase from 10 °C till 60 °C (50 Kelvin)

Primary flow temperature [°C]				62	65	70	75	80	85
DHW performance [l/min]	-	-	-	5.4	7.9	11.0	12.0	12.0	12.0
DHW performance [kW]	-	-	-	18.8	27.5	38.3	41.8	41.8	41.8
Primary flow rate [l/min]	-	-	-	17.8	17.8	17.8	15.1	12.4	10.7
Primary return temperature [°C]	-	-	-	47	43	39	35	32	29
Primary pressure loss [kPa]	-	-	-	50	50	50	36	24	18
Domestic water pressure loss [kPa]	-	-	-	18	43	88	100	100	100
Calculated mixing water volume at 38°C ¹⁾ [l/min]	-	-	-	9.6	14.1	19.6	21.4	21.4	21.4

¹⁾ The calculated mixing water volume is an indication of the max. water volume at 38°C (tapping at the single taps and not at the HIU).

LogoMatic G2 M-Line performance table DHW preparation: DHW temperature increase from 10 °C till 45 °C (35 Kelvin)

Primary flow temperature [°C]	47	50	55	60	65	70	75	80	85
DHW performance [l/min]	8.8	12.1	16.1	17.0	17.0	17.0	17.0	17.0	17.0
DHW performance [kW]	21.5	29.5	39.3	41.4	41.4	41.4	41.4	41.4	41.4
Primary flow rate [l/min]	18.4	18.4	18.4	15.5	13.0	11.4	10.1	9.2	8.4
Primary return temperature [°C]	30	27	24	22	19	18	16	15	14
Primary pressure loss [kPa]	50	50	50	36	26	20	17	14	12
Domestic water pressure loss [kPa]	24	43	86	100	100	100	100	100	100
Calculated mixing water volume at 38°C ¹⁾ [l/min]	11.0	15.1	20.2	21.3	21.3	21.3	21.3	21.3	21.3

¹⁾ The calculated mixing water volume is an indication of the max. water volume at 38°C (tapping at the single taps and not at the HIU).

LogoMatic G2 M-Line performance table DHW preparation: DHW temperature increase from 10 °C till 50 °C (40 Kelvin)

Primary flow temperature [°C]		52	55	60	65	70	75	80	85
DHW performance [l/min]	-	8.6	11.6	15.4	17.0	17.0	17.0	17.0	17.0
DHW performance [kW]	-	23.9	32.4	42.8	47.4	47.4	47.4	47.4	47.4
Primary flow rate [l/min]	-	18.4	18.4	18.4	16.6	14.0	12.2	11.0	10.0
Primary return temperature [°C]	-	33	30	27	24	21	19	18	17
Primary pressure loss [kPa]	-	50	50	50	41	30	23	19	16
Domestic water pressure loss [kPa]	-	23	40	76	100	100	100	100	100
Calculated mixing water volume at 38°C ¹⁾ [l/min]	-	12.3	16.6	22.0	24.3	24.3	24.3	24.3	24.3

¹⁾ The calculated mixing water volume is an indication of the max. water volume at 38°C (tapping at the single taps and not at the HIU).

LogoMatic G2 M-Line performance table DHW preparation: DHW temperature increase from 10 °C till 55 °C (45 Kelvin)

Primary flow temperature [°C]			57	60	65	70	75	80	85
DHW performance [l/min]	-	-	8.4	11.3	14.8	17.0	17.0	17.0	17.0
DHW performance [kW]	-	-	26.4	35.5	46.3	53.3	53.3	53.3	53.3
Primary flow rate [l/min]	-	-	18.4	18.4	18.4	17.5	14.9	13.0	11.7
Primary return temperature [°C]	-	-	36	32	29	26	24	21	20
Primary pressure loss [kPa]	-	-	50	50	50	46	33	26	21
Domestic water pressure loss [kPa]	-	-	22	38	69	100	100	100	100
Calculated mixing water volume at 38°C ¹⁾ [l/min]	-	-	13.6	18.2	23.8	27.3	27.3	27.3	27.3

¹⁾ The calculated mixing water volume is an indication of the max. water volume at 38°C (tapping at the single taps and not at the HIU).

LogoMatic G2 M-Line performance table DHW preparation: DHW temperature increase from 10 °C till 60 °C (50 Kelvin)

Primary flow temperature [°C]				62	65	70	75	80	85
DHW performance [l/min]	-	-	-	8.3	11.1	14.3	17.0	17.0	17.0
DHW performance [kW]	-	-	-	28.9	38.5	49.8	59.3	59.2	59.2
Primary flow rate [l/min]	-	-	-	18.4	18.4	18.4	18.4	15.6	13.8
Primary return temperature [°C]	-	-	-	39	35	31	29	26	23
Primary pressure loss [kPa]	-	-	-	50	50	50	50	37	29
Domestic water pressure loss [kPa]	-	-	-	22	36	64	100	100	100
Calculated mixing water volume at 38°C ¹⁾ [l/min]	-	-	-	14.8	19.7	25.6	30.4	30.4	30.4

¹⁾ The calculated mixing water volume is an indication of the max. water volume at 38°C (tapping at the single taps and not at the HIU).

LogoMatic G2 L-Line performance table DHW preparation: DHW temperature increase from 10 °C till 45 °C (35 Kelvin)

Primary flow temperature [°C]	47	50	55	60	65	70	75	80	85
DHW performance [l/min]	14.4	18.3	22.0	22.0	22.0	22.0	22.0	22.0	22.0
DHW performance [kW]	35.1	44.7	53.6	53.6	53.6	53.6	53.6	53.6	53.6
Primary flow rate [l/min]	21.2	21.2	20.1	22.0	14.9	13.4	12.2	11.2	10.4
Primary return temperature [°C]	23	20	17	15	13	12	12	11	11
Primary pressure loss [kPa]	70	70	63	45	34	28	23	19	17
Domestic water pressure loss [kPa]	45	72	100	100	100	100	100	100	100
Calculated mixing water volume at 38°C ¹⁾ [l/min]	18.0	22.9	27.5	27.5	27.5	27.5	27.5	27.5	27.5

¹⁾ The calculated mixing water volume is an indication of the max. water volume at 38°C (tapping at the single taps and not at the HIU).

LogoMatic G2 L-Line performance table DHW preparation: DHW temperature increase from 10 °C till 50 °C (40 Kelvin)

Primary flow temperature [°C]		52	55	60	65	70	75	80	85
DHW performance [l/min]	-	14.1	17.8	22.0	22.0	22.0	22.0	22.0	22.0
DHW performance [kW]	-	39.3	49.6	61.3	61.3	61.3	61.3	61.3	61.3
Primary flow rate [l/min]	-	21.2	21.2	21.0	17.9	15.8	14.2	13.0	12.0
Primary return temperature [°C]	-	25	21	18	16	14	13	12	12
Primary pressure loss [kPa]	-	70	70	69	50	39	31	26	22
Domestic water pressure loss [kPa]	-	43	67	100	100	100	100	100	100
Calculated mixing water volume at 38°C ¹⁾ [l/min]	-	20.2	25.4	31.4	31.4	31.4	31.4	31.4	31.4

¹⁾ The calculated mixing water volume is an indication of the max. water volume at 38°C (tapping at the single taps and not at the HIU).

LogoMatic G2 L-Line performance table DHW preparation: DHW temperature increase from 10 °C till 55 °C (45 Kelvin)

Primary flow temperature [°C]			57	60	65	70	75	80	85
DHW performance [l/min]	-	-	13.9	17.4	21.4	22.0	22.0	22.0	22.0
DHW performance [kW]	-	-	43.6	54.4	67.1	68.9	68.9	68.9	68.9
Primary flow rate [l/min]	-	-	21.2	21.2	21.2	18.6	16.5	15.0	13.7
Primary return temperature [°C]	-	-	27	23	20	17	15	14	13
Primary pressure loss [kPa]	-	-	70	70	70	54	42	35	29
Domestic water pressure loss [kPa]	-	-	41	64	97	100	100	100	100
Calculated mixing water volume at 38°C ¹⁾ [l/min]	-	-	22.3	27.9	34.4	35.4	35.4	35.4	35.4

¹⁾ The calculated mixing water volume is an indication of the max. water volume at 38°C (tapping at the single taps and not at the HIU).

LogoMatic G2 L-Line performance table DHW preparation: DHW temperature increase from 10 °C till 60 °C (50 Kelvin)

Primary flow temperature [°C]				62	65	70	75	80	85
DHW performance [l/min]	-	-	-	13.7	17.0	20.8	22.0	22.0	22.0
DHW performance [kW]	-	-	-	47.8	59.3	72.5	76.6	76.6	76.6
Primary flow rate [l/min]	-	-	-	21.2	21.2	21.2	19.3	17.2	15.6
Primary return temperature [°C]	-	-	-	30	25	21	18	16	15
Primary pressure loss [kPa]	-	-	-	70	70	70	58	46	38
Domestic water pressure loss [kPa]	-	-	-	40	62	92	100	100	100
Calculated mixing water volume at 38°C ¹⁾ [l/min]	-	-	-	24.5	30.4	37.2	39.3	39.3	39.3

¹⁾ The calculated mixing water volume is an indication of the max. water volume at 38°C (tapping at the single taps and not at the HIU).


LOGOECO E

LogoEco E H-HW

The LogoEco E H-HW is a compact, ready-to-fit, surface-mounted and decentralised interface station in which the hot water preparation is electronically controlled to ensure that the latest hygienic standards are met. Furthermore, the LogoEco E H-HW also provide heating for the living space.

- Electrically controlled.
- Max. Heating / sanitary pressure: 16 bar / 10 bar.
- Min. sanitary operating pressure: 1 bar.
- Max. heating differential pressure (primary): 2.5 bar.
- Supply voltage: 100 - 230 V.



Type	Hot water output			Order Code
	[l/min] *	[kW] *		
LogoEco E H-HW	10	35	1	M11253.91

* Defined for a flow line temperature of 65 °C and heating of 45 K (factory setting).




Technical data – LogoEco E H-HW

	LogoEco E H-HW
Dimensions (width x height x depth) [mm]	570 x 390 x 170
Bottom connections	3/4" "
Max. permissible temperatures: Heating	95 °C
Pre-adjusted hot water draw-off temperature *	55 °C **
Heating capacity (at 30 K)	21
Hot water preparation	✓
Heating	✓
Electronically controlled two-way control valve for hot water preparation	✓
Electronically controlled two-way control valve for dwelling heating circuit	✓
Constant hot water outlet temperatures, even with changing primary temperatures (e.g. summer / winter operation) or cold water temperatures	✓
Low return line temperatures resulting from electronic regulation of the primary energy feed	✓
Stainless-steel plate heat exchanger (copper-soldered), vertical design to reduce the risk of calcification	✓
Electrical connection for regulation of the living space	✓
Keep warm function of the heat exchanger (40 °C – adjustable from 25 – 60 °C)	✓
Flow meter for exact volume-based hot water preparation	✓
Stainless steel plate heat exchanger (copper-soldered)	✓
Spool piece (3/4" x 110 mm) for an optional heat meter	✓
Pipework made from copper (fixed piping)	✓
Mounted entirely mechanically tension-free in the housing and inspected	✓
Dirt trap with stainless-steel sieve insert	✓
Differential pressure regulator for autom. hydr. balancing of the dwelling heating circuit	✓
Control range of differential pressure regulator	5-25 KPa
Surface-mounted cover (EPP black)	✓

* Pre-adjusted values can be amended as required by customer service or in the factory.

** Defined for a flow line temperature of 65 °C and heating of 45 K (factory setting).

Mounting rails for LogoEco E H-HW

Flush-mounted				
Type	For	Model		Order Code
Mounting rail - surface-mounted	LogoEco E H-HW	Including ball valves, 4 × DN 20 straight	1	M11253.911

LOGOECO COMPACT E

District Heating
In the world of communal central heating there is more and more demand for continuous innovation and far-reaching modernisation. Communal heating, such as district or block central heating is particularly suitable for creating the optimum balance between comfort and efficiency.

Innovative Heating Systems
LogoEco Compact E heat interface units contribute significantly to the reduction of energy loss and the increase of user convenience. The heat interface units provide the perfect energy-transfer from the heating network to the indoor installation. A modern, sustainable form of heating that we continue to improve.

LogoEco Compact E HW

LogoEco Compact E HW is a domestic hot water unit which provides hot water in buildings connected to a district heating system.

- Auto pressure adjusting feature. The electronics will adapt the valve setpoint according the accurate differential pressure. This self learning feature makes sure you will have accurate and fast hot water.
- Feed Forward Control. The unit is equipped with a flow sensor which will detect hot water tapplings within a second. The electronics will respond immediately to assure direct hot water availability at the right temperature.
- Possibility of data collection and custom settings.
- Plug and play solution.
- Anti-Legionella program.
- Standard 3/4" connections.
- Firmware version 1.32G".



Type	Hot water output			Order Code
	[l/min] *	[kW] *		
LogoEco Compact E HW	10	35	1	M11231.91



Technical data – LogoEco Compact E HW

	LogoEco Compact E
Dimensions (width x height x depth) [mm]	255 x 415 x 125
Bottom connections	$\frac{3}{4}$ "
Max. permissible temperatures: Heating	90 °C
Pre-adjusted hot water draw-off temperature *	55 °C **
Hot water preparation	✓
Electronically controlled two-way control valve for hot water preparation	✓
Constant hot water outlet temperatures, even with changing primary temperatures (e.g. summer / winter operation) or cold water temperatures	✓
Low return line temperatures resulting from electronic regulation of the primary energy feed	✓
Stainless-steel plate heat exchanger (copper-soldered), vertical design to reduce the risk of calcification	✓
Keep warm function of the heat exchanger (40 °C – adjustable from 25 – 60 °C)	✓
Flow meter for exact volume-based hot water preparation	✓
Stainless steel plate heat exchanger (copper-soldered)	✓
Pipework made from copper (fixed piping)	✓
Mounted entirely mechanically tension-free in the housing and inspected	✓
Surface-mounted cover (EPP black)	✓

* Pre-adjusted values can be amended as required by customer service or in the factory.

** Defined for a flow line temperature of 65 °C and heating of 45 K (factory setting).

LogoEco Compact E HW - Capacity examples


Capacity examples: 10 °C-45 °C - using SWEP heat exchanger E8LASHx36 plates (W-N)

Output [kW]	Temperatures (primary)		Pressure loss, heat exchanger		DHW tap load	
	supply [°C]	return [°C]	primary [kPa]	secondary [kPa]	primary [l./min.]	secondary [l./min.]
32,3	55	17.1	29.3	28.8	12.4	13.3
32,3	60	14.9	21.4	28.8	10.5	13.3
41,0	60	15.9	34.1	45.4	13.5	16.9
53,0	60	17.2	57.4	74.1	18.1	21.9

Mounting rails for LogoEco Compact E HW

Flush-mounted



Type	For	Model		Order Code
Mounting rail - surface-mounted	LogoEco Compact E HW	Including ball valves, 2 × DN 20 straight	1	M11231.911

LOGOECO DUAL E

District Heating

In the world of communal central heating there is more and more demand for continuous innovation and far-reaching modernisation. Communal heating, such as district or block central heating is particularly suitable for creating the optimum balance between comfort and efficiency.

Innovative Heating Systems

LogoEco Dual E heat interface units contribute significantly to the reduction of energy loss and the increase of user convenience. The heat interface units provide the perfect energy-transfer from the heating network to the indoor installation. A modern, sustainable form of heating that we continue to improve.

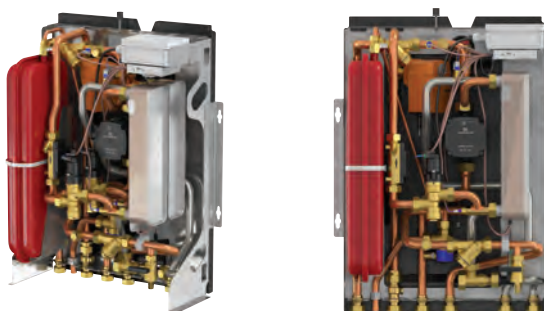
Special UK version available!


LogoEco Dual E H-HW

Heat interface unit for transferring heat from the district heating network to the domestic heating and hot water systems.

The interface unit is fitted with two heat exchangers: one for domestic water and one for the central heating system. These heat exchangers ensure physical separation (hydraulic) between the interior installation and the district heating network. The medium in the district heating network can then not come into contact with the medium in the interior installation. Heat is transferred from the district heating network through the heat exchangers to the domestic water installation and CH system.

- Low tapping threshold.
- Economical pump.
- Suitable for low district heating temperatures.
- Can be used for desalinated or demineralised water.
- Priority switching possible.
- Anti-legionellaprogram-Option.
- Maximum working pressure: 6 bar.
- Domestic water temperature: 55 °C.*
- Domestic water design flow rate: 18 l/min.
- Max power (10 °C - 55 °C): 56 kW.**



Type	Dimensions											Weight [kg]		Order Code
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	K [mm]	M [mm]	N [mm]	P [mm]			
LogoEco Dual E H-HW	490	640	275	819	55	80	60	60	120	60	45	24	1	At order

* Settings can be read out and changed using special service software and service cable for mechanics.

** Performance of a unit is strongly dependant on supply temperatures and differential pressures on the supply network.



LOGOTHERMIC CS COMPLETE STATIONS

LogoThermic CS - complete stations

The LogoThermic CS are compact, directly connectable, decentralized heat interface units with a thermostatically controlled DHW preparation and space heating supply. The LogoThermic CS are available as surface or flush mounting configurations, including the case / cover and the ball valve connection set, to enable a simple product selection.

The LogoThermic CS are available as a static heating circuit (UC), as a direct mixing heating circuit (MC) incl. 6 underfloor circuits or as a direct mixing heating circuit (MC) incl. 8 underfloor circuits and a second static heating circuit (UC). The LogoThermic always contains a thermostatic DHW temperature control to meet the system demands.

LogoThermic CS are also available as surface-mounted (SM) or flush-mounted version (FM) as well, with copper soldered heat exchanger (CU) or copper soldered heat exchanger with inner sealed surface (SX) for a higher resistance against aggressive mains water.

- Thermostatically controlled.
- Max. heating/sanitary pressure: 6 bar / PN 10.
- Min. operating pressure for sanitary uses: 1 bar.
- Max. permissible heating/sanitary temperatures: 110 °C/110 °C.
- Heating capacity (at 20 K): 10 kW.
- Hot water output: 15* - 17** - 20*** l/min. (or 36* - 46** - 50*** kW)


* Defined by a flow line temperature of 55 °C and heating of around 35 K.

** Defined by a flow line temperature of 65 °C and heating of around 40 K.

*** Defined by a flow line temperature of 65 °C and heating of around 35 K.

The LogoThermic regulation and control technology is resistant to hard domestic water as no sensitive mechanical components are exposed to the cold water.



Type	Performance type	Variants	Type of heating	Heat-exchanger		Order Code
LogoThermic CS	M-Line	UC	Static heating circuit (st. HC)	CU	1	M11124.1HKAP
LogoThermic CS	M-Line	UC	Static heating circuit (st. HC)	CU	1	M11124.1HKUP
LogoThermic CS	M-Line	6MC	Mixing circuit (MC) with 6 manifolds	CU	1	M11124.61MKAP
LogoThermic CS	M-Line	6MC	Mixing circuit (MC) with 6 manifolds	CU	1	M11124.61MKUP
LogoThermic CS	M-Line	8MC-UC	Mixing circuit with 8 manifolds and st. HC	CU	1	M11124.81MKAP
LogoThermic CS	M-Line	8MC-UC	Mixing circuit with 8 manifolds and st. HC	CU	1	M11124.81MKUP
LogoThermic CS	M-Line	UC	Static heating circuit (st. HC)	SX	1	M11124.1HKAPSX
LogoThermic CS	M-Line	UC	Static heating circuit (st. HC)	SX	1	M11124.1HKUPSX
LogoThermic CS	M-Line	6MC	Mixing circuit (MC) with 6 manifolds	SX	1	M11124.61MKAPSX
LogoThermic CS	M-Line	6MC	Mixing circuit (MC) with 6 manifolds	SX	1	M11124.61MKUPSX
LogoThermic CS	M-Line	8MC-UC	Mixing circuit with 8 manifolds and st. HC	SX	1	M11124.81MKAPSX
LogoThermic CS	M-Line	8MC-UC	Mixing circuit with 8 manifolds and st. HC	SX	1	M11124.81MKUPSX



Technical Data - LogoThermic CS

	LogoThermic CS		
	UC	MC	MC-UC
Dimensions (SM) surface version (width x heights x depth) [mm]	600 x 900 x 210	600 x 1300 x 210	600 x 1300 x 210
Dimensions (SM) flush version (width x heights x depth)* [mm]	610 x 953 x 110-160	610 x 1327 x 160-210	610 x 1327 x 160-210
Connection with bottom placement	3/4"	3/4"	3/4"
Radiator heating circuit supply (UC)	✓	-	✓
Mixer circuit (MC) with injection circuit (setting range 20-65°C) and HE pump	-	✓	✓
Underfloor manifold with 6 circuits (3/4"M, 0.5-5l / min, 6 bar)	-	✓	-
Underfloor manifold with 8 circuits (3/4"M, 0.5-5l / min, 6 bar)	-	-	✓
Stainless steel plate heat exchanger, vertical positioning for reducing of risks of calcification	✓	✓	✓
Thermostatic three-way valve for setting the priority switch (20... 50°C) as a comfort function, as well as reducing the risk of lime failure by avoiding the constant keeping of the plate heat exchanger	✓	✓	✓
Thermostatic control valve for setting the DHW temperature	✓	✓	✓
Zone / regulation valve for apartment heating circuit (option: connection to the temp. controller)	✓	✓	✓
Venting spots with hose connection at the primary heating side	✓	✓	✓
Spool piece for a heat meter (3/4" x 110mm) and sensor pocket (M10x1)	✓	✓	✓
Volume flow limiter for a Domenstic hot water regulation	✓	✓	✓
Saving energy with pipes made of insulated corrugated stainless steel	✓	✓	✓
Completely mechanically assembled on a base plate and tested	✓	✓	✓
Strainer with stainless steel sieve insert (including drainage function) for high operational reliability	✓	✓	✓
Second cold water connection for the apartment	✓	✓	✓
Spool piece for a cold water meter (3/4" x 110mm)	✓	✓	✓
Keep warm function of the primary heating water supply (not inside the measuring circuit of the heat meter) via an adjustable circulation bridge (35-65°C)	✓	✓	✓
Differential pressure control valve (range 5-25 kPa) for autom. hydr. alignment	✓	✓	✓
7 ball valves DN20, one with a sensor pocket for the heat meter & some of them are drinking water ball valves (DVGW tested)	✓	✓	✓

* Width: dimension of front cover, cut-out dimension greater. Height: dimension of front cover, or adjustable in height. Feet. Depth: adjustable.

Optional accessories - LogoThermic CS

Optional accessories available for each station with the variant management system.

	LogoThermic CS			Order Code
	UC	MC	UC-MC	
Meiflex SST 3/4 F/F x 500	Optional	Optional	Optional	M4325.1227.50
Double nipple DN16	Optional	Optional	Optional	M43.66124D

LOGOTHERMIC

LogoThermic - final station

The LogoThermic final stations are compact, directly connectable, decentralized heat interface units with a thermostatically controlled DHW preparation and space heating supply. The LogoThermic units are available as a system for surface or flush mounting.

There are two main variants of the LogoThermic series:

- UC = LogoThermic with static heating circuit.
- MC = LogoThermic Plus with integrated mixing circuit.


Special equipment features:

- CU = copper soldered plate heat exchanger.
- SX = sealed heat exchanger.
- DHW-C = domestic hot water circulation.
- PRV = pressure reducing valve (in the cold water inlet).
- RTL = return temperature limiter (in the secondary heating return).

Operating parameters and performances:

- Thermostatically controlled.
- Max. heating/sanitary pressure: 6 bar/10 bar.
- Min. operating pressure for sanitary uses: 1 bar.
- Max. permissible heating/sanitary temperatures: 110 °C/110 °C.
- Heating capacity (at 20 K): 10 kW.



Type	Performance type	Variants	DHW performance						Heat-exchanger		Order Code
			[l/min] *	[kW] *	[l/min] **	[kW] **	[l/min] ***	[kW] ***			
LogoThermic	S-Line	UC	12	29	12	35	15	37	CU	–	M11124.11
LogoThermic	S-Line	UC DHW-C	12	29	12	35	15	37	CU	–	M11124.18
LogoThermic	S-Line	UC RTL	12	29	12	35	15	37	SX	–	M11124.112SX
LogoThermic	S-Line	UC PRV	12	29	12	35	15	37	CU	–	M11124.13
LogoThermic	S-Line	UC PRV	12	29	12	35	15	37	CU	–	M11124.114SX
LogoThermic	M-Line	UC	15	36	17	46	20	50	CU	–	M11124.110
LogoThermic	M-Line	UC	15	36	17	46	20	50	SX	–	M11124.110SX
LogoThermic	M-Line	UC DHW-C	15	36	17	46	20	50	CU	–	M11124.19
LogoThermic	M-Line	UC DHW-C	15	36	17	46	20	50	SX	–	M11124.19SX
LogoThermic	M-Line	UC PRV	15	36	17	46	20	50	CU	–	M11124.12
LogoThermic	M-Line	UC PRV	15	36	17	46	20	50	SX	–	M11124.113SX
LogoThermic	M-Line	UC RTL	15	36	17	46	20	50	CU	–	M11124.14
LogoThermic	M-Line	UC RTL	15	36	17	46	20	50	SX	–	M11124.111SX
LogoThermic Plus	S-Line	MC	12	29	12	35	15	37	CU	–	M11124.21
LogoThermic Plus	S-Line	MC DHW-C	12	29	12	35	15	37	CU	–	M11124.23
LogoThermic Plus	M-Line	MC	15	36	17	46	20	50	CU	–	M11124.210
LogoThermic Plus	M-Line	MC	15	36	17	46	20	50	SX	–	M11124.210SX
LogoThermic Plus	M-Line	MC DHW-C	15	36	17	46	20	50	CU	–	M11124.24
LogoThermic Plus	M-Line	MC DHW-C	15	36	17	46	20	50	SX	–	M11124.24SX
LogoThermic Plus	M-Line	UC MC	15	36	17	46	20	50	CU	–	M11124.71
LogoThermic Plus	M-Line	UC MC	15	36	17	46	20	50	SX	–	M11124.71SX

* Defined at a flow temperature of 55 °C and a heating of 35 K (use a adapted flow limiter).

** Defined at a flow temperature of 65 °C and a heating of 40 K.

*** Defined at a flow temperature of 65 °C and a heating of 35 K (use a adapted flow limiter).



Technical Data - LogoThermic final stations

	LogoThermic final stations	
	UC	MC
Dimensions* (width x height x depth without DHW-C / with DHW-C) [mm]	576 x 750 x 110 / 145	576 x 750 x 110 / 145
Thermostatic three-way valve for setting the priority switch (20... 50°C) as a comfort function, as well as reducing the risk of lime failure by avoiding the constant keeping of the plate heat exchanger	✓	✓
Stainless steel plate heat exchanger, vertical positioning for reducing of risks of calcification	✓	✓
Zone / regulation valve for apartment heating circuit (option: connection to the temp. controller)	✓	✓
Venting spots with hose connection at the primary heating side	✓	✓
Spool piece for a heat meter ($\frac{3}{4}$ " x 110mm) and sensor pocket (M10x1)	✓	✓
Volume flow limiter for a domestic hot water regulation	✓	✓
Saving energy with pipes made of insulated corrugated stainless steel	✓	✓
Completely mechanically assembled on a base plate and tested	✓	✓
Strainer with stainless steel sieve insert (including drainage function) for high operational reliability	✓	✓
Second cold water connection for the apartment	✓	✓
Spool piece for a cold water meter ($\frac{3}{4}$ " x 110mm)	✓	✓
Keep warm function of the primary heating water supply (not inside the measuring circuit of the heat meter) via an adjustable circulation bridge (35-65°C)	✓	✓
Differential pressure control valve (range 5-25 kPa) for autom. hydr. alignment	✓	✓
Radiator heating circuit supply (UC)	✓	-
Mixer circuit (MC) with injection circuit (setting range 20-65°C) and HE pump	-	✓

*Take care about the dimensions of the cases / covers

Optional accessories - LogoThermic final stations

Optional accessories available for each station with the variant management system.

	LogoThermic final stations		Ordner Code
	UC	MC	
Scalding protection	Optional	Optional	-
Return temperature limiter (35-65°C)	Optional	Optional	-
Ball valves 8 x DN20, DVGW tested and 1 x with sensor pocket (Application for LogoThermic with DHW circulation)	Optional	Optional	M61801.22
Ball valve 1 x DN20, DVGW tested	Optional	Optional	M10252.34
Ball valves 5 x DN20, DVGW tested and 1 x with sensor pocket	Optional	Optional	M10252.32
Ball valves 7 x DN20, DVGW tested and 1 x with sensor pocket	Optional	Optional	M10252.33
First fix rail - surface and flush-mounting possible with 7 x DN 20 ball valves, DVGW tested and 1 x with sensor pocket	Optional	Optional	M10203.181
Meiflex SST $\frac{3}{4}$ F/F x 500	Optional	Optional	M4325.1227.50
Double nipple DN16	Optional	Optional	M43.66124D
Connection set 2nd static heating circuit (unmixed, UC) incl. zone / regulation valve	Optional	Optional	M10253.13
Extension of the connection set "2nd stat. Heating circuit" for UFH manifolds variant B with up to 8 mixing circuits	Optional	Optional	M10253.17
Extension of the connection set "2nd stat. heating circuit" for UFH manifolds variant E with up to 12 mixing circuits	Optional	Optional	M10253.18
Special piping set with thermal injection circuit and HE pump for connecting LogoThermic MC with UFH manifold variant E with up to 12 mixing circuits*	-	Optional	M10253.15
Side connection module with thermal injection circuit and HE pump for connecting LogoThermic UC with UFH manifold variant E with up to 12 mixing circuits **	Optional	-	M10512.26

* Up to 8 heating circuit outlets are supplied 100% per outlet. After that, the power is distributed to all other heating circuits.


** Up to 12 heating circuit feeders are supplied at 100% per feeder.

Prewiring concept - LogoThermic finial stations

Prewiring concept per interface station with UHF including:

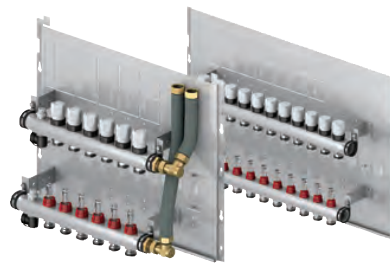
- UHF terminal block (IP44; supply voltage for the drives 230V).
- Pump logic module.
- Hinged mounting plate for the terminal strip (for access to all assemblies).
- Safety temperature limiter (STL) with thermal actuator.
- Professional wiring and supply within the selected station.


Attention: The required actuators for the underfloor heating circuits must be ordered separately!

Type		Order Code
For use with up to 8 zones (up to 18 actuators and therefore several can be connected per zone)	–	MB10560.03
For use with up to 10 zones (up to 18 actuators and therefore several can be connected per zone)	–	MB10560.04
Electrothermal actuator	–	M10560.98

Underfloor manifold

All underfloor manifolds are pre-assembled on a base plate and are fitted with the heating circuits specified below. There are five types of underfloor manifold available for the interface stations.



Type	Number of heating circuits	Model	LogoThermic MC	LogoThermic UC		Order Code
Underfloor manifold 3B	3	B	✓	–	1	M10515.3
Underfloor manifold 4B	4	B	✓	–	1	M10515.4
Underfloor manifold 5B	5	B	✓	–	1	M10515.5
Underfloor manifold 6B	6	B	✓	–	1	M10515.6
Underfloor manifold 7B	7	B	✓	–	1	M10515.7
Underfloor manifold 8B	8	B	✓	–	1	M10515.8
Underfloor manifold 8E	3	E	–	✓	1	M10512.33
Underfloor manifold 8E	4	E	–	✓	1	M10512.34
Underfloor manifold 8E	5	E	–	✓	1	M10512.35
Underfloor manifold 8E	6	E	–	✓	1	M10512.36
Underfloor manifold 8E	7	E	–	✓	1	M10512.37
Underfloor manifold 8E	8	E	–	✓	1	M10512.38
Underfloor manifold 8E	9	E	–	✓	1	M10512.39
Underfloor manifold 8E	10	E	–	✓	1	M10512.40
Underfloor manifold 8E	11	E	–	✓	1	M10512.41
Underfloor manifold 8E	12	E	–	✓	1	M10512.42


* application for wider station models >600 mm.

LogoThermic - thermal exchange units (BE)

The LogoThermic thermal exchange units (BE) are compact, directly connectable, decentralized heat interface units with a thermostatically controlled DHW preparation and space heating supply. The LogoThermic units are available as a system for surface or flush mounting.

Operating parameters and performances:

- Max. heating/sanitary pressure: PN10 / PN10.
- Min. operating pressure for sanitary uses: 1 bar.
- Max. permissible heating/sanitary temperatures: 110 °C/110 °C.
- Heating capacity (at 20 K): 10 kW.

Type	Performance type	Variants	DHW performance						Dimensions [mm]				Order Code
			[l/min] *	[kW] *	[l/min] **	[kW] **	[l/min] ***	[kW] ***	Width	Height	Depth		
LogoThermic	S-Line	UC BE	12	29	12	35	15	37	576	750	110	–	M11224.11
LogoThermic	S-Line	UC BE	12	29	12	35	15	37	576	887	106	–	M11224.12
LogoThermic	S-Line	UC BE	12	29	12	35	15	37	426	887	106	–	M11224.13
LogoThermic	S-Line	UC BE	12	29	12	35	15	37	426	887	106	–	M11224.14

* Defined at a flow temperature of 55 °C and a heating of 35 K.

** Defined at a flow temperature of 65 °C and a heating of 40 K.

*** Defined at a flow temperature of 65 °C and a heating of 35 K (use a adapted flow limiter).

**** Note the dimensions of the case / cover. For the LogoThermic M11224.12 to M11224.14, please register the appropriate case / cover separately.



Technical Data - LogoThermic thermal exchange units (BE)

	LogoThermic - thermal exchange units (BE)UC
Thermostatic three-way valve for setting the priority switch (20... 50°C) as a comfort function, as well as reducing the risk of lime failure by avoiding the constant keeping of the plate heat exchanger	✓
Stainless steel plate heat exchanger, vertical positioning for reducing of risks of calcification	✓
Zone / regulation valve for apartment heating circuit (option: connection to the temp. controller)	✓
Spool piece for a heat meter (3/4" x 110mm) and sensor pocket (M10x1)	✓
Volume flow limiter for a domestic hot water regulation	✓
Saving energy with pipes made of insulated corrugated stainless steel	✓
Completely mechanically assembled on a base plate and tested	✓
Strainer with stainless steel sieve insert (including drainage function) for high operational reliability	✓
Keep warm function of the primary heating water supply (not inside the measuring circuit of the heat meter) via an adjustable circulation bridge (35-65°C)	✓*
Differential pressure control valve (range 5-25 kPa) for autom. hydr. Alignment	✓
Radiator heating circuit supply (UC)	✓

* Not included with the LogoThermic M11224.14.

Optional accessories - LogoThermic thermal exchange units (BE)


Optional accessories available for each station with the variant management system.

	LogoThermic thermal exchange units (BE)	Order Code	
Plate heat exchanger (PHE) for drinking water with high Conductivity at 12 l/min.	Optional	MM10230.5SC	-
Ball valves 6 x DN20	Optional	M10252.34	-
Meiflex SST 3/4 F/F x 500	Optional	M4325.1227.50	-
Double nipple DN16	Optional	M43.66124D	-

ACCESSORIES FOR INTERFACE STATIONS


Ball valves



Type	For	Model		Order Code
Ball valves 7 x DN 20	LogoAktiv 35 - 50 LogoComfort LogoThermic	Ball valves 7 x DN 20 straight with heat flow meter sensor mounting, domestic water ball valves DVGW-certified.	1	M10252.32
Ball valves 5 x DN 20	LogoAktiv 35 - 50	-	1	M10252.34
Ball valves 6 x DN 20	LogoAktiv 35 - 50	-	1	M10252.35
Ball valves 4 x DN 20	LogoVital Typ 1 - Typ 2	Domestic water ball valves DVGW-certified., 4 x DN 20 straight	1	M10252.3
Ball valves 3 x DN 20 / 2 x DN 25	LogoVital Typ 3 - Typ 4	Domestic water ball valves DVGW-certified 3 x DN 20 & 2 x DN 25 straight	1	M10252.341
Ball valves 8 x DN 20	LogoThermic LogoComfort	With heat flow meter sensor mounting. Domestic water ball valves DVGW-certified 8 x DN 20 straight	1	M10252.33
Ball valves 7 x DN 25 / 1 x DN 20	LogoAktiv 70	With heat flow meter sensor mounting. Domestic water ball valves DVGW-certified 7 x DN 25 & 1 x DN 20 (circulation) straight	1	M10252.37


Mounting rails



Type	For	Model		Order Code
Mounting rail – surface-mounted & flush-mounted	LogoComfort 500	Ball valves 7 x DN 20 straight with heat flow meter sensor mounting, domestic water ball valves DVGW-certified.	1	M10203.160
Mounting rail – surface-mounted & flush-mounted	LogoComfort 600	Ball valves 7 x DN 20 straight with heat flow meter sensor mounting, domestic water ball valves DVGW-certified.	1	M10203.158
Mounting rail – surface-mounted & flush-mounted	LogoComfort 600+	Ball valves 7 x DN 20 straight with heat flow meter sensor mounting, domestic water ball valves DVGW-certified.	1	M10203.386
Mounting rail – surface-mounted & flush-mounted	LogoThermic UC / MC	Ball valves 7 x DN 20 straight with heat flow meter sensor mounting, domestic water ball valves DVGW-certified.	1	M10203.181
Mounting rail – surface-mounted & flush-mounted	LogoAktiv 35 - 50	Including ball valves, domestic water ball valves DVGW-certified, 7 x DN 20 straight	1	M10203.138
Mounting rail – surface-mounted & flush-mounted	LogoAktiv 35 - 50	Including ball valves, domestic water ball valves DVGW-certified, 8 x DN 20 straight	1	M10203.136
Mounting rail - surface-mounted	LogoEco Compact E HW	Including ball valves, 2 x DN 20 straight	1	M11231.911
Mounting rail - surface-mounted	LogoEco E H-HW	Including ball valves, 4 x DN 20 straight	1	M11253.911
Mounting rail angle - surface- and flush-mounted	LogoComfort 600	-	1	M10203.161

M-Bus module


The module allows the connection of M-Bus-capable station heat flow meters and station water meters. The LogoAktiv controller can thus be used for the recording and relaying of consumption data.

Type	For		Order Code
M-Bus module	Extension of the LogoAktiv Plus	1	M10579.004

Scalding protection




- Thermal water mixer (adjustment range 35-60 °C) for hot water limitation, max. 10 bar, 3/4" M

Type	For		Order Code
Scalding protection	LogoVital Typ 1 - Typ 2	1	M69050.9


Short end sections



- As line end with circulation bridge (35 – 65 °C).

Type	For	Model		Order Code
Short-circuit sections	LogoPack	Top with bleed valves	1	M10522.2
Short-circuit sections	LogoPack	Bottom with drainage device	1	M10523.2


Union fittings

Type	Model		Order Code
Union fittings	Pair of half shells on FixLock, DN 32 for devices prior to 11/96 (LogoPack)	1	M90180.1
Union fittings	1 x LogoPack DN 40, on corrugated pipe DN 40 (including half shell)	1	ME-46119.7

Flushing hose




- For flushing the network.

Type	Model		Order Code
Meiflex SST 3/4 F/F x 500	3/4" F x 3/4" F, 500 mm	1	M4325.1227.50

Flushing hose connections




- MS flat sealing, 3/4".

Type		Order Code
Double nipple DN16	10	M43.66124D

Differential pressure regulator (balancer) for LogoPack



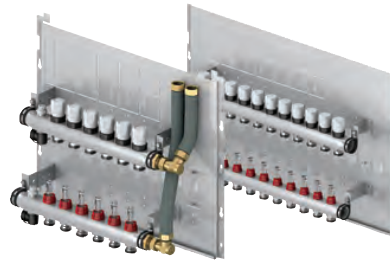
- 0.5 m pilot line, return flow ball valve with pilot line connection.


Type	Model		Order Code
Differential pressure regulator (balancer)	Set DN 20 for individual connection	1	M18120
Differential pressure regulator (balancer)	Set DN 32 for max. 5 stations	1	M18140

UNDERFLOOR MANIFOLD

Underfloor manifold

All underfloor manifolds are pre-assembled on a base plate and are fitted with the heating circuits specified below.



Type	Number of heating circuits	Model	Interface stations					Order Code
			LogoAktiv 35 & 50	Logo-Comfort 600+	Logo-Comfort 600	Logo-Comfort 4RS		
Underfloor manifold 3A	3	A	✓	-	-	-	1	M10514.1
Underfloor manifold 3B	3	B	-	✓	-	-	1	MM14
Underfloor manifold 3E	3	E	-	-	✓*	-	1	M10512.3
Underfloor manifold 4A	4	A	✓	-	-	-	1	M10514.2
Underfloor manifold 4B	4	B	-	✓	-	-	1	MM15
Underfloor manifold 4C	4	C	-	✓	✓	-	1	MTS-11301.23
Underfloor manifold 4E	4	E	-	-	✓*	-	1	M10512.4
Underfloor manifold 5A	5	A	✓	-	-	-	1	M10514.3
Underfloor manifold 5B	5	B	-	✓	-	-	1	MM16
Underfloor manifold 5C	5	C	-	-	-	✓	1	MTS-11301.22
Underfloor manifold 5D	5	D	-	-	-	✓	1	M10513.5
Underfloor manifold 5E	5	E	-	-	✓*	-	1	M10512.5
Underfloor manifold 6A	6	A	✓	-	-	-	1	M10514.4
Underfloor manifold 6B	6	B	-	✓	-	-	1	MM17
Underfloor manifold 6C	6	C	-	-	-	✓	1	MTS-11301.21
Underfloor manifold 6D	6	D	-	-	-	✓	1	M10513.6
Underfloor manifold 6E	6	E	-	-	✓*	-	1	M10512.6
Underfloor manifold 7A	7	A	✓	-	-	-	1	M10514.5
Underfloor manifold 7B	7	B	-	✓	-	-	1	MTS-11301.17
Underfloor manifold 7C	7	C	-	-	-	✓	1	MTS-11301.24
Underfloor manifold 7D	7	D	-	-	-	✓	1	M10513.7
Underfloor manifold 7E	7	E	-	-	✓*	-	1	M10512.7
Underfloor manifold 8B	8	B	-	✓	-	-	1	MTS-11301.18
Underfloor manifold 8D	8	D	-	-	-	✓	1	M10513.8
Underfloor manifold 8E	8	E	-	-	✓*	-	1	M10512.8
Underfloor manifold 9D	9	D	-	-	-	✓	1	M10513.9
Underfloor manifold 9E	9	E	-	-	✓*	-	1	M10512.9
Underfloor manifold 10D	10	D	-	-	-	✓	1	M10513.10
Underfloor manifold 10E	10	E	-	-	✓*	-	1	M10512.10
Underfloor manifold 11D	11	D	-	-	-	✓	1	M10513.11
Underfloor manifold 11E	11	E	-	-	✓*	-	1	M10512.31
Underfloor manifold 12E	12	E	-	-	✓*	-	1	M10512.32

* Anwendung für Stationen in breiter Ausführung >600 mm.

Technical data, underfloor manifold


Specifications	Underfloor manifold				
	Type A	Type B	Type C	Type D	Type E
Width x height [mm] (dimensions of the housings to be taken into account)	600 x 450	600 x 450	600 x 500	792 x 500	792 x 500
Connection to the heating circuits	3/4" M - Eurokonus	3/4" M - Eurokonus	3/4" M - Eurokonus	3/4" M - Eurokonus	3/4" M - Eurokonus
Arrangement of the supply connections:	top	top	below	below	side
Heating circuit manifold material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Control range flow rate limiter [l/min.]	0.5 - 5	0.5 - 5	0.5 - 5	0.5 - 5	0.5 - 5
Max. pressure load (bar)	6	6	6	6	6
Integrated zone valve	✓	-	-	-	-
Valve inserts M30 × 1.5 with manual adjustment flaps	✓	✓	✓	✓	✓
Incl. adaptors for converting to flat sealing 3/4" male thread connection to the heating circuits	-	-	-	-	✓
For mounting under the device in combination with housing M11100.72, M11100.73 and connection group	-	-	-	-	✓
Spool piece (3/4" × 110 mm) for an optional heat meter	-	-	✓	✓	-
Bleeding and drainage	-	-	✓	-	-

CLADDING

The cladding types listed are available as surface-mounted or flush-mounted variants, and may also be used for wireless meter reading (radio permeable) applications when using consumption metering with wireless transmission. Cladding: steel painted white (RAL 9016) and plastic panel in white (RAL 9016) for wireless applications.

Surface-mounted cladding



Type	With door	Long ¹⁾	Radio permeable ²⁾	Dimensions [mm]				Order Code
				Width	Height	Depth		
Surface-mounted cladding 1	-	-	-	310	500	170	1	M10203.132
Surface-mounted cladding 2	-	-	-	440	637	190	1	M10203.133
Surface-mounted cladding 3	-	-	-	500	800	210	1	M11200.1
Surface-mounted cladding 4	-	✓	-	500	1000	210	1	M11200.1L
Surface-mounted cladding 5	-	-	-	600	880	210	1	M11100.9
Surface-mounted cladding 6	-	✓	-	600	1000	210	1	M11200.2L
Surface-mounted cladding 8	-	-	-	600	800	210	1	M11100.1
Additional cladding f. manifolds	-	-	-	600	400	210	1	M11100.5
Surface-mounted cladding 9	-	✓	-	850	1210	210	1	M11100.73
Surface-mounted cladding 10	-	✓	-	850	1210	210	1	M11100.77
Surface-mounted cladding 12	-	✓	✓	500	1000	210	1	M11200.1KL
Surface-mounted cladding 13	-	-	✓	600	880	210	1	M11100.9K
Surface-mounted cladding 14	-	✓	✓	600	1000	210	1	M11200.2KL
Surface-mounted cladding 15	-	-	✓	600	800	210	1	M11100.1K
Surface-mounted cladding 16	-	-	-	600	935	210	1	M11100.11
Surface-mounted cladding 17	-	-	✓	600	935	210	1	M11100.11K
Surface-mounted cladding 18	-	✓	-	600	1330	210	1	M11100.46
Surface-mounted cladding 19	-	✓	✓	600	1330	210	1	M11100.46K

¹⁾ Housing with the option of wireless meter reading for consumption metering thanks to plastic insert.


²⁾ Height ≥ 1,000 mm.

Surface-mounted cladding selection table

Type	LogoAktiv		LogoComfort			LogoPack		LogoThermic		LogoVital		
	35 & 50	70	500	600	600+	C	C1	UC	MC	35	46	65
Surface-mounted cladding 1	-	-	-	-	-	-	-	-	-	✓	-	-
Surface-mounted cladding 2	-	-	-	-	-	-	-	-	-	-	✓	-
Surface-mounted cladding 3	-	-	✓	-	-	-	-	-	-	-	-	-
Surface-mounted cladding 4	-	-	✓	-	-	-	-	-	-	-	-	-
Surface-mounted cladding 5	✓	-	-	-	-	-	-	-	-	-	-	-
Surface-mounted cladding 6	-	✓	-	✓	-	-	-	-	-	-	-	✓
Surface-mounted cladding 7	-	-	-	✓	-	-	-	-	-	-	-	-
Surface-mounted cladding 8	-	-	-	✓	✓	-	-	-	-	-	-	-
Additional cladding for manifolds	✓	-	-	✓	✓	-	-	-	-	-	-	-
Surface-mounted cladding 9	-	-	-	✓	-	-	-	-	-	-	-	-
Surface-mounted cladding 10	-	-	-	-	-	-	-	-	-	-	-	✓
Surface-mounted cladding 11	-	-	✓	-	-	-	-	-	-	-	-	-
Surface-mounted cladding 12	-	-	✓	-	-	-	-	-	-	-	-	-
Surface-mounted cladding 13	✓	-	-	-	-	-	-	-	-	-	-	-
Surface-mounted cladding 14	-	✓	-	✓	-	-	-	-	-	-	-	✓
Surface-mounted cladding 15	-	-	-	✓	✓	-	-	-	-	-	-	-
Surface-mounted cladding 16	-	-	-	-	-	-	-	✓	✓	-	-	-
Surface-mounted cladding 17	-	-	-	-	-	-	-	✓	✓	-	-	-
Surface-mounted cladding 18	-	-	-	-	-	-	-	✓	✓	-	-	-
Surface-mounted cladding 19	-	-	-	-	-	-	-	✓	✓	-	-	-

Cladding for manifold



Type	Dimensions				Order Code
	Width [mm]	Height [mm]	Depth [mm]		
Cladding for manifold 1	600	400	210	1	M11100.71

Cladding for manifold selection table

Type	LogoAktiv		LogoComfort			LogoPack		LogoThermic		LogoVital		
	35 & 50	70	500	600	600+	C	C1	UC	MC	35	46	65
Cladding for manifold 1	✓	-	-	✓	✓	-	-	-	-	-	-	-

Flush-mounted cladding



Type	With door	Long ¹⁾	Radio permeable ²⁾	Dimensions				Order Code
				Width [mm]	Height [mm]	Depth [mm]		
Flush-mounted cladding 1a	-	-	-	510	835	150 - 220	1	M11200.2
Flush-mounted cladding 1	-	✓	-	610	1260	150 - 220	1	M11100.8
Flush-mounted cladding 2	-	-	-	610	835	150 - 220	1	M11100.2
Flush-mounted cladding 3	-	✓	-	610	1175	150 - 220	1	M11100.4
Flush-mounted cladding 4	-	✓	-	825	1175	150 - 220	1	M11100.72
Flush-mounted cladding 5	-	✓	-	825	1175	150 - 220	1	M11100.76
Flush-mounted cladding 6	-	-	✓	510	835	150 - 220	1	M11200.2K
Flush-mounted cladding 7	-	✓	✓	610	1260	150 - 220	1	M11100.8K
Flush-mounted cladding 8	-	-	✓	610	835	150 - 220	1	M11100.2K
Flush-mounted cladding 9	-	✓	✓	610	1175	150 - 220	1	M11100.4K
Flush-mounted cladding 10*	-	-	-	610	835	150 - 210	1	M11100.23
Flush-mounted cladding 11*	-	✓	-	610	1175	150 - 210	1	M11100.24
Flush-mounted cladding 12*	-	✓	-	845	1175	150 - 210	1	M11100.25
Flush-mounted cladding 13*	-	-	-	460	720	190	1	M10203.548
Flush-mounted cladding 14*	-	-	✓	610	835	150 - 210	1	M11100.23K
Flush-mounted cladding 15*	-	✓	✓	610	1175	150 - 210	1	M11100.24K
Flush-mounted cladding 16*	-	-	-	610	935	110 - 160	1	M11100.38
Flush-mounted cladding 17*	-	-	✓	610	935	110 - 160	1	M11100.38K
Flush-mounted cladding 18*	-	✓	-	610	1230	110 - 160	1	M11100.39
Flush-mounted cladding 19*	-	✓	✓	610	1230	110 - 160	1	M11100.39K

* Completely closed.

¹⁾ Housing with the option of wireless meter reading for consumption metering thanks to plastic insert.

²⁾ Height ≥ 1,000 mm.


Flush-mounted cladding selection table

Type	LogoAktiv		LogoComfort			LogoPack		LogoThermic		LogoVital		
	35 & 50	70	500	600	600+	C	C1	UC	MC	35	46	65
Flush-mounted cladding 1a	✓	-	✓	-	-	-	-	-	-	-	-	-
Flush-mounted cladding 1	✓	-	-	-	-	-	-	-	-	-	-	-
Flush-mounted cladding 2	✓	-	-	✓	✓	-	-	-	-	-	-	-
Flush-mounted cladding 3	-	✓	-	✓	✓	-	-	-	-	-	-	✓
Flush-mounted cladding 4	-	-	-	✓	-	-	-	-	-	-	-	-
Flush-mounted cladding 5	-	-	-	-	-	-	-	-	-	-	-	✓
Flush-mounted cladding 6	-	-	✓	-	-	-	-	-	-	-	-	-
Flush-mounted cladding 7	✓	-	-	-	-	-	-	-	-	-	-	-
Flush-mounted cladding 8	✓	-	-	✓	✓	-	-	-	-	-	-	-
Flush-mounted cladding 9	-	✓	-	✓	✓	-	-	-	-	-	-	-
Flush-mounted cladding 10*	-	-	-	✓	✓	-	-	-	-	-	-	-
Flush-mounted cladding 11*	-	-	-	✓	✓	-	-	-	-	-	-	-
Flush-mounted cladding 12*	-	-	-	✓	-	-	-	-	-	-	-	-
Flush-mounted cladding 13*	-	-	-	-	-	-	-	-	-	-	✓	-
Flush-mounted cladding 14*	-	-	-	✓	✓	-	-	-	-	-	-	-
Flush-mounted cladding 15*	-	-	-	✓	✓	-	-	-	-	-	-	-
Flush-mounted cladding 16*	-	-	-	-	-	-	-	✓	✓	-	-	-
Flush-mounted cladding 17*	-	-	-	-	-	-	-	✓	✓	-	-	-
Flush-mounted cladding 18*	-	-	-	-	-	-	-	✓	✓	-	-	-
Flush-mounted cladding 19*	-	-	-	-	-	-	-	✓	✓	-	-	-

* Completely closed.

Inspection frame



Type	With door	Long ¹⁾	Radio permeable ²⁾	Dimensions			Order Code
				Width [mm]	Height [mm]		
Inspection frame 1	-	-	-	400	600	1	M66200.6
Inspection frame 2	-	-	-	500	800	1	M10203.317
Inspection frame 3	-	-	-	500	600	1	M66200.7
Inspection frame 4	-	-	-	600	800	1	M10203.309
Inspection frame 5	-	✓	-	600	1150	1	M10203.312
Inspection frame 6	-	-	✓	500	800	1	M10203.317K
Inspection frame 7	-	-	✓	600	800	1	M10203.309K

¹⁾ Height ≥ 1,000 mm.²⁾ Housing with the option of wireless meter reading for consumption metering thanks to plastic insert.

Inspection frame selection table


Type	LogoAktiv		LogoComfort			LogoPack		LogoThermic & LogoMatic G2		LogoVital		
	35 & 50	70	500	600	600+	C	C1	UC	MC	35	46	65
Inspection frame 1	-	-	-	-	-	-	✓	-	-	✓	-	-
Inspection frame 2	-	-	✓	-	-	-	-	✓	-	-	-	-
Inspection frame 3	-	-	-	-	-	✓	✓	-	-	-	✓	-
Inspection frame 4	-	-	-	✓	✓	-	-	-	✓	-	-	-
Inspection frame 5	✓	✓	-	✓	-	-	-	-	-	-	-	✓
Inspection frame 6	-	-	✓	-	-	✓	✓	✓	-	✓	✓	-
Inspection frame 7	-	-	-	✓	✓	-	-	-	✓	-	-	-
Inspection frame 8	✓	✓	-	✓	-	-	-	-	-	-	-	✓

Height-adjustable feet

For flush-mounted covers.

- Adjustability: 100 - 170 mm.



Type	Width [mm]		Order Code
Height-adjustable feet 1	510	1	M11200.21
Height-adjustable feet 2	610	1	M11100.21
Height-adjustable feet 3	825	1	M11100.71
Height-adjustable feet 4	610	1	M11100.35

Height-adjustable feet selection table

Type	LogoAktiv		LogoComfort			LogoPack		LogoThermic & LogoMatic G2		LogoVital		
	35 & 50	70	500	600	600+	C	C1	UC	MC	35	46	65
Height-adjustable feet 1	-	-	✓	-	-	-	-	-	-	-	-	-
Height-adjustable feet 2*	✓	✓	-	✓	✓	-	-	✓	✓	-	-	✓
Height-adjustable feet 3	-	-	-	✓	-	-	-	-	-	-	-	✓
Height-adjustable feet 4	-	-	-	-	-	-	-	✓**	✓**	-	-	-

* Only useable with installation depth of the cladding of ≥110mm.

** Only useable with installation depth of the cladding of 110mm.

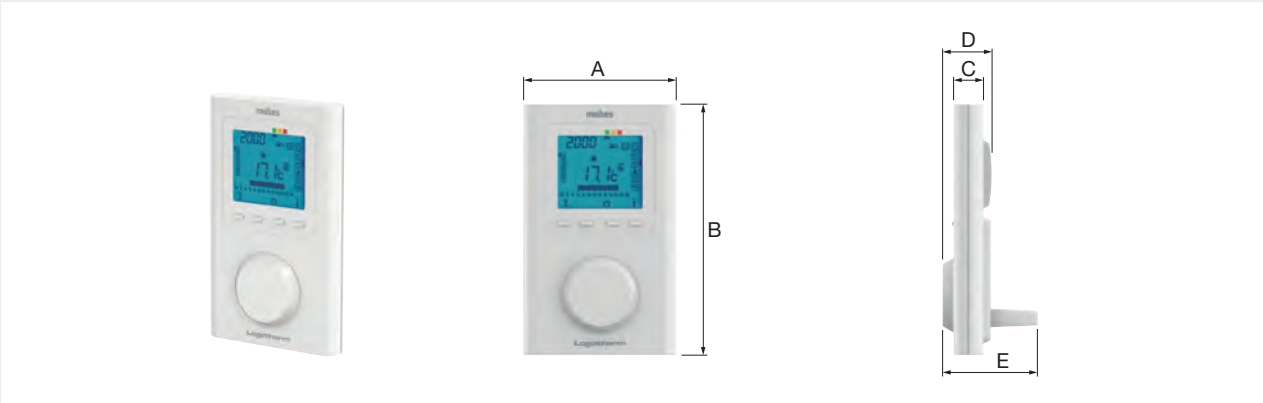
CONTROL SYSTEMS


The listed control systems are potential room temperature controllers for a wide range of applications such as individual room control, temperature regulation of underfloor distribution systems etc. The combination possibilities listed here are mutually exclusive options. We therefore recommend that have your desired combination for the planned application approved by our specialist personnel.

LogoControl RCS

LogoControl RCS battery-powered wireless room controller as a digital thermostat with automatic timer for time-controlled monitoring, control and regulation of the room temperature in a static heating circuit with bidirectional wireless technology. Extra-flat design for surface-mounted installation.

- Functions:
- General room temperature control with wireless receiver.
 - Quick settings adjustment with selector switch.
 - Display of general information by pressing the Info key.
 - Quick-start function using preset basic programs with rapidly customisable comfort and economy operating temperature.
 - Stored party program.
 - Fully automatic summer and winter time adjustment.
 - Holiday program with reduced temperature or timer.
 - 24 programmable time phases per program.
 - Backlight colour: blue.
 - Power supply via two alkaline batteries of type 1.5V LR03/AAA.
 - Temperature adjustment range: 5 to 30 °C.
 - Adjustment range for frost protection: 5 to 10 °C.
 - Temperature display accuracy: 0.1 °C.
 - Time input: 24 or 12 hours.
 - Transmission frequency: 868 MHz.
 - Protection code: IP30.
 - Display of the target and actual temperature.
 - Function option - window open.
 - Function option - absence.
 - Time adjustment interval: 1 hour or 1/2-hour increments.
- Remote control is possible using the product's associated Smarthome solution (app) through a separate optional gateway (LogoControl GW).



Type	Dimensions						Order Code
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]		
LogoControl RCS	80.4	133.7	22	27.5	57	1	M10561.11

LogoControl RRS

LogoControl RRS bidirectional wireless receiver for communication with digital room thermostat (LogoControl RCS) and control of a hard-wired 230 V actuator in a static heating circuit.


Extra-compact design.

Functions:

- Bidirectional communication with room thermostat (LogoControl RCS) and 230 V control of an actuator.
- Voltage supply: 230 V 50 Hz.
- Standard radio protocol type: X3D.
- Transmission frequency: 868 MHz.
- Protection code: IP44.
- Transmission range (free field) 300m.
- Output power: 16 A (max 3,500 Watt).
- Regulation type: On / Off.
- Ambient temperatures: 0 to 50 °C.

Remote control of the control components is possible using the product's associated Smarthome solution (APP) through a separate optional gateway (LogoControl GW).



Type	Dimensions					Order Code
	A [mm]	B [mm]	C [mm]	D [mm]		
LogoControl RRS	54	25	117.5	142.2	1	M10561.12

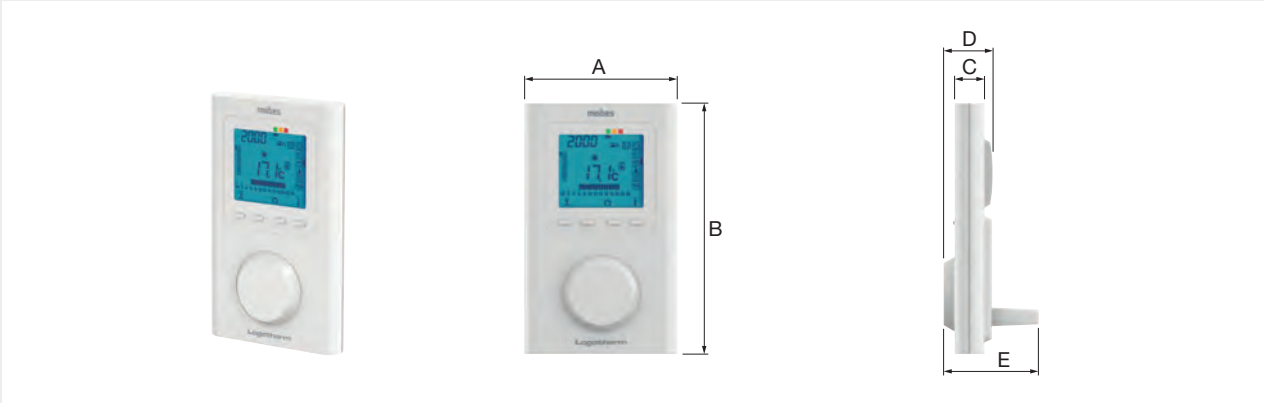
LogoControl RCM


LogoControl RCM battery-powered wireless room controller as a digital thermostat with automatic timer for time-controlled monitoring, control and regulation of the room temperature in a mixed heating circuit with bidirectional wireless technology. Extra-slim design for surface-mounted installation.

Functions:

- General room temperature control with wireless receiver.
- Rapid adjustment option with selector switch.
- Display of general information by pressing the Info key.
- Quick-start function using preset basic programs with rapidly customisable Comfort and Economy operating temperatures.
- Stored program.
- Fully automatic summer and winter time adjustment.
- Holiday program with temperature reduction or timer.
- 24 programmable time phases per program.
- Backlight colour: Blue.
- Power supply via two 1.5V LR03/AAA alkaline batteries.
- Temperature adjustment range: 5 to 30 °C.
- Adjustment range for frost protection: 5 to 10 °C.
- Temperature display accuracy: 0.1 °C.
- Time input: 24 or 12 hours.
- Transmission frequency: 868 MHz.
- Protection code: IP30.
- Dimensions: 81 x 135 x 22 mm.
- Display of target and actual temperature.
- Function option - window open.
- Function option - away from home.
- Time adjustment interval 1 hour or 1/2-hour increments. Steps.

Remote control is possible using the product's associated Smarthome solution (APP) via a separate optional gateway (LogoControl GW).



Type	Dimensions						Order Code
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]		
LogoControl RCM	80.4	133.7	22	27.5	57	1	M10561.16

LogoControl RRM

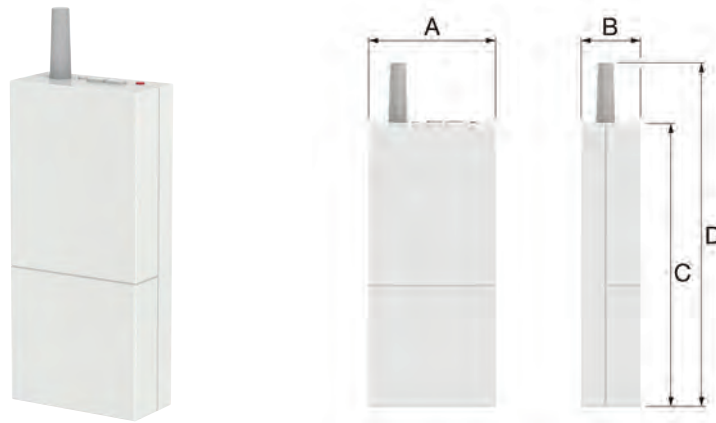
Bidirectional LogoControl RRM wireless receiver for communication with a digital room thermostat (LogoControl RCM) and control of the allocated heating circuit via floor-mounted terminal strip (LogoControl TS).


Extra-compact design.

Functions:

- Bidirectional communication with a digital room thermostat (LogoControl RCM) and control of the allocated heating circuit via floor-mounted terminal strip (LogoControl TS).
- Power supply: using LogoControl TS CAN-Bus.
- Standard wireless protocol type: X3D.
- Transmission frequency: 868 MHz.
- Protection code: IP44.
- Transmission range (free field) 300 m.
- Power output: 16A (max 3,500 Watt).
- Regulation type: On / Off.
- Ambient temperatures: 0 to 50 °C.

Remote control of the control components is possible using the product's associated Smarthome solution (APP) via a separate optional gateway (LogoControl GW).



Type	Dimensions					Order Code
	A [mm]	B [mm]	C [mm]	D [mm]		
LogoControl RRM	54	25	117.5	142.2	1	M10561.15

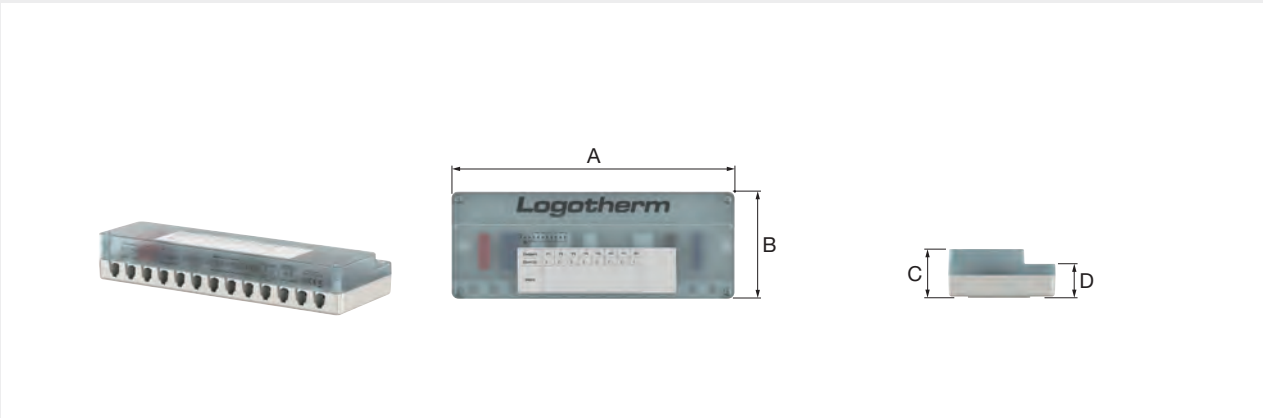
LogoControl TS


LogoControl TS floor terminal strip for up to 8 heating circuits and bidirectional communication with the room thermostats via radio through the optional receiver.

Functions:

- Control of the 230 V or 24 V heating circuits.
- Input/output changeover function (heating/cooling).
- Pump control.
- Sensor input for monitoring (dew point or temperature sensor).
- LED signals for individual controls (channels, pump).
- Can be extended by a second control unit and therefore up to 16 channels via BUS.
- Voltage supply: 230 V 50 Hz.
- Control: 230 V or 24 V Voltage supply to channels: max. 1 A per channel (permanent current) and max. 6 A total (switch-on current)
- Outputs: 8 channels, 1 pump (floating contact, max. 2 A), 1 generator (floating contact, max. 2 A), 1 changeover (or input, depending on switch configuration)
- Inputs: 2 communication buses, 1 sensor (dew point or temperature sensor), 1 changeover (or output, depending on switch configuration).
- Protection code: IP33.
- Ambient temperatures: 0 to 50 °C.
- Operating mode: heating or heating/cooling.
- Control types: thermal (max. 8 channels) or motorised (max. 4 channels).
- Control configuration: normal.
- Closed or normally open.

Remote control is possible using the product's associated Smarthome solution (app) through a separate optional gateway (LogoControl GW).



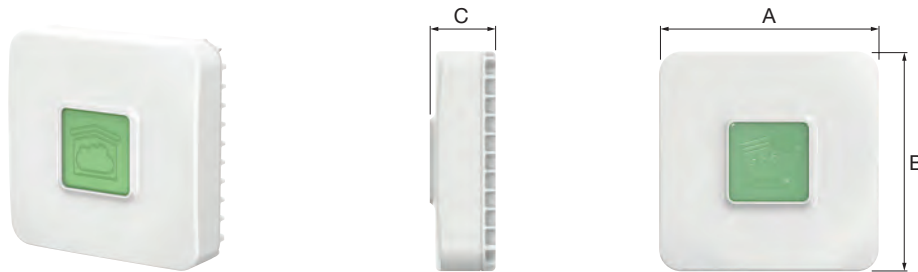
Type	Dimensions					Order Code
	A [mm]	B [mm]	C [mm]	D [mm]		
LogoControl TS	250	95	43		1	M10561.14


LogoControl GW

LogoControl GW gateway for Smarthome applications for room temperature controllers with LogoControl RCS or RCM room thermostats and the LogoControl RRS or RRM receiver.

Can be combined with up to 32 heat receivers (for up to 8 heating zones).

- Voltage supply: 230 V 50 Hz.
- Standard radio protocol type: X3D.
- Transmission frequency: 868 MHz.
- Transmission range (free field): 300m.
- Incl. 1 mains cable and 1 cable with RJ45 connector for connection of the gateway.
- Incl. free app.
- Intuitive handling with the app.
- Display of various values and settings within the app.
- Personalised access with the app.
- Ambient temperatures: 0 to 40 °C.
- Protection code: IP30.




Type	Dimensions				Order Code
	A [mm]	B [mm]	C [mm]		
LogoControl GW	100	100	30	1	M10561.13

Room temperature controller Salus HTRP230



Electronic room temperature controller.

- 230 V.
- Programmable.
- With 2 × 1.5 V backup battery AA.
- ENEC-compatible due to the 2 available reference variables.


Type		Order Code
Room temperature controller Salus HTRP230	1	M10561.31

Terminal strips



Terminal strip for up to 8 or 10 single underfloor heating circuits.

- Protection class: IP44.
- Including pump logic module.
- Up to 18 actuators connectable.
- Clear white front cover.
- 230V/50Hz.

Type	Max. single heating circuits		Order Code
Terminal strip 8 HC	for up to 8 single underfloor heating circuits.	1	M10560.962
Terminal strip 10 HC	for up to 10 single underfloor heating circuits.	1	M10560.963

Retainer for floor control terminal strip

For device widths upwards of 600 mm.

Type		Order Code
Retainer for terminal strip	1	M10203.021

Electro-thermal actuator



- 230 V (2-point).
- Normally closed (NC).

Type		Order Code
Electro-thermal actuator	1	M10560.98

Room temperature controller Salus RT 10



Electronic room temperature controller.

- 230 V.

Type		Order Code
Room temperature controller Salus RT 10	1	M10560.95

Safety temperature monitor, panel heating circuit



Safety temperature monitor as a contact thermostat for temperature monitoring of the surface heating circuit.

- Concealed setting option (20 - 90 °C).
- Including actuator 230 V and zone valve.

Type		Order Code
Safety temperature monitor panel heating circuit with zone valve	1	M10560.941

Safety temperature monitor, underfloor heating circuit

Safety temperature monitor as a contact thermostat for temperature monitoring of the underfloor heating circuit.

- Concealed setting option (20 - 90 °C).
- 230 V including electrothermal actuator 230 V.

Type		Order Code
Safety temperature monitor panel heating circuit without zone valve	1	M10560.94

Control technology for underfloor heating selection table

Type	LogoAktiv		LogoComfort			LogoPack		LogoMatic G2 & LogoThermic	
	35 & 50	70	500	600	600+	C	C1	UC	MC
Room temperature controller Salus HTRP230	-	-	✓	✓	✓	✓	✓	✓	✓
Terminal strip with pump logic module	✓	✓	-	✓	✓	-	-	-	✓
Retainer for terminal strip	✓	✓	-	✓	✓	-	-	-	✓
Electro-thermal actuator	✓	✓	✓	✓	✓	✓	✓	✓	✓
Room temperature controller Salus RT 10	✓	✓	✓	✓	✓	✓	✓	✓	✓
Safety temperature monitor panel heating circuit	✓	✓	-	-	-	-	-	-	-
Safety temperature monitor underfloor heating circuit	-	-	✓	✓	✓	✓	✓	-	✓

Complete controller sets for static heating circuits selection table

Living space control device and actuator.


Type	LogoAktiv		LogoComfort			LogoPack		LogoMatic G2 & LogoThermic		LogoVital		
	35 & 50	70	500	600	600+	C	C1	UC	MC	35	46	65
Controller set 1	-	-	✓	✓	✓	✓	✓	✓	✓	-	-	-
Controller set 2	-	-	✓	✓	✓	✓	✓	✓	✓	-	-	-
Controller set 4	-	-	✓	✓	✓	✓	✓	✓	✓	-	-	-

Controller set 1



Including:

- Electronic 230V programmable room temperature controller, with 2 x 1.5 V backup AA battery type Salus HTRP230 (ENEV-conformant due to the 2 available reference variables).
- Electrothermal actuator 230V (2-point), normally closed (NC).


Type		Order Code
Controller set 1	1	M10561.3

Controller set 2



Including:

- Programmable electronic wireless room temperature controller, type Honeywell CMS927 with battery operation (2 x 1.5 V AA).
- Suitable servomotor Honeywell HR92 (also 2 x 1.5 V AA).


Type		Order Code
Controller set 2	1	M10560.65

Controller set 4



Including:

- Programmable 230V electronic room temperature controller, type Heimeier Thermostat P.
- Electrothermal actuator 230V (2-point) normally open (NO).

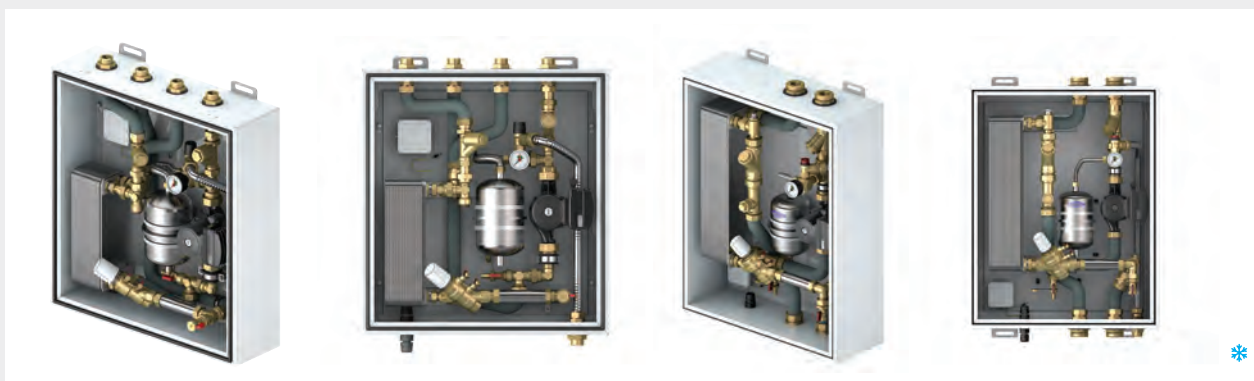
Type		Order Code
Controller set 4	1	M10560.7

LOGOCOOL - DECENTRALISED COOLING STATION

LogoCool is a new generation of compact, ready-to-fit residential transmission stations for the transfer of cooling energy into homes and apartments, as well as to commercial and industrial buildings. LogoCool meets the requirements concerning efficient and easy use due to the continuously adjustable primary flow rate setting, and thus the primary energy setting of the pressure-independent flow rate controller. The unique design of the hybrid housing means that there is effective shielding from the ambient conditions (temperature and air humidity) in the area of use.

- Max. Pressure: Primary side / secondary side: 10 bar / 3 bar.
- Special UK versions available!

LogoCool



Type		Order Code
LogoCool S 1 - 5 kW	1	M10610.32
LogoCool S 2 - 12 kW	1	M10610.22
LogoCool S 5 - 16 kW	1	M10610.12
LogoCool M 9 - 24 kW	1	M10610.1



Technical data – LogoCool

	LogoCool	
	LogoCool S-Line	LogoCool M-Line
Dimensions (width x height x depth) [mm]	629 x 675 x 263	650 x 879 x 334
Connections (FL & RL from primary and secondary circuit) / at bottom overpressure drain line (with ball valve / without ball valve)	1" / 1 1/4"	1 1/4" / 2"
Insulated (30 mm) and powder-coated hybrid housing in multi-shell design with circumferential hollow body seal	✓	✓
Stainless steel plate heat exchanger (copper-soldered)	✓	✓
Ability to drain and fill the secondary circuit	✓	✓
Circulation pump in secondary circuit	✓	✓
Expansion vessel in secondary circuit	✓	✓
Spool piece (1" x 130 mm) for an optional heat/cold meter	✓	✓
2x dirt trap with stainless steel sieve insert	✓	✓
Overpressure valve for secondary circuit	✓	✓
Adjustable flow rate controller	✓	✓
Actuator (on/off)	✓	✓
Pressure gauge for secondary circuit	✓	✓
Pipework made from insulated stainless-steel corrugated pipes	✓	✓
Mounted entirely mechanically tension-free on base plate, inserted in hybrid housing and inspected	✓	✓

Performance table – LogoCool S 1 – 5 kW

All information takes into account a minimum residual delivery head of 3 mWS on the secondary side as well as a spread (primary to secondary) of 2 Kelvin.

LogoCool S 1 - 5 kW													
Secondary temperature FL [°C]	8	8	8	10	10	10	10	10	10	10	10	10	10
Secondary temperature RL [°C]	14	14	14	14	14	14	14	14	16	16	16	16	16
Primary temperature FL [°C]	5	6	7	5	6	7	8	9	5	6	7	8	9
Primary temperature RL [°C]	12.9	12.7	12.2	13.7	13.6	13.5	13.3	12.9	15.3	15.2	15	14.7	14.2
Power [kW]	4.2	3.7	2.8	3.9	3.9	3.5	2.9	2.1	5.5	4.9	4.3	3.6	2.8

Performance table – LogoCool S 2 – 12 kW

All information takes into account a minimum residual delivery head of 3 mWS on the secondary side as well as a spread (primary to secondary) of 2 Kelvin.

LogoCool S 2 - 12 kW													
Secondary temperature FL [°C]	8	8	8	10	10	10	10	10	10	10	10	10	10
Secondary temperature RL [°C]	14	14	14	14	14	14	14	14	16	16	16	16	16
Primary temperature FL [°C]	5	6	7	5	6	7	8	9	5	6	7	8	9
Primary temperature RL [°C]	12.4	12.1	11.5	13.5	13.3	13.2	12.9	12.6	14.9	14.7	14.5	14.2	13.6
Power [kW]	9.9	8.1	6	8.1	8.1	8.1	6.9	5.3	12	11.7	10	8.2	6

Performance table – LogoCool S 5 – 16 kW

All information takes into account a minimum residual delivery head of 3 mWS on the secondary side as well as a spread (primary to secondary) of 2 Kelvin.

LogoCool S 5 - 16 kW													
Secondary temperature FL [°C]	8	8	8	10	10	10	10	10	10	10	10	10	10
Secondary temperature RL [°C]	14	14	14	14	14	14	14	14	16	16	16	16	16
Primary temperature FL [°C]	5	6	7	5	6	7	8	9	5	6	7	8	9
Primary temperature RL [°C]	12.4	12.1	11.5	13.6	13.4	13.3	13	12.6	15.1	14.8	14.6	14.2	13.6
Power [kW]	16	14.5	10.5	10.7	10.7	10.7	10.7	8.5	16	16	16	14.5	11


Performance table – LogoCool M 9 – 24 kW

All information takes into account a minimum residual delivery head of 3 mWS on the secondary side as well as a spread (primary to secondary) of 2 Kelvin.

LogoCool M 9 - 24 kW													
Secondary temperature FL [°C]	8	8	8	10	10	10	10	10	10	10	10	10	10
Secondary temperature RL [°C]	14	14	14	14	14	14	14	14	16	16	16	16	16
Primary temperature FL [°C]	5	6	7	6	7	8	9	5	6	7	8	9	9
Primary temperature RL [°C]	12.5	12.1	11.5	13.5	13.3	13	12.5	15.2	14.8	14.5	14.2	13.6	13.6
Power [kW]	23.7	22.5	16.9	15.8	15.8	15.8	13.5	23.7	23.7	23.7	22.8	17	17

Ball valves for LogoCool



Type	Model	For		Order Code
Ball valves	LogoCool S-line	With spindle extension 4 × DN 25 straight	1	M10610.121

LogoCool 3-6-12 kW

Meibes CIUs provide a circuit break and charging opportunity in residential and commercial cooling applications.

- **Special UK version!**
- **All units contain connecting ball valves (1" female thread).**
- **Incl. battery powered cooling meter with permanent display and M-Bus.**
- From 1 kW up to 16 kW for water-based cooling systems.
- Max. operation pressure secondary: 3 bar (restricted by over pressure relief valve).
- Dimensions: 629 x 263 x 812 mm (W x D x H).

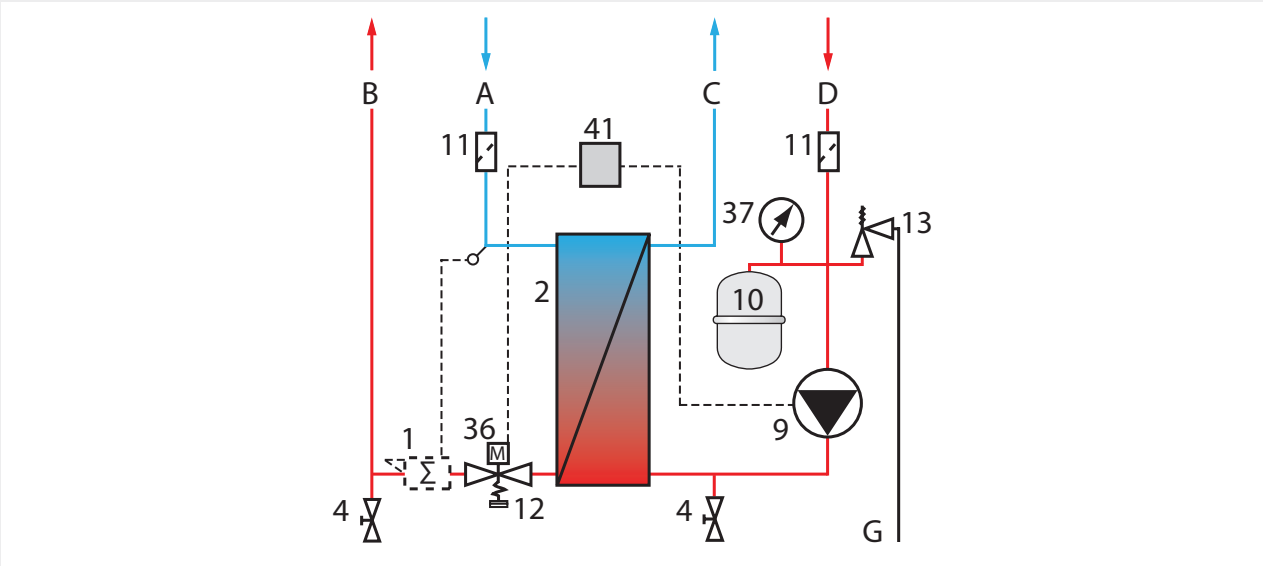


Type	Heat Transfer Capacity [kW]	With case	With heat meter		Order Code
A1CIU SP CIU c/w case, BPCM	6	✓	✓	1	MGB00130
A1CIU SP CIU c/w case, BPCM	12	✓	✓	1	MGB00129



Power

Output power depends on the existing primary temperatures as well as the secondary temperatures.



LogoCool A1CIU 1 - 5 kW - Maximum possible output

All information takes into account a minimum residual delivery head of 3 m on the secondary side as well as an approach temperature (differential between primary and secondary flow) of 2 Kelvin.

Example of the maximum possible output that can be achieved:

LogoCool A1CIU 1 - 5 kW													
Secondary - Temperature in SL [°C]	8	8	8	10	10	10	10	10	10	10	10	10	10
Secondary - Temperature in RL [°C]	14	14	14	14	14	14	14	14	16	16	16	16	16
Primary - Temperature in SL [°C]	5	6	7	5	6	7	8	9	5	6	7	8	9
Primary - Temperature in RL [°C]	12.9	12.7	12.2	13.7	13.6	13.5	13.3	12.9	15.3	15.2	15.0	14.7	14.2
Power [kW]	4.2	3.7	2.8	3.9	3.9	3.5	2.9	2.1	5.5	4.9	4.3	3.6	2.8

LogoCool A1CIU 2 - 12 kW - Maximum possible output

All information takes into account a minimum residual delivery head of 3 m on the secondary side as well as an approach temperature (differential between primary and secondary flow) of 2 Kelvin.

Example of the maximum possible output that can be achieved:

LogoCool A1CIU 2 - 12 kW													
Secondary - Temperature in SL [°C]	8	8	8	10	10	10	10	10	10	10	10	10	10
Secondary - Temperature in RL [°C]	14	14	14	14	14	14	14	14	16	16	16	16	16
Primary - Temperature in SL [°C]	5	6	7	5	6	7	8	9	5	6	7	8	9
Primary - Temperature in RL [°C]	12.4	12.1	11.5	13.5	13.3	13.2	12.9	12.6	14.9	14.7	14.5	14.2	13.6
Power [kW]	9.9	8.1	6.0	8.1	8.1	8.1	6.9	5.3	12.0	11.7	10.0	8.2	6.0

LogoCool A1CIU 5 - 16 kW - Maximum possible output

All information takes into account a minimum residual delivery head of 3 m on the secondary side as well as an approach temperature (differential between primary and secondary flow) of 2 Kelvin.

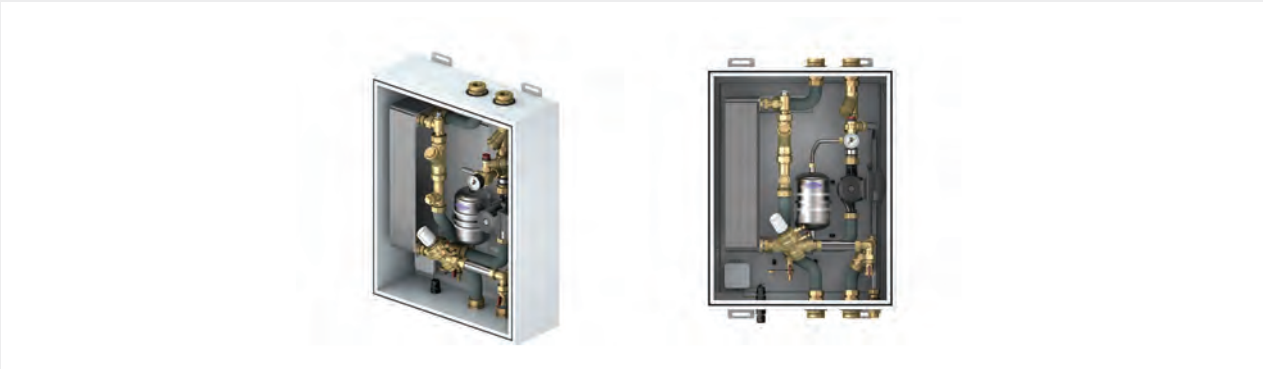
Example of the maximum possible output that can be achieved:

LogoCool A1CIU 5 - 16 kW													
Secondary - Temperature in SL [°C]	8	8	8	10	10	10	10	10	10	10	10	10	10
Secondary - Temperature in RL [°C]	14	14	14	14	14	14	14	14	16	16	16	16	16
Primary - Temperature in SL [°C]	5	6	7	5	6	7	8	9	5	6	7	8	9
Primary - Temperature in RL [°C]	12.4	12.1	11.5	13.6	13.4	13.3	13.0	12.6	15.1	14.8	14.6	14.2	13.6
Power [kW]	16.0	14.5	10.5	10.7	10.7	10.7	10.7	8.5	16.0	16.0	16.0	14.5	11.0

LogoCool 20 kW

Meibes CIUs provide a circuit break and charging opportunity in residential and commercial cooling applications.

- **Special UK version!**
- **All units contain connecting ball valves (1 1/4" female thread).**
- **Incl. battery powered cooling meter with permanent display and M-Bus.**
- From 9 kW up to 24 kW for water-based cooling systems.
- Max. operation pressure secondary: 3 bar (restricted by over pressure relief valve).
- Dimensions: 649 x 337 x 830 mm (W x D x H).

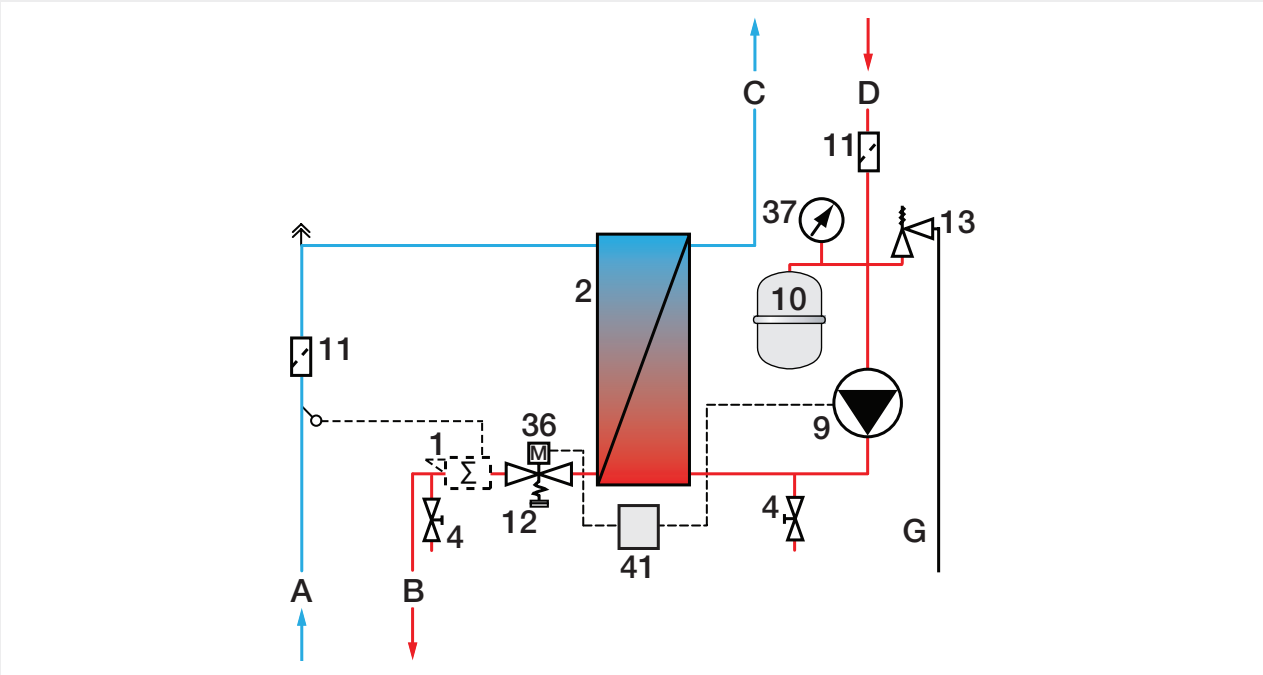


Type	Heat Transfer Capacity [kW]	With case	With heat meter		Order Code
A1CIU SP CIU c/w case, BPCM	20	✓	✓	1	MGB00132



Power

Output power depends on the existing primary temperatures as well as the secondary temperatures.



LogoCool A1CIU 9 -24 kW - Maximum possible output

Example of the maximum possible output that can be achieved:

LogoCool A1CIU 9 - 24 kW												
Secondary - Flow temperature [°C]	8	8	8	10	10	10	10	10	10	10	10	10
Secondary - Return temperature [°C]	14	14	14	14	14	14	14	16	16	16	16	16
Primary - Flow temperature [°C]	5	6	7	6	7	8	9	5	6	7	8	9
Primary - Return temperature [°C]	12.5	12	11.5	13.5	13.3	13	12.5	15.2	14.8	14.5	14.3	13.5
Power [kW]	23.7	22	16.7	15.5	15.5	15.5	14	23.7	23.7	23.7	21.5	17

LogoCool 3 - 20 kW- Performance

		3 kW	6 kW	12 kW	20 kW
Primary Duty (P1)	Output range (P1, selectable)	1 - 5 kW	2 - 12 kW	5 - 16 kW	9 - 24 kW
	Flow rate range (q1)	100 - 450 l/h	450 - 1150 l/h	850 - 2050 l/h	1700 - 3300 l/h
Secondary Duty (P2)	Pressure rating	PN 10 (PN 16 on request)	PN 10 (PN 16 on request)	PN 10 (PN 16 on request)	PN 10 (PN 16 on request)
	Flow temperature (t22)	8 °C / 10 °C	8 °C / 10 °C	8 °C / 10 °C	8 °C / 10 °C
	Return temperature (t21)	12 °C / 16 °C	12 °C / 16 °C	12 °C / 16 °C	12 °C / 16 °C
	Flow rate range (q2)	100 - 800 l/h	250 - 1730 l/h	700 - 2300 l/h	1500 - 3400 l/h
Primary and secondary fittings	Pressure independent control valve (PICV)	NexusValve Vivax (min. p = 30 kPa) with thermo-electrical actuator (on/off)	NexusValve Vivax (min. p = 30 kPa) with thermo-electrical actuator (on/off)	NexusValve Vivax (min. p = 30 kPa) with thermo-electrical actuator (on/off)	NexusValve Vivax (min. p = 30 kPa) with thermo-electrical actuator (on/off)
	Fittings and Drain points	Primary and secondary circuits	Primary and secondary circuits	Primary and secondary circuits	Primary and secondary circuits
	Strainer	Primary and secondary return	Primary and secondary return	Primary and secondary return	Primary and secondary return
	Circulation pump	Grundfoss, A-rated, secondary circuit	Grundfoss, A-rated, secondary circuit	Grundfoss, A-rated, secondary circuit	Grundfoss, A-rated, secondary circuit
	Expansion vessel	2 litre, secondary circuit	2 litre, secondary circuit	2 litre, secondary circuit	2 litre, secondary circuit
Connections	All external connections	1" BSP (male), top connections	1" BSP (male), top connections	1" BSP (male), top connections	1 1/4" BSP, top and bottom connections
	Ball valves	1" BSP	1" BSP	1" BSP	1 1/4" BSP

INDIRECT COMPLETE UNITS

The LogoTwin H (hydraulically controlled) and LogoTwin T (thermostatically controlled) complete stations are indirect, compact, plug-and-play, surface-mounted, decentralised transfer stations with housing in which the hot water preparation and heating of the living space are controlled proportionally according to volume. Indirect heating interface stations offer complete hydraulic separation between the primary and secondary sides via two stainless steel plate heat exchangers.


Special UK Versions available!

LogoTwin H

Including PM controller with priority switching, anti-calcification coating and DVGW approval.

- Max. pressure (primary heating / secondary heating / sanitary): PN10 / 3 bar / 6 bar.
- Max. permissible temperatures (primary heating / secondary heating / sanitary): 95 °C.
- Supply voltage: 230V / 50Hz.
- Min. sanitary operating pressure: 1.5 bar.
- Max. Differential pressure heating (primary): 2.5 bar.
- Heating capacity (65 °C flow line and 20 K spread): 10 kW.
- Connections: ¾".
- Adapter for heat meter in the primary circuit: ¾" x 110 mm.



Type	Position connections	Dimensions			Hot water output					Order Code
		Width [mm]	Height [mm]	Depth [mm]	[l/min] ¹	[kW] ¹	[l/min] ²	[kW] ²		
LogoTwin H 35	Top	500	800	350	12	35	15	37	1	M10920.26OHT80
LogoTwin H 46	Top	500	800	350	17	46	20	50	1	M10920.40OHT80
LogoTwin H 35	Bottom	500	800	350	12	35	15	37	1	M10920.26OHB80
LogoTwin H 45	Bottom	500	800	350	17	46	20	50	1	M10920.40OHB80

¹ = Defined with a flow line temperature of 65 °C and heating of 40 K.

² = Defined with a supply temperature of 65 °C and a heating of 35 K (other flow regulator are required).




Accessories for LogoTwin H surface-mounted assembly rail

Type		Order Code
Top connection including ball valves 6 x DN20 straight	1	M10920.26OH183
Bottom connection including ball valves 6 x DN20 straight	1	M10920.26OH184

LogoTwin T

- Max. pressure (primary heating / secondary heating / sanitary): PN10 / 3 bar / 6 bar.
- Max. permissible temperatures (primary heating / secondary heating / sanitary): 95 °C.
- Supply voltage: 230V / 50Hz.
- Min. sanitary operating pressure: 1.5 bar.
- Max. Differential pressure heating (primary): 2.5 bar.
- Heating capacity (65 °C flow line and 20 K spread): 15 kW.
- Connections: 1".
- Adapter for heat meter in the primary circuit: 1" x 130 mm.



Type	Position connections	Dimensions			Hot water output			Order Code
		Width [mm]	Height [mm]	Depth [mm]	[l/min] ¹	[kW] ¹		
LogoTwin T 95	Top	500	800	350	30	95	1	M10920.24OHT80
LogoTwin T 95	Bottom	500	800	350	30	95	1	M10920.24OHB10

¹ = Defined with a flow line temperature of 65 °C and heating of 40 K.



Accessories for LogoTwin T surface-mounted assembly rail

Type		Order Code
Top or bottom connection including ball valves 4 x DN25 & 2 x DN20 straight	1	M10920.24OH102

Design features LogoTwin H/T

Specifications	LogoTwin H/T
Pressure gauge as pressure display in the secondary circuit	✓
Differential pressure regulator for autom. hydr. station balancing in the primary circuit	✓
Hot water preparation – stainless steel plate heat exchanger (copper-soldered), vertical design to reduce the risk of calcification	✓
Adapter for one valve for closing the primary circuit	✓
Heating circulation pump (high-efficiency pump) in the secondary circuit	✓
Overpressure valve preset to 3bar in the secondary circuit	✓
Keep warm function of the primary heating-circuit water inlet via an adjustable circulation bridge (35 - 65 °C)	✓
Bleed valve with hose connection on the heating side	✓
Adjustable thermostatic hot water control	✓
Mounted on base plate, with absolutely no mechanical stress, and inspected	✓
Dirt trap with stainless steel sieve insert in the primary and secondary circuit	✓
Control valve for hot water (zone valve with actuator) in the primary circuit	✓
Surface-mounted housing in white (RAL 9016)*	✓
Heating – stainless steel plate heat exchanger (copper-soldered), vertical design	✓
Domestic water mixer in the hot water outlet, including scalding protection function (adjustable)	✓
Pipework made from insulated stainless-steel corrugated pipes	✓
Return line temperature limiter (preset to approx. 40 °C) in the primary circuit	✓
Membrane expansion tank in the secondary circuit	✓
Spool piece for an optional heat meter	✓

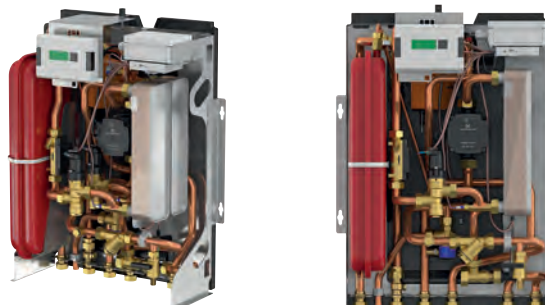
* Inspection window in the housing to read off the heat flow meter, as well as the pressure display of the secondary circuit.


INDIRECT UNITS FOR INSTANTANEOUS HOT WATER AND SPACE HEATING SYSTEMS

LogoEco Dual E H-HW

LogoEco Dual HIU's are for use where instantaneous hot water preparation is required combined with space heating output from one unit.

- **Special UK version!**
- **Incl. heat meter (BPHM or MPHMM) and some of them with pre-payment valve (PPV).**
- Designed to suit projects where minimal space combined with high output is required.
- Can be supplied in a range of output configurations, domestic hot water, space heating and heat meter set-ups.
- Independent and precise control of each Plate Heat Exchanger (PHE) to optimise Primary Return Temperature (VART).
- Latest, high efficiency low approach temperature, compact Plate Heat Exchangers are used.
- Customised, fully insulated case minimising heat losses to the surrounding area and intensifying the heat transfer to the dwelling.
- Highly visible status light indicating, without removing the case, the current readiness of the HIU.
- Weekly auto pasteurisation of the hot water side of the unit when idle, minimising the risk of legionella.
- Default comfort setting keep warm function ensuring energy consumption to maintain the HIU in a state of readiness is optimised.
- Mounting: Surface mounted.
- Heating System: 2 pipe flow.
- Pipework: Copper pipe with brass fittings.
- Heat exchangers: Stainless steel, copper brazed.
- Casing: Foam Arpro 50g/l density (Appendix A) with white painted metal sheet banding.
- Primary and secondary Fluid (heating): Low pressure hot water.
- Secondary Fluid (Domestic Hot Water): Potable hot water service.
- Size including case: 490 x 275 x 640 mm (W x D x H).



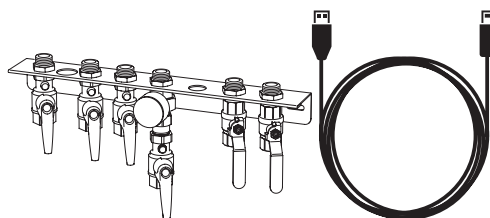
Type	With case		Order Code
LogoEco Dual 20L DHW S.Htg c/w ins case B con BPHM	✓	1	M10920.40OH30
LogoEco Dual 20L DHW S.Htg c/w ins case B con MPHMM	✓	1	M10920.40OH31
LogoEco Dual 20L DHW S.Htg c/w ins case B con BPHM Ex. Mbus card	✓	1	M10920.40OH32
LogoEco Dual 20L DHW S.Htg c/w ins case B con MPHMM Ex. Mbus card	✓	1	M10920.40OH33
LogoEco Dual 20L DHW S.Htg c/w ins case B con MPHMM PPV	✓	1	M10920.40OH35




LogoEco Dual E H-HW - Performance

		20kW standard unit
Primary Duty	Min. / Max. flow temperature (t11)	65 °C / 90 °C
	Nominal flow temperature (t11)	75 °C
	Flowrate (q1, at nominal flow temperature)	0.267 l/s (960 l/h) at max. output
Pressure	Pressure rating	PN 16
	Min. differential pressure (Δp_1)	50 kPa (0.5 bar), at nominal primary flow temperature
	Max. differential pressure (Δp_1)	250 kPa (2.5 bar), or 450 kPa (4.5 bar) with additional DPCV
Cold water mains	Min. (max.) pressure (Δp_3)	1 bar (PN 10)
Secondary Duty: Domestic Hot Water	Nominal Heat Transfer Capacity (P3)	63 kW
	Max. flowrate (q3)	20 l/min (0.333 l/s)
	Fluid Temperature in (t31)	10 °C
	Fluid Temperature out (t32)	55 °C
Secondary Duty: Heating	Heat Transfer Capacity (P2)	18 kW @ 30K ΔT (10 kW @ 20K ΔT), at nominal primary flow temperature
	Fluid Temperature flow (t22)	Selectable: 40 °C / 70 °C (at nominal primary flow temperature)
	Fluid Temperature return (t21)	Depending on radiators and setup
	Maximum secondary pressure	PN 10 (restricted to 3 bar by over pressure relief valve)
Connections Primary and Secondary Fittings	All external connections	$\frac{3}{4}$ "
	Primary control valves	PICV, with electronic stepper motor
	Strainer	In primary flow and secondary return
	Heat Meter	Prefitted - Rossweiner HeatSonic, battery powered, M-Bus interface
	Circulation Pump	Grundfos, 6m, in secondary heating circuit
	Overpressure relief valve	3 bar, in secondary heating circuit
	Shut off valve (optional)	Shut off valve for pre-payment systems (230V~, 50Hz)
	DPCV (optional)	Differential pressure control valve (450 kPa max. dp)
	Hot water return (optional)	Hot water circulation (incl. pump, non return valve and ball valve)

Accessories LogoEco Dual E H-HW



Type		Order Code
Bottom first fix rail and pressure gauge	1	M10920.40OH301
Unit communication cable/data cable	1	M1059131

OVERVIEW OF FRESH WATER STATIONS

Thermostatically controlled

The thermostatic control technology is working temperature-controlled with the necessary thermostatic valve and thus ensures the constant supply of hot water during tapping based on temperature-dependent regulation of the primary volume flow.

Advantages

- Very easy commissioning and operation.
- Easy maintenance and fault diagnosis.
- Always adjusts to set hot water temperature, independent of changes in cold water or primary temperature (e.g. summer / winter operation).



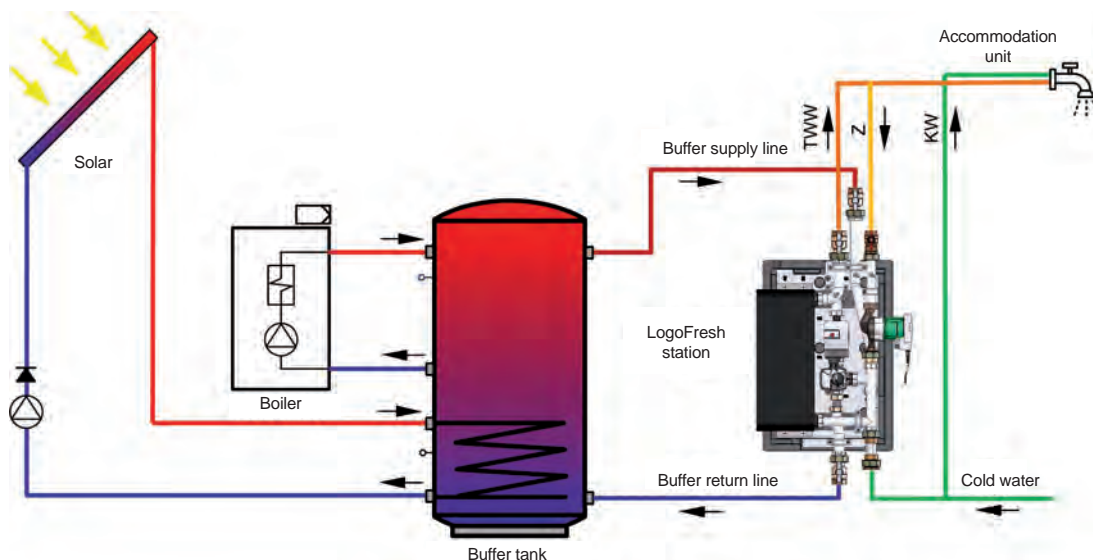
Type	Max. hot water single output (without cascade connection)		Type of installation		Housing EPP	Drinking water circulation	Σ max. parallel operation
	[l/min] ¹	[kW] ¹	Wall	on the storage tank			
LogoFresh S-Line	29	71	✓	✓	✓	✓ ²⁾	4
LogoFresh M-Line	35	86	✓	-	✓	✓ ²⁾	4

¹⁾ Performance data are based on corresponding primary flow temperatures and corresponding hot water temperatures. The basic data as well as possible performance ranges in between can be found in the performance tables on the respective product pages.

²⁾ These products are available with and without the specified technical equipment. For further information please refer to the respective product pages.

³⁾ The selection of the individual functions is freely selectable, but a limited number can be selected for each system. Please ask us for the possible combinations.

Fresh Water Stations - Installation example



Electrically controlled

The electric control system is operated with a microprocessor-regulated controller, thus ensuring immediate hot water preparation on draw-off thanks to temperature-based regulation of the primary flow rate.

Advantages

- Various comfort functions (e.g. disinfection circuit) adjustable.
- Increase of performance by simple electronic cascading of up to 5 fresh water stations.
- Always regulates exactly to the set hot water temperature, regardless of changes in the cold water or primary temperature (e.g. summer / winter operation).
- Possibility for fault message output and data logging.



Type	Max. hot water single output (without cascade connection)		Installation type		Housing EPP	Drinking water circulation	Autom. Desinfection ³	re-heating function storage ³	Mixing protection	Fault message output ³	Data-logging	Σ max. parallel operation
	[l/min] ¹	[kW] ¹	Wall	on the storage tank								
LogoFresh S-Line	44	107	✓	✓	✓	✓ ²	-	-	-	-	-	-
LogoFresh M-Line	58	140	✓	-	✓	✓ ²	✓	✓	✓	✓	✓	5 ³
LogoFresh L-Line	80	193	✓	-	✓	✓	✓	✓	✓	✓	✓	5 ³
LogoFresh XL-Line 100	100	346	✓	-	✓	✓	✓	✓	✓	✓	✓	5 ³
LogoFresh XL-Line 120	125	432	✓	-	✓	✓	✓	✓	✓	✓	✓	5 ³

¹⁾ Performance data are based on corresponding primary flow temperatures and corresponding hot water temperatures. The basic data as well as possible performance ranges in between can be found in the performance tables on the respective product pages.

²⁾ These products are available with and without the specified technical equipment. For further information please refer to the respective product pages.

³⁾ The selection of the individual functions is freely selectable, but a limited number can be selected for each system. Please ask us for the possible combinations.


LOGOFRESH XL-LINE, ELECTRONIC

LogoFresh XL-line, electronic

Compact, ready-to-fit central fresh water stations with electronically controlled hot water preparation. The Logo-Fresh XL-line fresh water stations are available as compact units with full insulation.

- Max. Heating / sanitary pressure: PN 10 / PN 10
- Max. permissible heating / sanitary temperatures: 90 °C / 90 °C
- Supply voltage: 230 V / 50 Hz



Type		Order Code
LogoFresh XL-line electronic 100	1	M10270.81
LogoFresh XL-line electronic 120	1	M10270.71
LogoFresh L-Line & XL-Line Cascade Set *: 1x zone valve DN 32 (supply voltage 230V, suitable for potable water) 1x safety valve 10bar - drinking water 1x T-piece for connection to the safety valve 1x CAN connection cable	1	M10270.711

* Suitable for direct connection to Logofresh XL-Line.



LogoFresh XL-line 100 performance data: Cold water heating 40 K (10 to 50 °C)

Primary supply temperature [°C]	-	55	60	65	70	75	80	85
Primary return line temperature [°C]	-	30	26	24	21	19	18	17
Domestic hot water draw-off volume ¹⁾ [l/min]	-	68	91	100	100	100	100	100
Domestic hot water output [kW]	-	190	252	278	278	278	278	278
Primary flow rate [l/h]	-	6600	6600	5890	4982	4375	4075	3780
Primary pressure loss [bar]	-	0.61	0.61	0.5	0.36	0.28	0.26	0.26
Primary residual delivery head [bar]	-	0.3	0.3	0.51	0.75	0.86	0.9	0.9
Secondary pressure loss [bar]	-	0.25	0.39	0.46	0.46	0.46	0.46	0.46
Max. mixed water (10 - 38 °C) ²⁾ [l/min]	-	97	130	143	143	143	143	143
Parallel showers ³⁾ [Σ]	-	5	7	8	8	8	8	8
Max. residential units ⁴⁾ [Σ-WE]	-	85	128	146	146	146	146	146

¹⁾ Max. draw-off volume (limited capacity)

²⁾ Calculated amount of mixed water

³⁾ Bathtub / shower head with 0.3 l/s of mixed water

⁴⁾ Apartments with a standard bath / shower and diversity factors according to the Technical University of Dresden

LogoFresh XL-line 100 performance data: Cold water heating 50 K (10 to 60 °C)

Primary supply temperature [°C]	-	-	-	65	70	75	80	85
Primary return line temperature [°C]	-	-	-	35	31	28	25	23
Domestic hot water draw-off volume ¹⁾ [l/min]	-	-	-	64	84	100	100	100
Domestic hot water output [kW]	-	-	-	224	291	346	346	346
Primary flow rate [l/h]	-	-	-	6600	6600	6560	5590	4932
Primary pressure loss [bar]	-	-	-	0.61	0.61	0.6	0.45	0.33
Primary residual delivery head [bar]	-	-	-	0.30	0.30	0.3	0.6	0.78
Secondary pressure loss [bar]	-	-	-	0.21	0.34	0.46	0.46	0.46
Max. mixed water (10 - 38 °C) ²⁾ [l/min]	-	-	-	114	150	179	179	179
Parallel showers ³⁾ [Σ]	-	-	-	6	8	10	10	10
Max. residential units ⁴⁾ [Σ-WE]	-	-	-	107	157	200	200	200

¹⁾ Max. draw-off volume (limited capacity)

²⁾ Bathtub / shower head with 0.3 l/s of mixed water

⁴⁾ Apartments with a standard bath / shower and diversity factors according to the Technical University of Dresden

LogoFresh XL-line 120 performance data: Cold water heating 40 K (10 to 50 °C)

Primary supply temperature [°C]	-	55	60	65	70	75	80	85
Primary return line temperature [°C]	-	27	24	22	19	17	16	15
Domestic hot water draw-off volume ¹⁾ [l/min]	-	83	110	125	125	125	125	125
Domestic hot water output [kW]	-	231	303	346	346	346	346	346
Primary flow rate [l/h]	-	7400	7400	7050	6013	5320	4760	4450
Primary pressure loss [bar]	-	0.6	0.6	0.51	0.39	0.32	0.3	0.3
Primary residual delivery head [bar]	-	0.21	0.21	0.3	0.62	0.76	0.8	0.8
Secondary pressure loss [bar]	-	0.26	0.43	0.55	0.55	0.55	0.55	0.55
Max. mixed water (10 - 38 °C) ²⁾ [l/min]	-	119	157	179	179	179	179	179
Parallel showers ³⁾ [Σ]	-	7	9	10	10	10	10	10
Max. residential units ⁴⁾ [Σ-WE]	-	113	169	200	200	200	200	200

¹⁾ Max. draw-off volume (limited capacity)

²⁾ Bathtub / shower head with 0.3 l/s of mixed water

⁴⁾ Apartments with a standard bath / shower and diversity factors according to the Technical University of Dresden

LogoFresh XL-line 120 performance data: Cold water heating 50 K (10 to 60 °C)

Primary supply temperature [°C]	-	-	-	65	70	75	80	85
Primary return line temperature [°C]	-	-	-	32	28	26	23	20
Domestic hot water draw-off volume ¹⁾ [l/min]	-	-	-	79	101	120	125	125
Domestic hot water output [kW]	-	-	-	273	350	415	432	432
Primary flow rate [l/h]	-	-	-	7400	7400	7400	6710	5970
Primary pressure loss [bar]	-	-	-	0.6	0.6	0.6	0.48	0.38
Primary residual delivery head [bar]	-	-	-	0.21	0.21	0.21	0.44	0.64
Secondary pressure loss [bar]	-	-	-	0.24	0.36	0.5	0.55	0.55
Max. mixed water (10 - 38 °C) ²⁾ [l/min]	-	-	-	141	180	214	223	223
Parallel showers ³⁾ [Σ]	-	-	-	8	10	12	12	12
Max. residential units ⁴⁾ [Σ-WE]	-	-	-	143	200	300	300	300

¹⁾ Max. draw-off volume (limited capacity)

²⁾ Bathtub / shower head with 0.3 l/s of mixed water

⁴⁾ Apartments with a standard bath / shower and diversity factors according to the Technical University of Dresden

Design features and technical data – LogoFresh XL-line

Design features	XL-Line 100	XL-Line 120
Station dimensions: Width x height x depth [mm]	500 x 1137 ¹⁾ x 340	600 x 1137 ¹⁾ x 340
Connections for cold water, hot water, flow line & return line buffer / circulation	1 1/2" / 1 1/4"	1 1/2" / 1 1/4"
Surface-mounted installation	✓	✓
Electronic fresh water station with variably mountable control panel for constant hot water temperature regulation depending on the set hot water temperature and draw-off capacity by modulating the heating circuit pump	✓	✓
Stainless-steel plate heat exchanger (copper-soldered), vertical design to reduce the risk of calcification	✓	✓
Achieves lower return line temperatures at full operating performance	✓	✓
Heating side high-efficiency recirculation pump	✓	✓
Bleed valve on the heating side	✓	✓
Backflow preventer	✓	✓
Shut-off valves (except for cold water inlet)	✓	✓
Pipework made from stainless steel fixed piping (smooth)	✓	✓
Mounted entirely mechanically stress-free on base plate, inserted in housing and inspected	✓	✓
Freely programmable domestic water circulation with high-efficiency pump, backflow preventer and piping and screw fitting components installed in the station and connected to the controller	✓	✓
Flow sensor	✓	✓
With integrated disinfection (legionella protection control) ²⁾	✓	✓
With integrated keep warm function (heat exchanger)	✓	✓
Tank reheating function ²⁾	✓	✓
Mixing protection for heating water buffer tank ²⁾	✓	✓
Fault indicator ²⁾	✓	✓
Housing: Full EPP insulation of housing (black)	✓	✓
Number of possible electronically controlled cascades	5	5
Data logging via data logger	Optional	Optional
Intuitive menu navigation and multilingual controller	✓	✓
Display monochrome multifunction graphics on LCD display with background lighting	✓	✓
Animated schematic of the systems and operating states	✓	✓
Statistics and graphical evaluations from data memory	✓	✓
Commissioning wizard, function check and fault memory with date and time	✓	✓
Menu languages: German, English, Spanish, French, Dutch, Italian, Czech, Polish, Russian	✓	✓

1) Including shut off ball valves

2) A choice of individual functions may be selected, but only a limited number may be selected for each system. possible combinations.

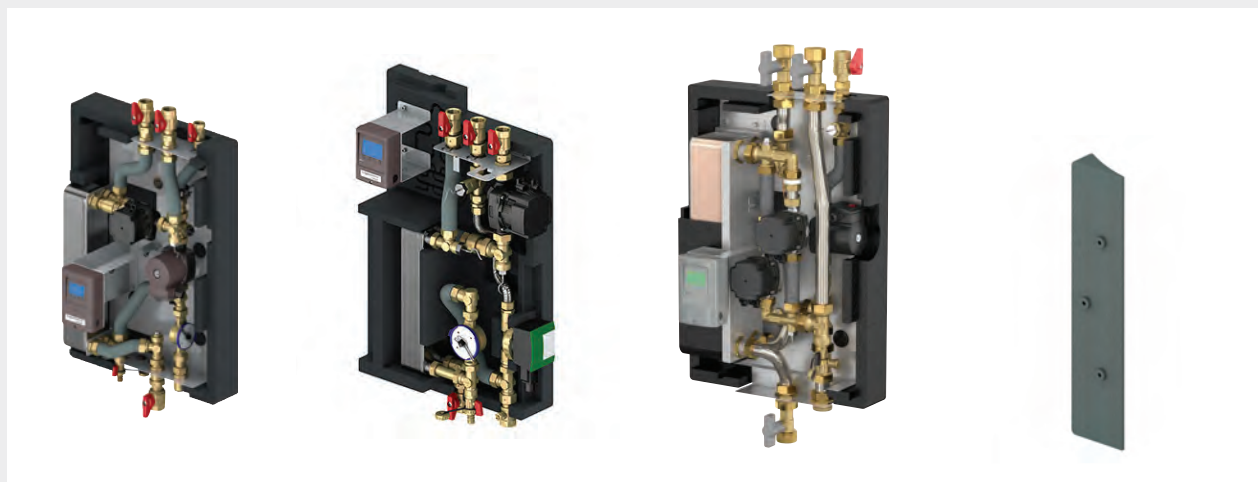
LOGOFRESH S-LINE, M-LINE & L-LINE, ELECTRONIC


LogoFresh S-Line, M-Line & L-Line, electronic

Compact, ready-to-fit central fresh water stations with electronically controlled hot water preparation, available as surface-mounted or tank installation depending on the respective system. The M-line and L-Line version are electronically cascadable and allows even higher outputs to be attained in correlation with the respective application.

- Max. heating / sanitary pressure: PN 10 / PN 10
- Max. permissible heating / sanitary temperatures: 110 °C / 110 °C
- Supply voltage: 230 V / 50 Hz

Additional complimentary and supplementary products available (e.g. measuring equipment for consumption metering, heating water buffer tank, pump groups etc.).



Type		Order Code
Type 1 - LogoFresh S-line electronic	1	M10270.62
Type 2 - LogoFresh S-line electronic with domestic hot water circulation	1	M10270.63
Type 1 - LogoFresh M-line electronic	1	M10270.52
Type 2 - LogoFresh M-line electronic with domestic hot water circulation	1	M10270.53
Type 1 - LogoFresh L-line electronic	1	M10270.91
Type 2 - LogoFresh L-line electronic with domestic hot water circulation	1	M10270.92
S-Line – insulation wedge for tank installation	1	M66306.3673
LogoFresh M-Line cascade set basic set *: 1x zone valve DN25 (supply voltage 230V, suitable for potable water) 1x safety valve 10bar - drinking water 1x T-piece for connection to the safety valve 1x CAN connection cable	1	M10270.521
LogoFresh L-Line & XL-Line Cascade Set *: 1x zone valve DN 32 (supply voltage 230V, suitable for potable water) 1x safety valve 10bar - drinking water 1x T-piece for connection to the safety valve 1x CAN connection cable	1	M10270.711

* Suitable for direct connection to LogoFresh.



S-line electronic performance data: Cold water heating 35 K (10 to 45 °C)

Primary supply temperature [°C]	-	55	60	65	70	75	80	85
Primary return line temperature [°C]	-	33	32	31	30	30	29	29
Domestic hot water draw-off volume [l/min]	-	17	22	27	31	35	40	44
Domestic hot water output [kW]	-	42	54	65	76	86	96	107
Primary flow rate [l/h]	-	1642	1642	1642	1642	1642	1642	1642
Primary pressure loss [bar]	-	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Primary residual delivery head [bar]	-	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Secondary pressure loss [bar]	-	0.31	0.45	0.6	0.81	1.07	1.32	1.58
Max. mixed water (10 - 38 °C) ¹⁾ [Liter]	-	22	28	33	39	44	49	55

¹⁾ calculated mixed water quantity at bathtub / shower head with 0.3 l/s of mixed water

S-line electronic performance data: Cold water heating 40 K (10 to 50 °C)

Primary supply temperature [°C]	-	55	60	65	70	75	80	85
Primary return line temperature [°C]	-	38	36	35	34	33	32	32
Domestic hot water draw-off volume [l/min]	-	11	16	21	25	29	33	36
Domestic hot water output [kW]	-	32	46	58	69	80	91	101
Primary flow rate [l/h]	-	1642	1642	1642	1642	1642	1642	1642
Primary pressure loss [bar]	-	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Primary residual delivery head [bar]	-	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Secondary pressure loss [bar]	-	0.15	0.28	0.41	0.54	0.73	0.9	1.1
Max. mixed water (10 - 38 °C) ¹⁾ [Liter]	-	16	23	30	35	41	47	52

¹⁾ calculated mixed water quantity at bathtub / shower head with 0.3 l/s of mixed water

S-line electronic performance data: Cold water heating 50 K (10 to 60 °C)

Primary supply temperature [°C]	-	-	-	65	70	75	80	85
Primary return line temperature [°C]	-	-	-	46	43	41	39	38
Domestic hot water draw-off volume [l/min]	-	-	-	11	15	19	22	26
Domestic hot water output [kW]	-	-	-	37	52	65	78	89
Primary flow rate [l/h]	-	-	-	1642	1642	1642	1642	1642
Primary pressure loss [bar]	-	-	-	0.3	0.3	0.3	0.3	0.3
Primary residual delivery head [bar]	-	-	-	0.15	0.15	0.15	0.15	0.15
Secondary pressure loss [bar]	-	-	-	0.13	0.25	0.33	0.44	0.57
Max. mixed water (10 - 38 °C) ¹⁾ [Liter]	-	-	-	19	27	34	40	46

¹⁾ calculated mixed water quantity at bathtub / shower head with 0.3 l/s of mixed water

M-line electronic performance data: Cold water heating 35 K (10 to 45 °C)

Primary supply temperature [°C]	50	55	60	65	70	75	80	85
Primary return line temperature [°C]	27	24	22	21	20	19	18	18
Domestic hot water draw-off volume [l/min]	20	27	33	38	43	48	53	58
Domestic hot water output [kW]	48	65	80	93	105	117	129	140
Primary flow rate [l/h]	1862	1862	1862	1862	1862	1862	1862	1862
Primary pressure loss [bar]	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
Primary residual delivery head [bar]	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Secondary pressure loss [bar]	0.18	0.33	0.5	0.68	0.88	1.1	1.33	1.59
Max. mixed water (10 - 38 °C) ¹⁾ [Liter]	25	33	41	48	54	60	66	72

¹⁾ calculated mixed water quantity at bathtub / shower head with 0.3 l/s of mixed water

M-line electronic performance data: Cold water heating 40 K (10 to 50 °C)

Primary supply temperature [°C]	-	55	60	65	70	75	80	85
Primary return line temperature [°C]	-	30	27	24	23	22	21	20
Domestic hot water draw-off volume [l/min]	-	19	25	31	36	40	45	49
Domestic hot water output [kW]	-	53	71	86	99	112	125	136
Primary flow rate [l/h]	-	1862	1862	1862	1862	1862	1862	1862
Primary pressure loss [bar]	-	0,33	0,33	0,33	0,33	0,33	0,33	0,33
Primary residual delivery head [bar]	-	0,15	0,15	0,15	0,15	0,15	0,15	0,15
Secondary pressure loss [bar]	-	0,16	0,3	0,44	0,6	0,76	0,94	1,14
Max. mixed water (10 - 38 °C) ¹⁾ [Liter]	-	27	36	44	51	58	64	70

¹⁾ calculated mixed water quantity at bathtub / shower head with 0.3 l/s of mixed water

M-line electronic performance data: Cold water heating 50 K (10 to 60 °C)

Primary supply temperature [°C]	-	-	-	65	70	75	80	85
Primary return line temperature [°C]	-	-	-	35	31	28	26	25
Domestic hot water draw-off volume [l/min]	-	-	-	18	24	28	32	36
Domestic hot water output [kW]	-	-	-	63	82	98	112	126
Primary flow rate [l/h]	-	-	-	1862	1862	1862	1862	1862
Primary pressure loss [bar]	-	-	-	0,33	0,33	0,33	0,33	0,33
Primary residual delivery head [bar]	-	-	-	0,15	0,15	0,15	0,15	0,15
Secondary pressure loss [bar]	-	-	-	0,15	0,26	0,37	0,49	0,62
Max. mixed water (10 - 38 °C) ¹⁾ [Liter]	-	-	-	32	42	50	58	65

¹⁾ Calculated mixed water quantity.

L-Line electronic performance data: Cold water heating 35 K (10 to 45 °C)

Primary supply temperature [°C]	50	55	60	65	70	75	80	85
Primary return line temperature [°C]	24	21	19	18	17	16	15	14
Domestic hot water draw-off volume [l/min]	38	51	61	70	80	80	80	80
Domestic hot water output [kW]	94	123	148	171	193	193	193	193
Primary flow rate [l/h]	3240	3240	3240	3240	3240	2841	2578	2365
Primary pressure loss [bar]	0,35	0,35	0,35	0,35	0,35	0,27	0,22	0,19
Primary residual delivery head [bar]	0,2	0,2	0,2	0,2	0,2	0,32	0,40	0,46
Secondary pressure loss [bar]	0,26	0,43	0,61	0,80	1,03	1,03	1,03	1,03
Max. mixed water (10 - 38 °C) ¹⁾ [Liter]	48	63	76	88	100	100	100	100

¹⁾ calculated mixed water quantity at bathtub / shower head with 0.3 l/s of mixed water

L-Line electronic performance data: Cold water heating 40 K (10 to 50 °C)

Primary supply temperature [°C]	-	55	60	65	70	75	80	85
Primary return line temperature [°C]	-	27	23	21	20	18	17	16
Domestic hot water draw-off volume [l/min]	-	37	48	58	66	74	80	80
Domestic hot water output [kW]	-	103	134	161	184	207	223	223
Primary flow rate [l/h]	-	3240	3240	3240	3240	3240	3066	2788
Primary pressure loss [bar]	-	0,35	0,35	0,35	0,35	0,35	0,31	0,26
Primary residual delivery head [bar]	-	0,2	0,2	0,2	0,2	0,2	0,25	0,34
Secondary pressure loss [bar]	-	0,25	0,40	0,55	0,72	0,89	1,03	1,03
Max. mixed water (10 - 38 °C) ¹⁾ [Liter]	-	53	69	82	95	106	114	114

¹⁾ calculated mixed water quantity at bathtub / shower head with 0.3 l/s of mixed water

L-Line electronic performance data: Cold water heating 50 K (10 to 60 °C)

Primary supply temperature [°C]	-	-	-	65	70	75	80	85
Primary return line temperature [°C]	-	-	-	31	27	24	23	21
Domestic hot water draw-off volume [l/min]	-	-	-	35	45	53	60	67
Domestic hot water output [kW]	-	-	-	123	157	185	210	234
Primary flow rate [l/h]	-	-	-	3240	3240	3240	3240	3240
Primary pressure loss [bar]	-	-	-	0.35	0.35	0.35	0.35	0.35
Primary residual delivery head [bar]	-	-	-	0.2	0.2	0.2	0.20	0.20
Secondary pressure loss [bar]	-	-	-	0.22	0.35	0.47	0.60	0.74
Max. mixed water (10 - 38 °C) ¹⁾ [Liter]	-	-	-	63	80	95	108	120

¹⁾ Calculated mixed water quantity.

Design features and technical data – S-line, M-line & L-Line, electronic

Design features	S-Line		M-Line		L-Line	
	Type 1	Type 2	Type 1	Type 2	Type 1	Type 2
Dimensions including housing: Width x height x depth [mm]	455 x 660 ¹⁾ x 215	455 x 660 ¹⁾ x 215	500 x 890 ¹⁾ x 340	500 x 890 ¹⁾ x 340	500 x 965 ¹⁾ x 340	500 x 965 ¹⁾ x 340
Max. heating / sanitary pressure	PN 10 / PN 10	PN 10 / PN 10	PN 10 / PN 10	PN 10 / PN 10	PN 10 / PN 10	PN 10 / PN 10
Max. permissible heating / sanitary temperatures	110 °C	110 °C	110 °C	110 °C	110 °C	110 °C
Supply voltage	230V / 50Hz	230V / 50Hz	230V / 50Hz	230V / 50Hz	230V / 50Hz	230V / 50Hz
Bottom connections (cold water inlet & primary heating return)	3/4"	3/4"	1"	1"	1 1/4"	1 1/4"
Top connections (hot water outlet & primary heating flow)	3/4"	3/4"	1"	1"	1 1/4"	1 1/4"
Top connection (DHW circulation)	-	3/4"	-	3/4"	-	1"
Wall-mounted installation	✓	✓	✓	✓	✓	✓
Tank assembly (only with optional insulating wedges)	✓	✓	-	-	-	-
Electronic controller for constant temperature regulation depending on the set hot water temperature and draw-off capacity by modulating the heating circuit pump	✓	✓	✓	✓	✓	✓
Stainless-steel plate heat exchanger (copper-soldered), vertical design to reduce the risk of calcification	✓	✓	✓	✓	✓	✓
Achieves lower return line temperatures	✓	✓	✓	✓	✓	✓
Bleed valve on the heating side	✓	✓	✓	✓	✓	✓
Backflow preventer	✓	✓	✓	✓	✓	✓
Shut-off valves (except for cold water inlet)	✓	✓	✓	✓	✓	✓
Pipework made from insulated stainless-steel corrugated pipes	✓	✓	✓	✓	✓	✓
Mounted entirely mechanically tension-free on base plate, inserted in housing and inspected	✓	✓	✓	✓	✓	✓
Flow sensor	✓	✓	✓	✓	✓	✓
Full EPP insulation of housing (black)	✓	✓	✓	✓	✓	✓
Heating side high-efficiency recirculation pump	1	1	1	1	2	2
Domestic water circulation with pump, backflow preventer, piping and screw fitting components installed in the station and connected to the controller	-	✓	-	✓	-	✓
With integrated disinfection (legionella protection)	-	-	-	✓	-	✓
With integrated keep warm function (heat exchanger) ²⁾	-	-	✓	✓	✓	✓
Tank reheating function ²⁾	-	-	✓	✓	✓	✓
Mixing protection for heating water buffer tank ²⁾	-	-	✓	✓	✓	✓
Fault indicator ²⁾	-	-	✓	✓	✓	✓
Number of possible electronically controlled cascades ²⁾	-	-	5	5	5	5
Data logging via data logger optional	-	-	✓	✓	✓	✓
Intuitive menu navigation and multilingual controller	✓	✓	✓	✓	✓	✓
Display monochrome multifunction graphics on LCD display with background lighting	✓	✓	✓	✓	✓	✓
Animated schematic of the systems and operating states	✓	✓	✓	✓	✓	✓
Statistics and graphical evaluations from data memory	✓	✓	✓	✓	✓	✓
Menu languages: German, English, Spanish, French, Dutch, Italian, Czech, Polish, Russian	✓	✓	✓	✓	✓	✓
Insulation wedges for tank installation - connectible wedges for pre-formed rear-wall insulation for mounting directly onto a tank (tank ø ≥ 600 mm)	Optional	Optional	-	-	-	-

1) Including shut off ball valves

2) A choice of individual functions may be selected, but only a limited number may be selected for each system. possible combinations.

LOGOFRESH S-LINE & M-LINE, THERMOSTATIC


LogoFresh S-line & M-line, thermostatic

Compact, ready-to-fit central fresh water stations with thermostatically controlled hot water preparation, available as surface mounting or tank installation depending on the respective system.

- Max. Heating / sanitary pressure: 3 bar / 6 bar
- Max. permissible heating / sanitary temperatures: 110 °C / 110 °C
- Supply voltage: 230 V / 50 Hz

Additional complimentary and supplementary products available (e.g. measuring equipment for consumption metering, heating water buffer tank, pump groups etc.).



Type		Order Code
Type 1 - LogoFresh S-line thermostatic	1	M10271.51
Type 2 - LogoFresh S-line thermostatic with domestic hot water circulation	1	M10271.5
Type 1 - LogoFresh M-line thermostatic	1	M10271.41
Type 2 - LogoFresh M-line thermostatic with domestic hot water circulation	1	M10271.4
S-Line – insulation wedge for tank installation	1	M66306.3673



S-line thermostatic performance data: Cold water heating 35 K (10 to 45 °C)

Primary supply temperature [°C]	50	55	60	65	70	75	80	-
Primary return line temperature [°C]	29	26	24	23	22	21	20	-
Domestic hot water draw-off volume [l/min]	10	14	18	21	24	26	29	-
Domestic hot water output [kW]	25	35	43	50	57	64	71	-
Primary flow rate [l/h]	1050	1050	1050	1050	1050	1050	1050	-
Primary pressure loss [bar]	0.28	0.28	0.28	0.28	0.28	0.28	0.28	-
Primary residual delivery head [bar]	0.15	0.15	0.15	0.15	0.15	0.15	0.15	-
Secondary pressure loss [bar]	0.11	0.21	0.34	0.46	0.6	0.7	0.87	-
Max. mixed water (10 - 38 °C) ¹⁾ [Liter]	13	18	23	26	30	33	36	-

¹⁾ calculated mixed water quantity at bathtub / shower head with 0.3 l/s of mixed water

S-line thermostatic performance data: Cold water heating 40 K (10 to 50 °C)

Primary supply temperature [°C]	-	55	60	65	70	75	80	-
Primary return line temperature [°C]	-	29	26	23	21	20	19	-
Domestic hot water draw-off volume [l/min]	-	9	12	15	17	19	21	-
Domestic hot water output [kW]	-	25	35	42	46	52	58	-
Primary flow rate [l/h]	-	1050	1050	1050	1050	1050	1050	-
Primary pressure loss [bar]	-	0.28	0.28	0.28	0.28	0.28	0.28	-
Primary residual delivery head [bar]	-	0.15	0.15	0.15	0.15	0.15	0.15	-
Secondary pressure loss [bar]	-	0.11	0.18	0.27	0.38	0.5	0.65	-
Max. mixed water (10 - 38 °C) ¹⁾ [Liter]	-	13	17	21	24	27	30	-

¹⁾ calculated mixed water quantity at bathtub / shower head with 0.3 l/s of mixed water

S-line thermostatic performance data: Cold water heating 50 K (10 to 60 °C)

Primary supply temperature [°C]	-	-	-	65	70	75	80	-
Primary return line temperature [°C]	-	-	-	34	29	27	25	-
Domestic hot water draw-off volume [l/min]	-	-	-	9	11	13	15	-
Domestic hot water output [kW]	-	-	-	30	39	46	52	-
Primary flow rate [l/h]	-	-	-	1050	1050	1050	1050	-
Primary pressure loss [bar]	-	-	-	0.28	0.28	0.28	0.28	-
Primary residual delivery head [bar]	-	-	-	0.15	0.15	0.15	0.15	-
Secondary pressure loss [bar]	-	-	-	0.11	0.15	0.24	0.3	-
Max. mixed water (10 - 38 °C) ¹⁾ [Liter]	-	-	-	16	20	23	27	-

¹⁾ calculated mixed water quantity at bathtub / shower head with 0.3 l/s of mixed water

M-line thermostatic performance data: Cold water heating 35 K (10 to 45 °C)

Primary supply temperature [°C]	50	55	60	65	70	75	-	-
Primary return line temperature [°C]	26	22	20	19	18	17	-	-
Domestic hot water draw-off volume [l/min]	15	20	24	28	32	35	-	-
Domestic hot water output [kW]	37	49	59	69	77	86	-	-
Primary flow rate [l/h]	1310	1310	1310	1310	1310	1310	-	-
Primary pressure loss [bar]	0.36	0.36	0.36	0.36	0.36	0.36	-	-
Primary residual delivery head [bar]	0.15	0.15	0.15	0.15	0.15	0.15	-	-
Secondary pressure loss [bar]	0.13	0.23	0.35	0.46	0.58	0.71	-	-
Max. mixed water (10 - 38 °C) ¹⁾ [Liter]	19	25	30	35	40	44	-	-

¹⁾ calculated mixed water quantity at bathtub / shower head with 0.3 l/s of mixed water

M-line thermostatic performance data: Cold water heating 40 K (10 to 50 °C)

Primary supply temperature [°C]	-	55	60	65	70	75	-	-
Primary return line temperature [°C]	-	28	24	22	21	19	-	-
Domestic hot water draw-off volume [l/min]	-	15	19	23	26	30	-	-
Domestic hot water output [kW]	-	41	53	64	72	83	-	-
Primary flow rate [l/h]	-	1310	1310	1310	1310	1310	-	-
Primary pressure loss [bar]	-	0.36	0.36	0.36	0.36	0.36	-	-
Primary residual delivery head [bar]	-	0.15	0.15	0.15	0.15	0.15	-	-
Secondary pressure loss [bar]	-	0.13	0.21	0.31	0.39	0.52	-	-
Max. mixed water (10 - 38 °C) ¹⁾ [Liter]	-	21	27	33	37	43	-	-

¹⁾ calculated mixed water quantity at bathtub / shower head with 0.3 l/s of mixed water

M-line thermostatic performance data: Cold water heating 50 K (10 to 60 °C)

Primary supply temperature [°C]	-	-	-	65	70	75	-	-
Primary return line temperature [°C]	-	-	-	33	28	26	-	-
Domestic hot water draw-off volume [l/min]	-	-	-	14	18	21	-	-
Domestic hot water output [kW]	-	-	-	48	62	73	-	-
Primary flow rate [l/h]	-	-	-	1310	1310	1310	-	-
Primary pressure loss [bar]	-	-	-	0.36	0.36	0.36	-	-
Primary residual delivery head [bar]	-	-	-	0.15	0.15	0.15	-	-
Secondary pressure loss [bar]	-	-	-	0.12	0.19	0.26	-	-
Max. mixed water (10 - 38 °C) ¹⁾ [Liter]	-	-	-	25	32	38	-	-

¹⁾ calculated mixed water quantity at bathtub / shower head with 0.3 l/s of mixed water

Design features and technical data - S-line & M-line, thermostatic

Design features	S-Line		M-Line	
	Type 3	Type 4	Type 1	Type 2
Dimensions including housing: Width x height x depth [mm]	460 x 660 x 250	460 x 660 x 250	500 x 890 x 340	500 x 890 x 340
Bottom connections cold water, hot water, FL & RL buffer (DHW circulation)	3/4"	3/4"	1"	1" (3/4")
Surface-mounted installation	✓	✓	✓	✓
Tank assembly (only with optional insulating wedges)	✓	✓	-	-
Stainless-steel plate heat exchanger (copper-soldered), vertical design to reduce the risk of calcification	✓	✓	✓	✓
Achieves lower return line temperatures	✓	✓	✓	✓
Heating side high-efficiency recirculation pump	✓	✓	✓	✓
Bleed valve on the heating side	✓	✓	✓	✓
Backflow preventer	✓	✓	-	-
Shut-off valves (except for cold water inlet)	✓	✓	✓	✓
Pipework made from insulated stainless-steel corrugated pipes	✓	✓	✓	✓
Mounted entirely mechanically tension-free on base plate, inserted in housing and inspected	✓	✓	✓	✓
Domestic hot water circulation with pump, backflow preventer, piping and screw fitting components installed in the station	-	✓	-	✓
Flow switch	✓	✓	✓	✓
Connection option for temperature sensor connector	-	-	✓	✓
Mixing of primary return line water for red. FL temperature	✓	✓	✓	✓
Continuously adjustable heating medium flow rate via therm. domestic water regulator	✓	✓	✓	✓
Scalding protection	-	-	✓	✓
Temperature adjusting range on heating side (flow line temperature limitation measured in heating medium)	-	-	50 - 75 °C	50 - 75 °C
Temperature adjustment range of hot water (measured in hot water)	20 - 65 °C	20 - 65 °C	40 - 65 °C	40 - 65 °C
Temperature display on valve (heating side)	-	-	✓	✓
Housing: Full EPP insulation of housing (black)	✓	✓	✓	✓
Terminal box for electric connection	✓	✓	✓	✓
Number of parallel connections (overflow valve required)	4	4	4	4
Insulation wedges for tank installation - connectible wedges for pre-formed rear-wall insulation for mounting directly onto a tank (tank ø ≥ 600 mm)	optional	optional	-	-

LOGOMINI

Meibes offers a selection of LogoMini district heating stations for direct and indirect connection to local/district heating networks with a weather-controlled heating circuit controller for one or more heating circuits on the secondary side and hot water preparation on the primary or secondary side. The units are also available with direct connection.

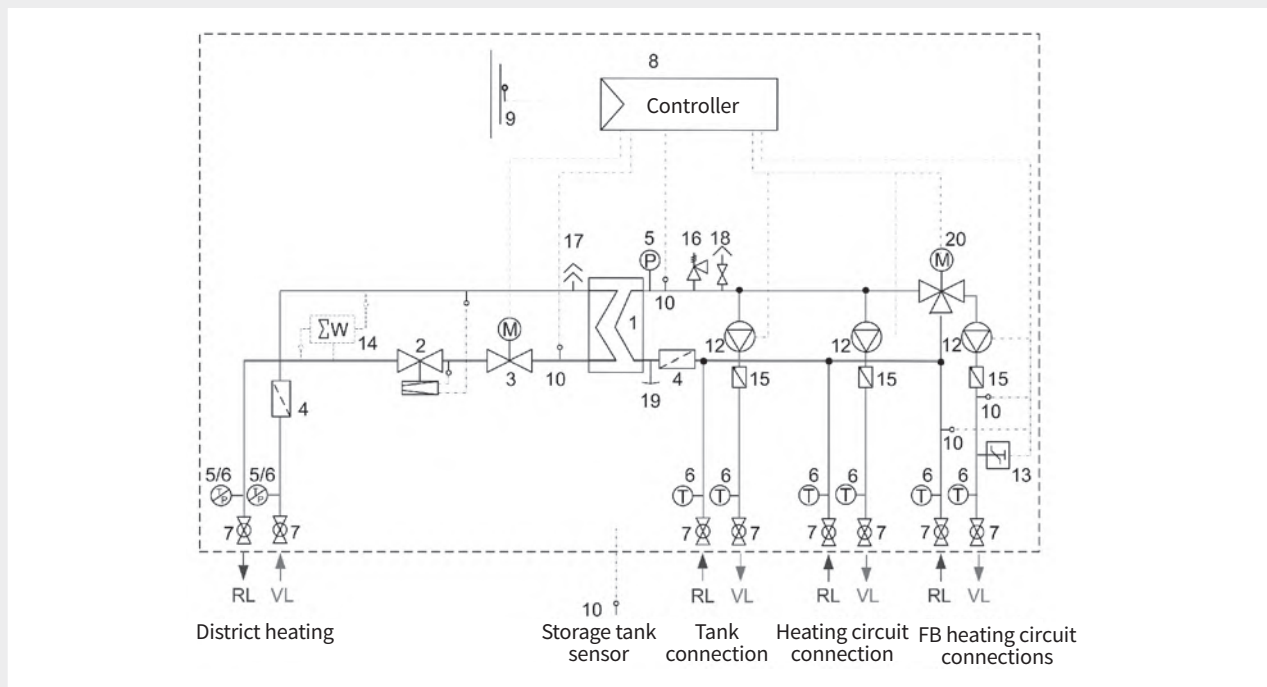
The local/district heating units are particularly suitable for connecting local/district heating networks with media temperatures of up to 150°C (PN 25). The compact units are available with a power of up to 20 kW and 20-60 kW.


The following pages contain the pre-configured units with flexible configurations (modular systems).

- Short installation times and quick exchange of old systems.
- Also available as a welded station for primary network temperatures up to 130°C (with PN 16) and 150°C (with PN 25).
- Pre-assembled in factory, 100% leak tested, can be installed immediately.
- Modular system, also available up to 10 MW.

LogoMini to 20 kW / indirect connection

Indirect station with secondary side connections for hot water preparation, static heating circuit and underfloor heating circuit, each with a high-efficiency heating circuit pump.

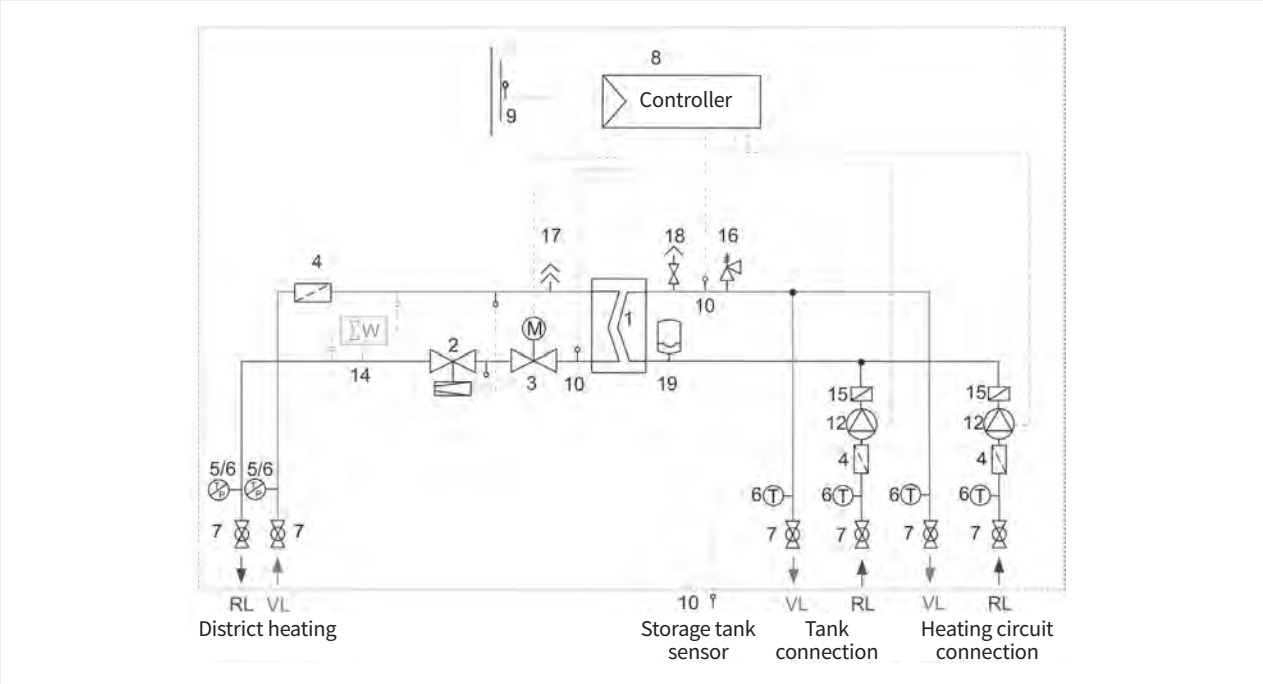



Type	Output		Order Code
H 26 AF - SHF - SAMSON controller	to 20 kW	1	M10810.26 SHF 7A
H 26 AF - SHF - Siemens controller	to 20 kW	1	M10810.26 SHF 7A1



LogoMini to 20 kW / indirect connection

Indirect station with primary side connections for hot water preparation with priority switching via thermoelectric actuator, and static heating circuit with high-efficiency heating circuit pump.

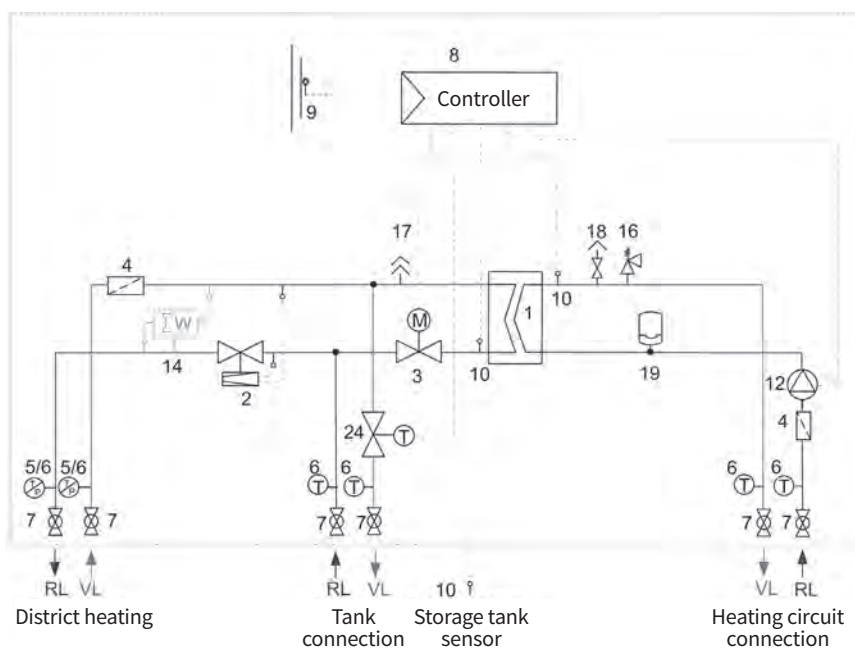



Type	Output		Order Code
H 26 AF - SH - SAMSON controller	to 20 kW	1	M10810.26 SH 22
H 26 AF - SH - Siemens controller	to 20 kW	1	M10810.26 SH 23



LogoMini to 20 kW / indirect connection

Indirect station with primary side connections for hot water preparation with priority switching via thermoelectric actuator, and static heating circuit with high-efficiency heating circuit pump.

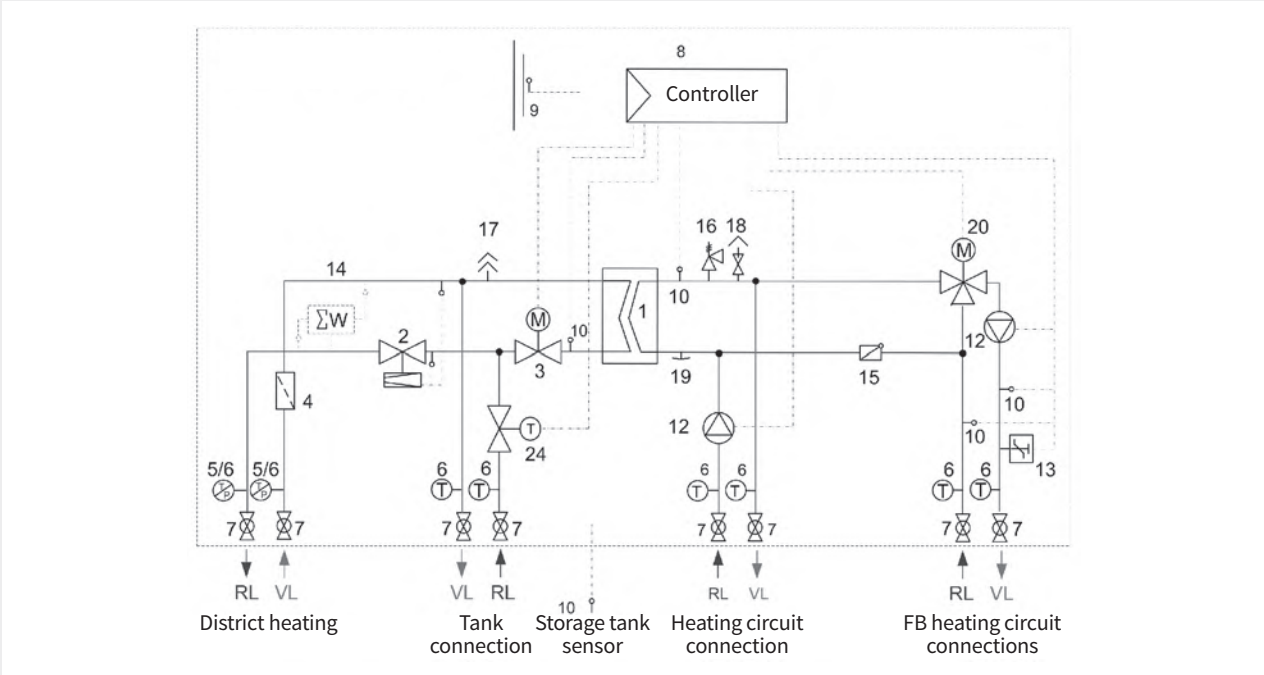


Type	Output		Order Code
H 26 AF - PH - SAMSON controller	to 20 kW	1	M10810.26 PH 25
H 26 AF - PH - Siemens controller	bis 20 kW	1	M10810.26 PH 26



LogoMini to 20 kW / indirect connection

Indirect station with primary side connections for hot water preparation with priority switching via thermoelectric actuator, and one static and one underfloor heating circuit, each with a high-efficiency heating circuit pump.

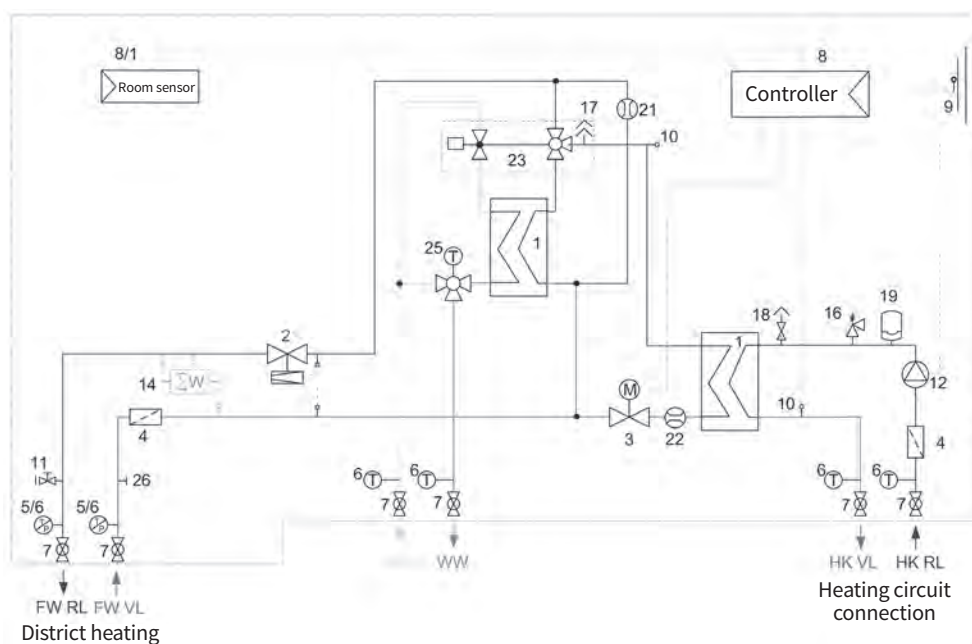



Type	Output		Order Code
H 26 AF - PHF - SAMSON controller	to 20 kW	1	M10810.26 PHF 3.2



LogoMini to 20 kW / indirect connection

Indirect station (PN 10) with hot water preparation in continuous flow principle (12 l/min), thermostatic scalding protection and a secondary side static heating circuit with high-efficiency heating circuit pump.

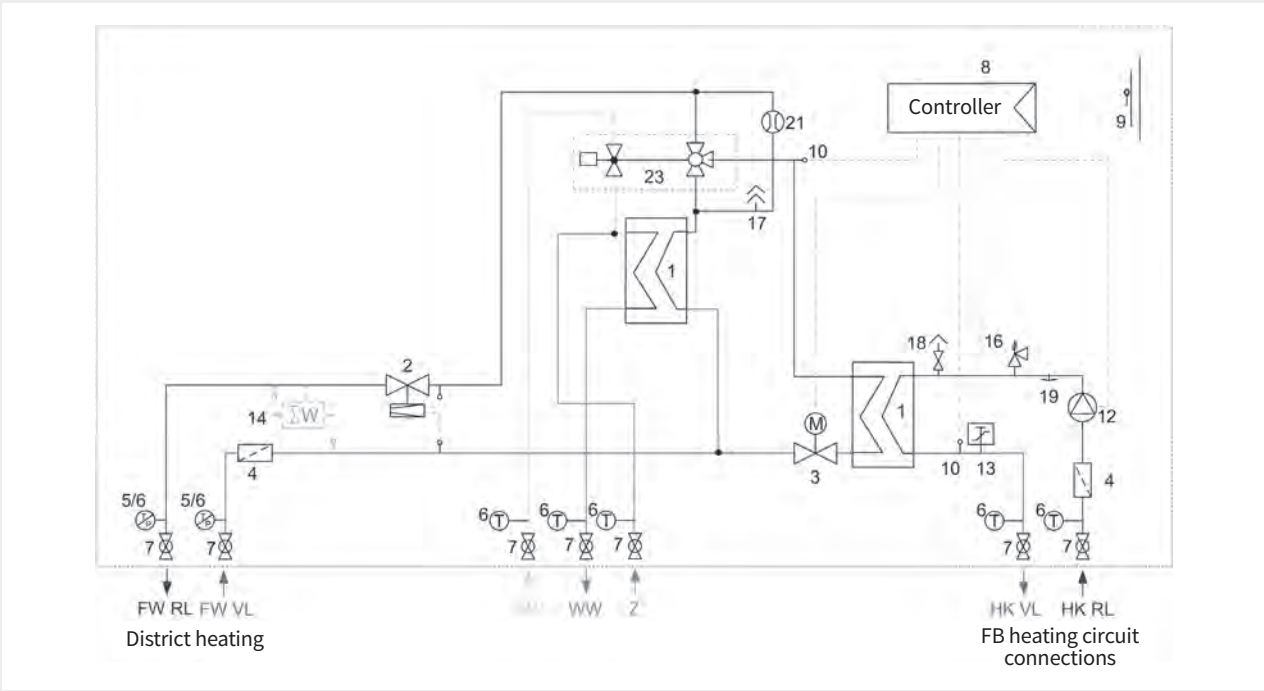


Type	Output		Order Code
HW 2 AF - OH2 - SAMSON controller	to 20 kW	1	M10910.26 OH 2/7A
HW 2 AF - OH2 - Siemens controller	to 20 kW	1	M10910.26 OH 2/8A



LogoMini to 20 kW / indirect connection

Indirect station (PN 10) with hot water preparation in continuous flow principle (15 l/min), domestic water circulation connection and a secondary side underfloor heating circuit with high-efficiency heating circuit pump.

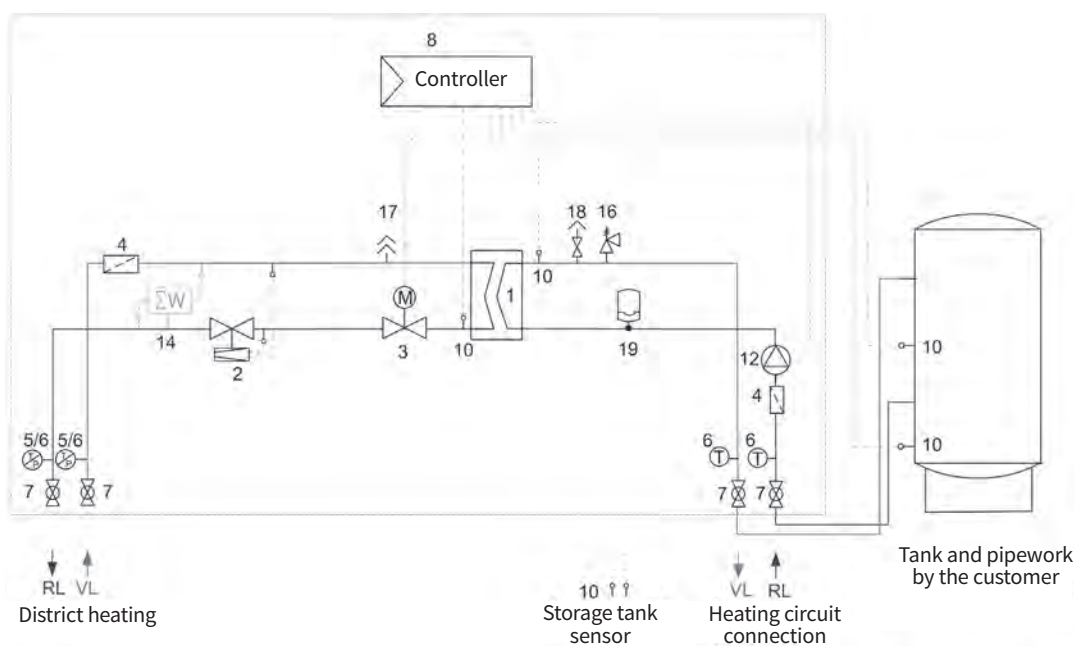


Type	Output		Order Code
HW 2 AF - OH8 - SAMSON controller	to 20 kW	1	M10910.26 OH 8/8



LogoMini to 20 kW / indirect connection

Indirect station (PN 10) with hot water preparation in continuous flow principle (12 l/min), thermostatic scalding protection and a secondary side static heating circuit with high-efficiency heating circuit pump.

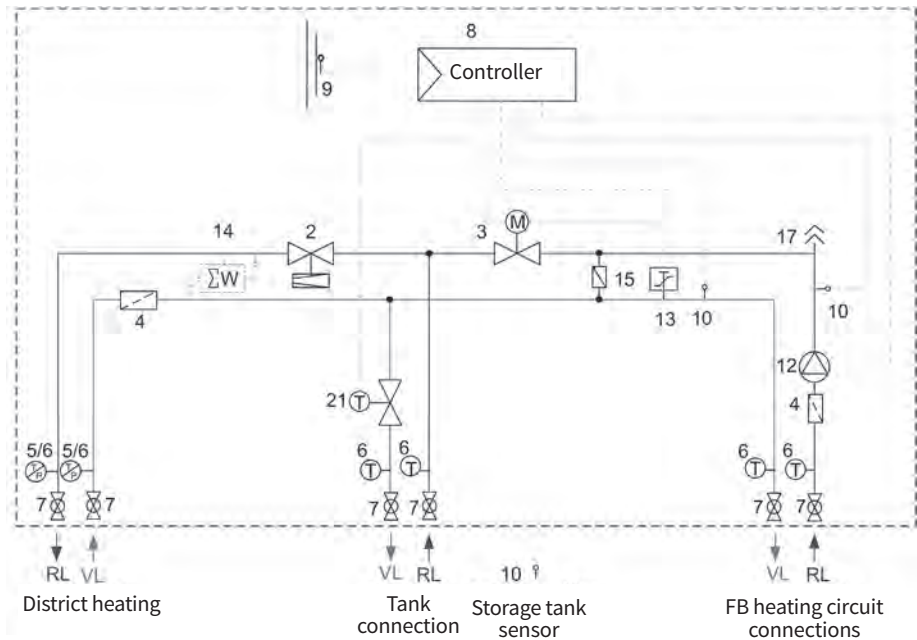



Type	Output		Order Code
H 26 AF - PH - SAMSON controller	to 20 kW	1	M10810.26 PH 4/10



LogoMini to 20 kW / direct connection

Direct station with hot water preparation via thermoelectric actuator and an underfloor heating circuit with high-efficiency heating circuit pump.



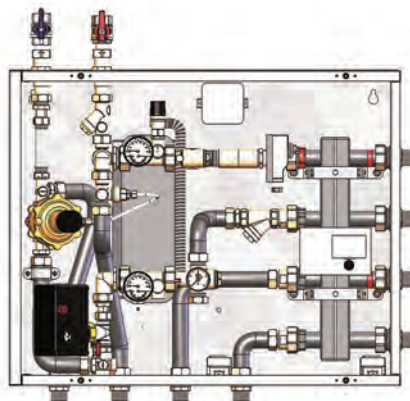
Type	Output		Order Code
H AF - PH 14 - SAMSON controller	to 20 kW	1	M10810.00 PH 14/1
H AF - PH 14 - Siemens controller	to 20 kW	1	M10810.00 PH 14/2




LogoMini to 40 kW / indirect connection / Modular construction

District heating stations up to 40 kW for indirect connection to the primary network. Modular design for a maximum of four heating circuits.

- Surface-mounted station.
- Vibration-resistant mounting with the primary side connections at top left.
- Secondary side on the right or below.
- Station with insulation (plate heat exchanger, manifold, heating circuits, housing and pipework) and cladding.
- Strength design: primary: Nominal pressure PN 10 (PN 16 on request), secondary: PN 6.
- Output design: primary: 100 °C / 60 °C, secondary: 70 °C / 50 °C.
- Standard module comprising:
 - Primary section
 - Pipe DN 20
 - Coupler ball valve, coupler dirt trap
 - Relay valve with actuator without emergency function
 - Differential pressure and volumetric flow limiter
 - Plate heat exchanger with insulation
 - Adaptor for heat flow meter G 3/4" male thread, 110 mm
 - Immersion temperature sensor
 - Thermo-/manometer 20-160 °C, 0-16 bar, NG 63
 - Fill and drain ball valve
 - Secondary section
 - Coupler dirt trap
 - Safety valve 3 bar
 - MAG connection
 - Immersion temperature sensor
 - Manometer 0-4 bar, NG 63
 - Fill and drain ball valve
- SAMSON TRAVIS 5573 controller
 - for max. 1 mixed heating circuit, 1 unmixing heating circuit, 1 heating circuit for hot water preparation (accumulator tank)



Type	Dimensions incl. connections [mm]				Order Code
	H	B	T		
District heating station to 40 kW	800	835	300	1	MTAB840-VD-11-010



LogoMini for local heating networks up to 60 kW / indirect connection / modular construction

District heating stations for local heating networks up to 60 kW for indirect connection to the primary network, modular assembly.

- District heating stations ideally suited for local heating networks up to 60 kW for indirect connection to the primary network.
- Surface-mounted station, low-vibration mounting with primary-side connections variable top/bottom, secondary connections variable top/bottom.
- Station with insulation (plate heat exchanger, manifold, housing, heating circuits and secondary pipework) and cladding.

- Strength design: primary: Nominal pressure PN 16, secondary: PN 6.
- Output design: primary: 80 °C / 60 °C, secondary: 70 °C / 55 °C.
- Standard module comprising:

Primary section

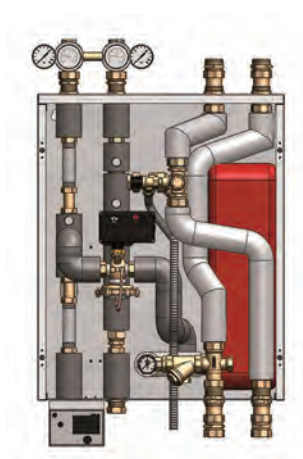
- Coupler ball valve with thermometer and manometer
- Dirt trap
- Flow rate controller with actuator without emergency function
- Plate heat exchanger with insulation
- Adaptor for heat flow meter:
 - 20 kW G 3/4" male thread, 110 mm
 - 40 kW G 1" male thread, 130 mm
 - 60 kW G 1 1/4" male thread, 260 mm
- Immersion temperature sensor


Secondary section

- Coupler dirt trap
- Safety valve 3 bar
- MAG connection
- Immersion temperature sensor

SAMSON TRAVIS 5573 controller

- for max. 1 mixed heating circuit, 1 unmixed heating circuit, 1 heating circuit for hot water preparation (accumulator tank)



Type	Dimensions incl. connections [mm]				Order Code
	H	B	T		
Basic model 20 kW	650	1080	335	1	MTAB2520-KV-11-001
Basic model 40 kW	650	1080	335	1	MTAB2540-KV-11-001
Basic model 60 kW	1110	1005	450	1	MTAB2560-KV-11-001




DISTRICT HEATING STATION, MODULE

Modules for district heating station 40 kW und max. 4 heating circuit and district heating stations 20, 40 und 60 kW.

Unmixed heating circuit

Unmixed heating circuit pump group UC (also for secondary hot water preparation).

Type		Order Code
Unmixed heating circuit 1 1/4" with ALPHA 2 32-60	1	MB-66812.30TAB
Unmixed heating circuit 1" with ALPHA 2 25-60 and counter adapter	1	MB-66811.30ZTAB


Mixed heating circuit

Mixed heating circuit pump group MC, comprising: Pump group with 3-way T-mixer, actuator, sensor.


Type		Order Code
Mixed heating circuit 1" with ALPHA 2 25-60	1	MB-L66831.30TAB
Mixed heating circuit 1 1/4" with ALPHA 2 32-60	1	MB-L66832.30TAB
Mixed heating circuit 1 1/4" without pump	1	MB-L66832.EATAB

Temperature controller thermostat


Temperature controller thermostat for underfloor heating incl. immersion sleeve and installation parts.

Type		Order Code
Thermostat 1 1/4"	1	MB-10211.01TAB2

Hot water preparation with tank charging system primary/secondary


Type		Order Code
Separation system and control valve	1	on request

Hot water preparation with thermal controller


Type		Order Code
Hot water preparation with thermal controller for registering memory	1	on request

Ball valve


Ball valve only for TAB2520/40/60-KV-11-001, comprising: 2 pcs. ball valve, 2 pcs. thermometer 0 – 120 °C.

Type		Order Code
Ball valve 1 1/4"	1	MB-61887.91TAB


Outside temperature sensor

Type		Order Code
Outside temperature sensor for outside temperature controlled systems	1	M10211.038


Manifold

Type		Order Code
Manifold for TAB2520 / 40 / 60-KV-11-001 3 heating circuits	1	M66301.2

Controller

Type		Order Code
Controller for other heating circuits	1	on request

Storage tank sensor

Type		Order Code
Storage tank sensor	1	M80590.26

LOGODISTRICT

LogoDistrict

LogoDistrict are compact, connection-ready, indirect local and district heating stations for indirect heating supply and direct or indirect supply of the hot water tank, and can be individually configured according to the tables supplied. The stations offer a space-saving setup, are easily mountable and developed for a high level of service-friendliness through the externally visible displays, the easily removable housing and the arrangement of the components within the station.

LogoDistrict (base station) equipment features

- Primary connections (top or bottom, can be selected in advance)
- Axial distances of 125 mm as standard dimension as also found in Meibes heating circuit manifolds and pump groups
- Stainless steel plate heat exchanger for the heating supply
- Adaptors for installation of a heat flow meter
- Insulated housing for high efficiency
- Dirt trap (primary flow line and secondary return line) for protecting the station
- Safety group on secondary side incl. display manometer, connection for expansion vessel 1" male thread (DN20) secondary side, sensor mount 1/2" female thread (100 mm) for temperature controller/safety temperature monitor (secondary flow line)

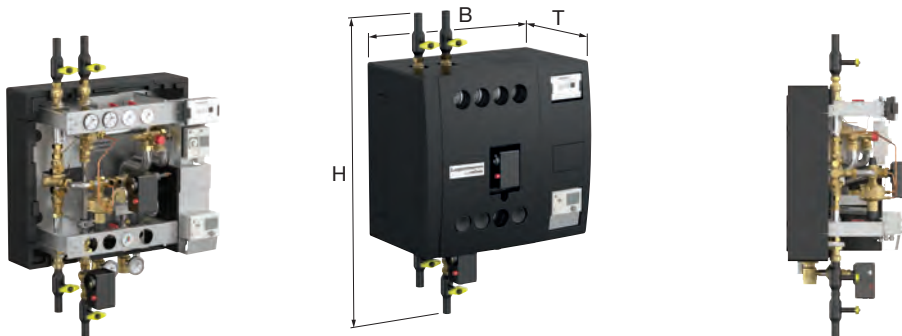
Optional


- Individual project-specific equipment options e.g. heat meter.
- Can be extended with modular assemblies such as manifolds, pump groups, etc.

• Max. pressure load: PN16

• Max. temperature load: 130 °C

Depending on the type of model and selected control components (relay and control valves as well as connection sets)



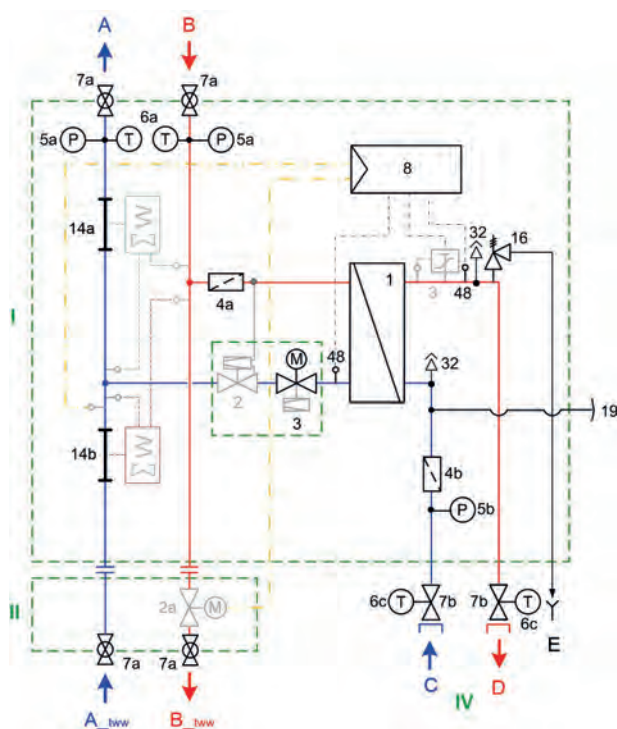
Type	Position Connections	Dimensions			Output [kW] ¹	Connections primary/secondary		Order Code
		B [mm]	H [mm]	T [mm]				
LogoDistrict S-Line T	top	1250	790	510	30	DN25 / DN32	1	M12001.3T
LogoDistrict S-Line B	bottom	1250	790	510	30	DN25 / DN32	1	M12001.3B
LogoDistrict M-Line T	top	1250	790	510	50	DN25 / DN32	1	M12001.5T
LogoDistrict M-Line B	bottom	1250	790	510	50	DN25 / DN32	1	M12001.5B
LogoDistrict L-Line T	top	1250	790	510	80	DN25 / DN32	1	M12001.8T
LogoDistrict L-Line B	bottom	1250	790	510	80	DN25 / DN32	1	M12001.8B

¹ For configuration temperatures of 110 °C / 130 °C flow line and 55 °C return line.



Hydraulic diagrams of the basic modules LogoDistrict and optional accessories

Version with district heating connections on top



DHW , primary, bottom

Optional accessories



Connections

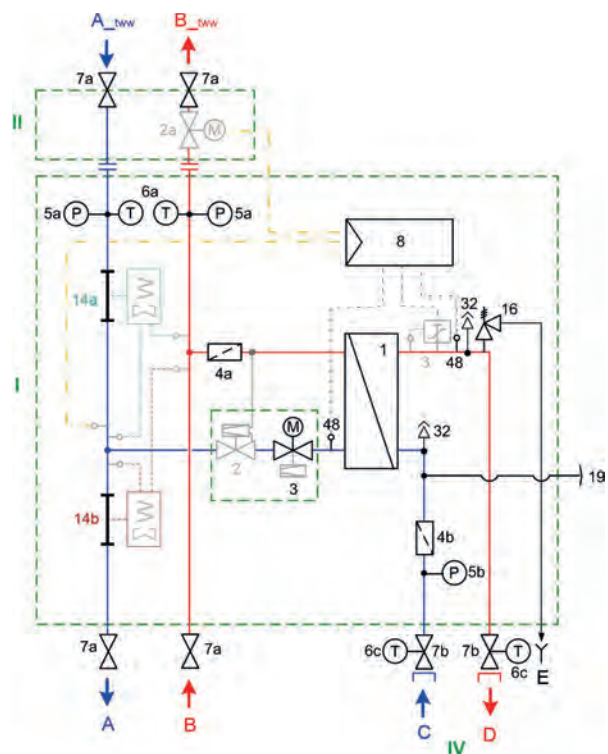
- A District heating SL primary, 1", DN 25
- B District heating RL primary, 1", DN 25
- C RL secondary, 1 1/4" female thread
- D SL secondary, 1 1/4" female thread
- E Safety valve outlet pipe (guided outside the housing) DN 20

Components and modules

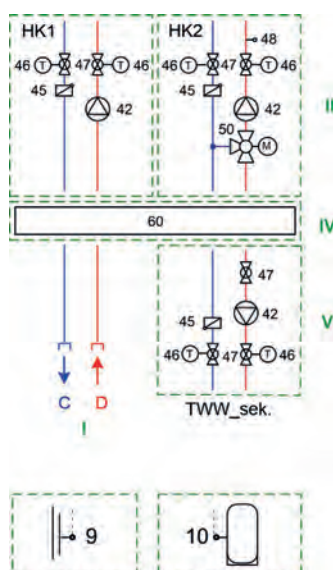
- I Basic module district heating station
- II DHW module primary, optional
- III Heating circuit pump, optional
- IV Heating circuit manifold, optional
- V Pump group for DHW preparation secondary, optional

Version with district heating connections on top

DHW primary, on top



Optional accessories



Connections

- A District heating SL primary, 1", DN 25
- B District heating RL primary, 1", DN 25
- C RL secondary, 1 1/4" female thread
- D SL secondary, 1 1/4" female thread
- E Safety valve outlet pipe (guided outside the housing) DN 20

Components and modules

- I Basic module district heating station
- II DHW module primary, optional
- III Heating circuit pump, optional
- IV Heating circuit manifold, optional
- V Pump group for DHW preparation secondary, optional

Optional accessories for the LogoDistrict base module

Position (optional)	Brief description	Components/elements	Type / Other
1		Stainless steel plate heat exchanger (copper welded) with thermal insulation	
2+3	1P 1V 1V-FC 1V-FC-DP 3P 3V 3CV 3V-FC 3V-FC-DP	Depending on equipment required, adaptors, relay valve with actuator and, on request, combi-valve with flow rate control or combi-valve with flow rate control/differential pressure limiter	optional
2a	1M-/ 3M-DHW	Relay valve for DHW, primary side	optional
4a		Dirt trap with strainer, primary side	
4b		Dirt trap with strainer, secondary side	
5a	1M / 3M	Manometer with remote sensor, primary side	
5b		Manometer with remote sensor, secondary side	
6a	3T	Thermometer 0 - 160 °C (red/blue), primary side, 130 °C variant	
6b	1VS	Thermometer 0 - 160 °C (red/blue), primary side, 110 °C variant	
6c	CS-T	Thermometer 0 - 120 °C (red/blue), secondary side	
7a	1VS / 3VS	Shut-off valves, primary side	optional
7b	CS-T	Shut-off valves, secondary side	optional
7c	1OS / 3OS	Ball valves for bleeding/draining option, primary side, top or bottom depending on connection, required e.g. for subsequent HFM installation (for 14a, b)	optional
8	EC	Controller	optional
9		External temperature sensor	optional control accessory
10		Storage tank sensor	optional control accessory
13	TR/STC	Double thermostat with IS, secondary side safeguard	variant-dependent
14		Meter adaptor for 3/4" x 110 mm HFM	2 pcs., if available
14a, b		Meter adaptor for 1" x 130 mm HFM	
16		Safety valve 1/2" x 3/4" 3 bar, with vent line	
19		Connecting pieces MAG, 1" MT with SW 36 mm	
31		Cap MS 1" with O-ring	
32		Bleed cap 1/2", 10 bar	
34		EPP thermal insulation	
42		Heating circuit pump	optional
45		Backflow preventer	optional
46		Thermometer	
47		Shut-off ball valve	
48		Temperature sensor	
50		Mixing valve with actuator	optional
60		Heating circuit manifold	optional

Technical data for primary side use up to 110 °C or PN10

Nominal layout of the base station & basic data	S-Line 30 KW ¹	M-Line 50 KW ¹	L-Line 80 KW ¹
Flow rate on primary side at 110 °C flow line and 55 °C return line	0.5 m³/h	0.8 m³/h	1.25 m³/h
Flow rate on secondary side at 70 °C flow line and 55 °C return line	1.3 m³/h	2.2 m³/h	3.5 m³/h
Primary / secondary connections:	DN25 / DN32	DN25 / DN32	DN25 / DN32
Max. temperature & pressure load on secondary side:	110 °C - PN6	110 °C - PN6	110 °C - PN6
Differential pressure on primary side min./max.:	0.6 bar / 8.0 bar	0.6 bar / 8.0 bar	0.6 bar / 8.0 bar

¹ Power ratings based on the indicated primary flow and return line temperatures

Primary side relay and control valves up to 110 °C / PN10 for use in the primary return line				
Type	Description	S-Line 30 KW	M-Line 50 KW	L-Line 80 KW
1P	Adaptors installed (possible use of relay and control valves by the customer)	TS-12001.000	TS-12001.000	TS-12001.000
1V	Relay valve with 3-point actuation ² (V)	TS-12101 S001 Kvs (V) 1.6	TS-12101 M001 Kvs (V) 2.5	TS-12101 L001 Kvs (V) 4.0
1V-FC	Relay valve with 3-point actuation ² (V) & type ";Samson 45-9" flow rate controller (FC)	TS-12101 S003 Kvs (V) 1.6 Kvs (FC) 1.0	TS-12101 M003 Kvs (V) 2.5 Kvs (FC) 2.5	TS-12101 L003 Kvs (V) 4.0 Kvs (FC) 4.0
1V-FC-DP	Relay valve with 3-point actuation ² (V) & type "Samson 46-6" flow rate/differential pressure limiter (FC-DP)	TS-12101 S004 Kvs (V) 1.6 Kvs (FC-DP) 2.5	TS-12101 M004 Kvs (V) 2.5 Kvs (FC-DP) 2.5	TS-12101 L004 Kvs (V) 4.0 Kvs (FC-DP) 4.0

² further relay and control valves for use in the flow line available on request

Primary side modules & connection assemblies up to 110 °C / PN10				
Type	Description	S-Line 30 KW	M-Line 50 KW	L-Line 80 KW
1M-DHW	Control module for connection to primary side hot water preparation (accumulator tank), relay valve with 3-point actuator, incl. 2x temperature sensors (primary RL & HW tank)	TS-12101 S101 Kvs (M-DHW) 1.6	TS-12101 M101 Kvs (M-DHW) 2.5	TS-12101 L101 Kvs (M-DHW) 4.0
1VS	Shut-off set with 2x screw-on ball valves with integrated display thermometer	TS-12101.101	TS-12101.101	TS-12101.101
1M	2x display pressure gauges for flow line/return line in EPP insulation with remote sensor	TS-12001.201	TS-12001.201	TS-12001.201
1OS	2x drain/vent ball valves up to 110 °C (Use for primary side venting for power supply from below / draining for power supply from top)	TS-12001.202	TS-12001.202	TS-12001.202

Technical data for primary side use up to 130 °C or PN16

Nominal layout of the base station & basic data	S-Line 30 KW ¹	M-Line 50 KW ¹	L-Line 80 KW ¹
Flow rate on primary side at 130 °C flow line and 55 °C return line	0.4 m³/h	0.6 m³/h	1.00 m³/h
Flow rate on secondary side at 70 °C flow line and 55 °C return line	1.3 m³/h	2.2 m³/h	3.5 m³/h
Primary / secondary connections:	DN25 / DN32	DN25 / DN32	DN25 / DN32
Max. temperature & pressure load on secondary side:	110 °C - PN6	110 °C - PN6	110 °C - PN6
Differential pressure on primary side min./max.:	0.6 bar / 8.0 bar	0.6 bar / 8.0 bar	0.6 bar / 8.0 bar

¹ Power ratings based on the indicated primary flow and return line temperatures

Primary side relay and control valves up to 130 °C / PN16 for use in the primary return line

Position	Description	S-Line 30 KW	M-Line 50 KW	L-Line 80 KW
3P	Adaptors installed (possible use of relay and control valves by the customer)	TS-12001.000	TS-12001.000	TS-12001.000
3V	Type "Samson 3222" relay valve ² With type "Samson 5825-10" relay valve (emergency setting function) - (V)	TS-12201 S001 Kvs (V) 1.6	TS-12201 M001 Kvs (V) 2.5	TS-12201 L001 Kvs (V) 4.0
3CV	Type "Samson 2488" combination flow rate controller with type "Samson 5825-10" actuator (emergency setting function) - (CV)	TS-12201 S002 Kvs (CV) 1.0	TS-12201 M002 Kvs (V) 2.5	TS-12201 L002 Kvs (V) 4.0
3V-FC	Type "Samson 3222" relay valve ² with type "5825-10" actuator (emergency setting function) - (V) & type 45-9 flow rate controller (FC)	TS-12201 S003 Kvs (V) 1.6 Kvs (FC) 1.0	TS-12201 M003 Kvs (V) 2.5 Kvs (FC) 2.5	TS-12201 L003 Kvs (V) 4.0 Kvs (FC) 4.0
3V-FC-DP	Type "Samson 3222" relay valve ² With type "Samson 5825-10" relay valve (emergency setting function) - (V) & "type 46-7" flow rate/diff. pressure controller (FC - DP)	TS-12201 S004 Kvs (V) 1.6 Kvs (FC-DP) 1.0	TS-12201 M004 Kvs (V) 2.5 Kvs (FC-DP) 2.5	TS-12201 L004 Kvs (V) 4.0 Kvs (FC-DP) 4.0

² further relay and control valves for use in the flow line available on request

Primary side modules & connection assemblies up to 130 °C / PN16

Type	Description	S-Line 30 KW	M-Line 50 KW	L-Line 80 KW
3M-DHW	Control module for connection to primary side hot water preparation (accumulator tank), relay valve of type "Samson 3222" with actuator type "Samson 5825-10" (emergency function), incl. 2 temperature sensors (primary return line & hot water tank)	TS-12201 S101 Kvs (M-DHW) 1.6	TS-12201 M101 Kvs (M-DHW) 2.5	TS-12201 L101 Kvs (M-DHW) 4.0
3VS	Shut-off set with 2x welded-on ball valves	TS-12201.101	TS-12201.101	TS-12201.101
3T	2x display thermometers for flow line/return line in EPP insulation with remote sensor	TS-12201.201	TS-12201.201	TS-12201.201
3M	2x display pressure gauges for flow line/return line in EPP insulation with remote sensor	TS-12001.201	TS-12001.201	TS-12001.201
3OS	2x drain/vent ball valves (Use for primary side venting for power supply from below / draining for power supply from top)	TS-12001.202	TS-12001.202	TS-12001.202

Other optional accessories for the LogoDistrict

Secondary side modules & connection assemblies		
Type	Description	Article no.
STC ³	Safety temperature monitor type "343-2"	TS-12001.903
TR/STC ³	Double thermostat for protecting the secondary side "type 5348-1"	TS-12001.902
CS-T	Shut-off set with 2x screw-on ball valves & with integrated display thermometer	TS-12001.901

³ for actuators with emergency control function, mandatory at primary temperatures >120 °C

Electronic system controller		
Type	Description	Article no.
EC	Type "Samson Trovis 5573" for control of the primary side, incl. 2 temperature sensors (primary RL & secondary FL). Additionally controls up to three further secondary supply circuits: 1x mixed heating circuit, 1x unmixed heating circuit, 1x hot water tank (further control circuits possible on request)	TS-12001.001

Generally separate accessories	
Description	Article no.
Storage tank sensor / control sensor	M80590.26
External temperature sensor	M10211.038
Safety temperature monitor (STW) type 5343-2, 1/2" thread, TL=100 x 8 mm, 40-100 °C	80592.353
Stainless steel immersion sleeve with 1/2" thread, TL=100 x 8 mm	80592.0491
TR/STW type 5348-2, 1/2" thread, 0-120 °C or 40-100 °C	M80592.055
Stainless steel immersion sleeve with 1/2" thread, TL=150 x 15 mm	80592.048
Contact thermostat 230 V	M45160.01

Pump Groups and Manifolds



P. 384

LogoFloor Complete



P. 475

Hydraulic Balancers



P. 480

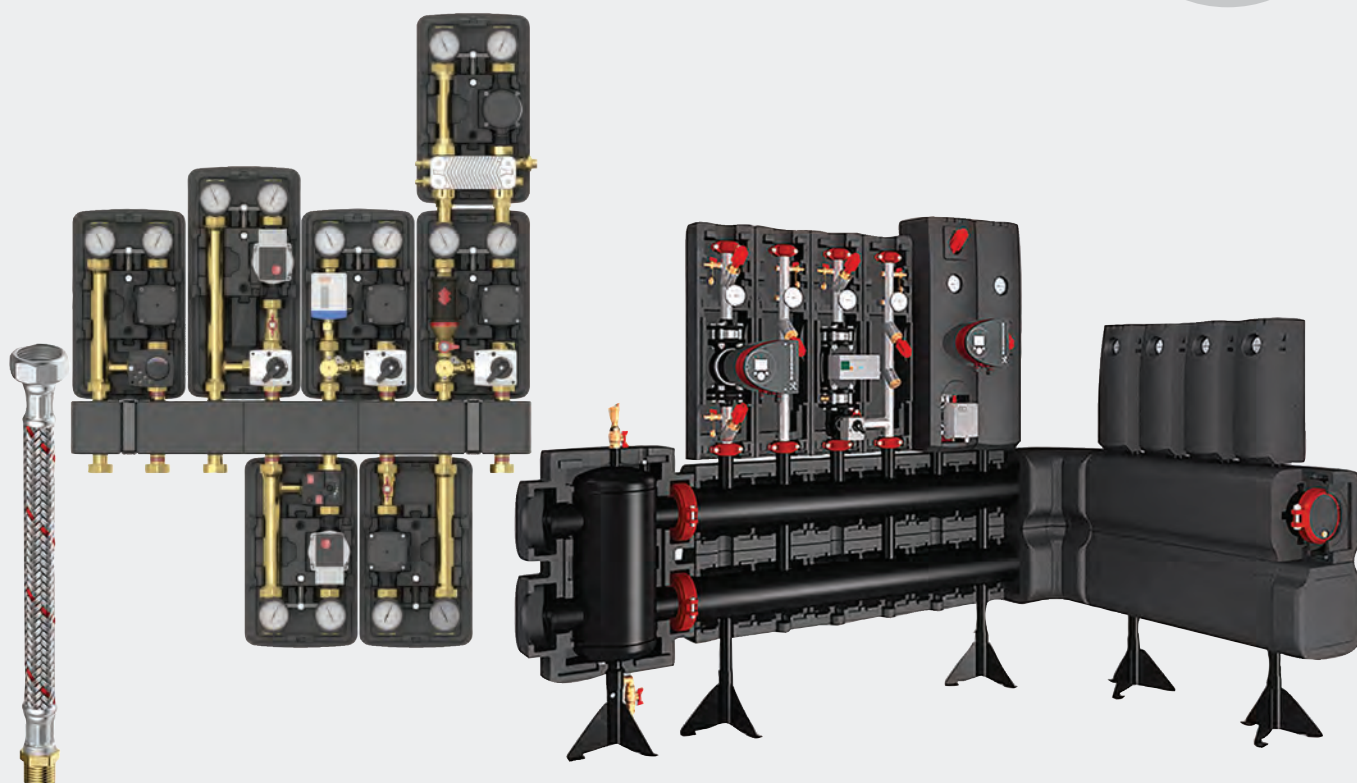
Flexible Connections



P. 492

Energy Distribution

6



Energy distribution is divided into areas of heat distribution, systems for solar installation and flexible connections. Meibes offers an extensive range characterized by a high degree of modularity and ease of installation. The range facilitates up to 2,300kW and includes bulk distribution systems, pump groups up to DN65, hydraulic switches and optional accessories such as, control valves and servomotors. The connection systems are made from corrugated steel tubing or hoses and are of the highest quality and safety.

UNIVERSAL CASCADE

Universal cascade for surface-mounted boiler systems of up to 480 kW total capacity.

- Modules for 1 or 2 heaters with a width of up to 580 mm and up to 100 kg, and connections of up to 2" (DN 50).
- Heating circuit can be connected on the right-hand or left-hand side
- End cap with ½" coupler and stopper
- Free-standing, sturdy mounting frame
- Systems up to 110 °C and PN 10
- Including height-adjustable feet



Advantages for you

- Universally applicable for various heat generators (manufacturer-independent)
- Easy installation, assembly and connection
- Prefabricated EPP insulating shells for main pipelines
- Can be combined with Meibes large manifold system with suitable connection set
- Cascading surface-mounted boiler systems up to 480 kW


Distributor with installation frame

For securing of the heaters.

Installation in a frame allows arbitrary placement anywhere in a room. A solid wall is not necessary, and other components can still be installed on the walls.

The frames are designed for 1 or 2 heaters, each up to 580 mm wide and each weighing 100 kg.



Type		Order Code
2-way standard module with end cap	1	M66451.37
1-way extension	1	M66451.38

Connection set for surface-mounted boiler without internal pump, shut-offs and safety device




For surface-mounted boiler:

- Without shut-offs and safety device
- Without internal pump

The set includes:

- Ball valves DN 32 with thermometer in the handle
- Safety valve 3 bar
- Fill and drain valve
- Pump ball valve DN 32

1 ½" reducers are included with the 2" union nuts for the pump to enable supplementation of both the DN 25 and DN 35 pumps. 1 ¼" reducers are included with the 1 ½" union nuts for the heater.

Type	Shut-offs	Safety-devices	Internal pump (wall-mounted boiler)		Order Code
Connector set for wall-mounted boiler	✓	✓	-	1	M66362.35

Connection set for surface-mounted boiler with internal pump, without shut-offs and safety device




For surface-mounted boiler:

- Without shut-offs and safety device
- With internal pump

The set includes:

- Ball valves DN 32 with thermometer in the handle
- Safety valve 3 bar
- Fill and drain valve

1 ¼" reducers are included with the 1 ½" union nuts for the heater.

Type	Shut-offs	Safety-devices	Internal pump (wall-mounted boiler)		Order Code
Connector set for wall-mounted boiler	✓	✓	✓	1	M66362.36

Connection set for surface-mounted boiler without internal pump and safety device



For surface-mounted boiler:

- With shut-offs and safety device
- Without internal pump

The set includes:

- Pump ball valve DN 32


1 ½" reducers are included with the 2" union nuts for the pump to enable supplementation of both the DN 25 and DN 35 pumps. The pump fitting for the heater is 1 ¼" M (flat sealing).

Type	Shut-offs	Safety-devices	Internal pump (wall-mounted boiler)		Order Code
Connector set for wall-mounted boiler	-	-	-	1	M66362.37

Connector set with VA corrugated pipe




We recommend a connection system between collector and heater or pump for each connector set. The piping is made up of 2 insulated stainless steel corrugated pipes DN 32 with lengths of 0.7 m and 1 m. The corrugated pipes are fastened to the collector with the accompanying 2" union nuts, bent to comply with the installation conditions and shortened to the correct length. Fixlock 1 1/4" M threaded joints provide a union to the ball valves or a direct connection to the heater.

Type		Order Code
Connector set with VA corrugated pipe	1	M66362.33

Connector set for MeiFlow L BG



The hydraulic diverter most often required is included in the "boiler guard" to enable the connection of our other heating circuit manifolds. We recommend utilisation of the S-shaped connection system when using the boiler guard. This is provided for flow line sensors. It includes 2 pairs of BigFixLock clamps. Alternatively, connection to the heating circuits is also possible without boiler guard. Unions from the DN 65 and DN 80 collectors are available for this application.

Type		Order Code
Connector set for MeiFlow L BG DN 80	1	M66421.50

COMPLETE SYSTEM UP TO 2300 KW (L-LINE)

The Meibes large manifold system consists of manifold with 2 and / or 3 circuit modules, a special manifold as a 1-module for larger connections, pump groups up to DN65 and hydraulic diverter. The modular system has a modular structure and can be combined as desired. With 90° angle pieces (optional), the modules can be connected accordingly and placed in a space-saving manner.

Advantages for you

- Short installation times thanks to "BigFixLock" connections and prefabricated EPP insulation
- Planning and calculation reliability through a complete modular system from the hydraulic diverter to the pump group
- Individual power range from 280 kW to 2,300 kW
- Integration of larger heating circuit connections possible via special distributor




MeiFlow L BG Boiler guard with hydraulic diverter

Welded round vessel with connecting pieces made from seamless steel pipe including BigFixLock nut. A cleaning opening with a 1" drain ball valve is featured in the base. An air vent which can be shut off automatically and an immersion sleeve for mounting of a temperature sensor are provided in the top section, including magnetite separator (depending on version), foot adjustable in height and EPP insulation.

- With hydraulic diverter.
- Max. permissible pressure rating: PN 6 (PN 10 upon request).
- Max. permissible temperature: 110 °C.



Type	Power [kW]	Pump capacity [m³/h]	Magnetite separator	Connection		Axial distance		Order Code
				DN	mm			
MeiFlow L BG 135	135	6	✓	50	60.3	225	1	M66374.50M
MeiFlow L BG 280	280	12	✓	80	88.9	225	1	M66374.80M
MeiFlow L BG 700	700	30	✓	100	114.3	340	1	M66374.100M
MeiFlow L BG 1150	1150	50	✓	150	168.3	450	1	M66374.152M
MeiFlow L BG 2300	2300	100	✓	200	219.1	450	1	M66374.201M
MeiFlow L BG 135	135	6	-	50	60.3	225	1	M66374.50
MeiFlow L BG 280	280	12	-	80	88.9	225	1	M66374.80
MeiFlow L BG 700	700	30	-	100	114.3	340	1	M66374.100
MeiFlow L BG 1150	1150	50	-	150	168.3	450	1	M66374.152
MeiFlow L BG 2300	2300	100	-	200	219.1	450	1	M66374.201


The stated outputs and pump capacities are based on a 20 K temperature difference between flow line and return line and a maximum flow speed of 1.5 m/s.

MeiFlow L BG Boiler guard without hydraulic diverter

Welded round vessel with connecting pieces made from seamless steel pipe including BigFixLock nut. A cleaning opening with a 1" drain ball valve is featured in the base. An air vent which can be shut off automatically and an immersion sleeve for mounting of a temperature sensor are provided in the top section, including 1 magnetite separator (additional magnetite separator optional), foot adjustable in height and EPP insulation.

- With one magnetite separator.
- Max. permissible pressure rating: PN 6 (PN 10 upon request).
- Max. permissible temperature: 110 °C.



Type	Power [kW]	Pump capacity [m³/h]	Magnetite separator	Connection		Axial distance		Order Code
				DN	mm			
MeiFlow L BG 135	135	6	✓	50	60.3	225	1	M66374.52M
MeiFlow L BG 280	280	12	✓	80	88.9	225	1	M66374.81M
MeiFlow L BG 700	700	30	✓	100	114.3	340	1	M66374.101M
MeiFlow L BG 1150	1150	50	✓	150	168.3	450	1	M66374.154M
MeiFlow L BG 2300	2300	100	✓	200	219.1	450	1	M66374.202M
MeiFlow L BG 135	135	6	-	50	60.3	225	1	M66374.52
MeiFlow L BG 280	280	12	-	80	88.9	225	1	M66374.81
MeiFlow L BG 700	700	30	-	100	114.3	340	1	M66374.101
MeiFlow L BG 1150	1150	50	-	150	168.3	450	1	M66374.154
MeiFlow L BG 2300	2300	100	-	200	219.1	450	1	M66374.202


The stated outputs and pump capacities are based on a 20 K temperature difference between flow line and return line and a maximum flow speed of 1.5 m/s.

BigFixLock for MeiFlow L BG



Unions from boiler guard to manifold.

- 1 pair (2 x).

Type	Ø pipe (HZW)*		Ø pipe (valve, angle, heat generator)*		Axial dis- tance		Order Code
	DN	External dimension [mm]	DN	External dimension [mm]			
BigFixLock DN 50 - DN 100	50	60.3	100	114.3	225	1	M66258.632
BigFixLock DN 80 - DN 100	80	88.9	100	114.3	225	1	M66258.634
BigFixLock DN 100 - DN 150	100	114.3	150	168.3	340	1	M66258.831
BigFixLock DN 150 - DN 150	150	168.3	150	168.3	450	1	M66259.81
BigFixLock DN 200 - DN 200	200	219.1	200	219.1	450	1	M66259.91

*HZW = Boiler guard / V= Manifold / W = Angle / WEZ = Heat generator


MeiFlow L MF Large manifold (2 heating circuits)

The manifold for 2 heating circuits comprises two chambers arranged one over the other (welded pipes) with thermal separation of flow line and return line.

The elements can be combined with one another arbitrarily. The boiler circuit can be connected on both the left and right side. The junctions from the return line positioned at the bottom are guided through the flow line pipe so that the connections for the pump groups are identical distances from wall. All connections are prepared for the use of BigFixLock clamps. The top outlet pieces used for connection of the heating circuits are designed with a nominal width of DN 50 (Ø 60.3 mm) with BigFixLock nut. All manifolds are painted, pressure-tested, fully insulated and delivered with two height-adjustable feet. Moreover, 2 BigFixLock clamps and 2 end caps with plugged ½" sleeve sockets are included. Alternatively, fill and drain ball valves can be screwed in for drainage.

- Thermally separated.
- Including 2 BigFixLock clamps with blind cover and insulation.
- Installation length: 1135 mm.
- Max. permissible pressure rating: PN 10.
- Max. permissible temperature: 110 °C.



Type	Power [kW]	Pump-capacity [m³/h]	Connection		Axial distance [mm]		Order Code
MeiFlow L MF 280	280	12	100	114.3	225	1	M66457.0
MeiFlow L MF 700	700	30	150	168.3	340	1	M66457.2
MeiFlow L MF 1150	1150	50	150	168.3	450	1	M66457.4
MeiFlow L MF 2300	2300	100	200	219.1	450	1	M66457.6

The stated outputs and pump capacities are based on a 20 K temperature difference between flow line and return line and a maximum flow speed of 1.5 m/s.


MeiFlow L MF Large manifold (3 heating circuits)

The manifold for 3 heating circuits comprises two chambers arranged one over the other (welded pipes) with thermal separation of flow line and return line.

The elements can be combined with one another arbitrarily. The boiler circuit can be connected on both the left and right side. The junctions from the return line positioned at the bottom are guided through the flow line pipe so that the connections for the pump groups are identical distances from wall. All connections are prepared for the use of BigFixLock clamps. The top outlet pieces used for connection of the heating circuits are designed with a nominal width of DN 50 (Ø 60.3 mm) with BigFixLock nut. All manifolds are painted, pressure-tested, fully insulated and delivered with two height-adjustable feet. Moreover, 2 BigFixLock clamps and 2 end caps with plugged 1 / 2" sleeve sockets are included. Alternatively fill and drain ball valves can be screwed in for drainage.

- Thermally separated.
- Including 2 BigFixLock clamps with blind cover and insulation.
- Installation length: 1635 mm.
- Max. permissible pressure rating: PN 10.
- Max. permissible temperature: 110 °C.



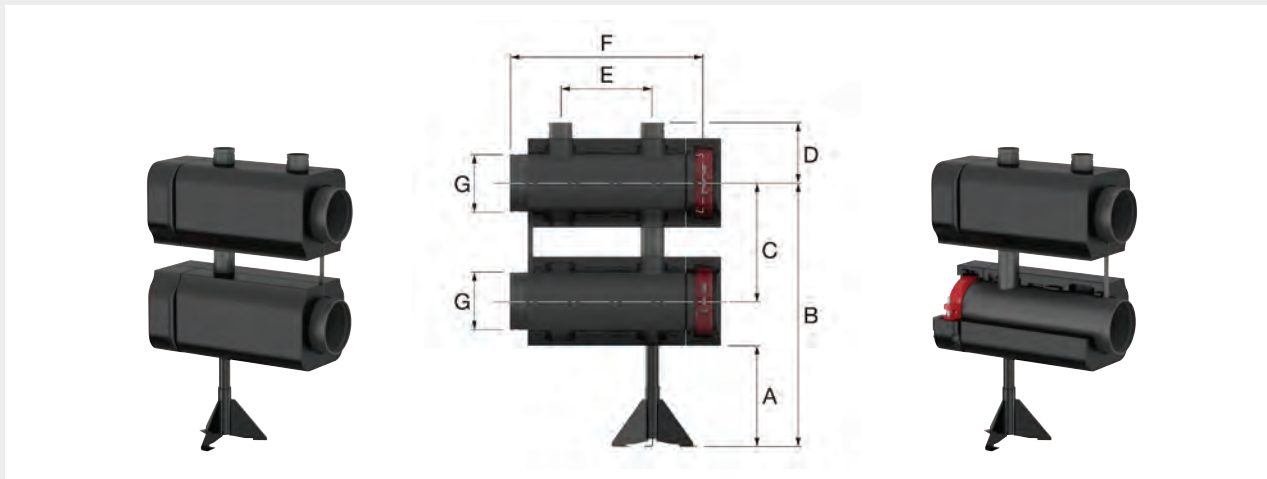
Type	Power [kW]	Pump-capacity [m³/h]	Connection		Axial distance [mm]		Order Code
			DN	mm			
MeiFlow L MF (3 heating circuits) 280	280	12	100	114.3	225	1	M66457.1
MeiFlow L MF (3 heating circuits) 700	700	30	150	168.3	340	1	M66457.3
MeiFlow L MF (3 heating circuits) 1150	1150	50	150	168.3	450	1	M66457.5
MeiFlow L MF (3 heating circuits) 2300	2300	100	200	219.1	450	1	M66457.7


The stated outputs and pump capacities are based on a 20 K temperature difference between flow line and return line and a maximum flow speed of 1.5 m/s.

MeiFlow L MF Special distributor (1 heating circuit)

For heating circuits with very high flow rates, Meibes offers a 1-module with larger connections for heating circuits larger than DN 50. The special distributor can be integrated at any position in the main distributor.

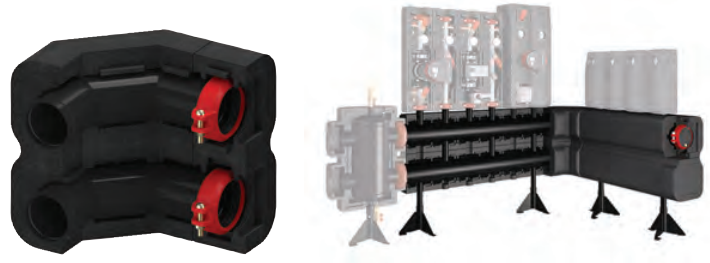
- Thermally separated.
- Including 2 BigFixLock clamps with blind cover and insulation.
- Installation length: 735 mm.
- Max. permissible pressure rating: PN 10.
- Max. permissible temperature: 110 °C.




Type	Power [kW]	Nominal diameter manifold	Heating circuit connection	Pump capacity [m³/h]	Dimensions								Order Code
					A [mm]	B * [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]		
Special distributor 700 DN80	700	DN 150	DN 80	30	350	860	340	230	350	735	168.3	1	M66457.340
Special distributor 700 DN100	700	DN 150	DN 100	30	350	860	340	230	350	735	168.3	1	M66457.350
Special distributor 1.150 DN80	1150	DN 150	DN 80	50	395	1015	450	230	350	735	168.3	1	M66457.360
Special distributor 1.150 DN100	1150	DN 150	DN 100	50	350	1015	450	230	350	735	168.3	1	M66457.370
Special distributor 2.300 DN80	2300	DN 200	DN 80	100	395	1015	450	230	350	735	219.1	1	M66457.380
Special distributor 2.300 DN100	2300	DN 200	DN 100	100	350	1015	450	230	350	735	219.1	1	M66457.390

Angle connector for MeiFlow L MF

- 1 pair (2 x).
- Including 2 BigFixLock clamps and insulation.




Type	Power [kW]	Pump-capacity [m³/h]	Connection		Axial distance		Order Code
			DN	mm			
Angle connector DN 100	280	12	100	114.3	225	1	M66457.130
Angle connector DN 150	700	30 / 50	150	168.3	340 / 450	1	M66457.330
Angle connector DN 200	2300	100	200	219.1	450	1	M66457.730

Labels



Labels for manifold insulation.

- One pair (1 × red, 1 × blue).
- Including rawl plugs and label strips.


Type		Order Code
Labels	1	M66170

QUICK Sign Holder with Quick Fastener Strap

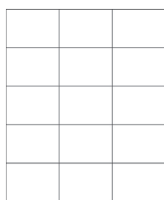
Sign holder made of plastic, with quick fastening strap made of heat-resistant polyamide, up to 200 mm pipe outside diameter, for self-printable labels 70 x 50.8 mm.

- Components made of plastic
- Max. operating temperature (for installation on pipes): 90 °C, max. ambient temperature: 40 °C
- Tool-free and fast installation via quick strap attachment
- Labelling by hand or with laser printer
- Can also be mounted on insulation
- Vertical and horizontal attachment possible




Type	Suitable for		Article no.
Sign Holder QUICK	labels 70 x 50.8 mm	10	F55022

Special Labels for QUICK Sign Holder



Weather-resistant labels, printable with laser printer, 10 x A4 sheets with 15 labels each, print template to download.

- Special weather-resistant film
- For higher humidity levels and for direct sunlight
- Labelling by hand or with laser printer
- Use your own design
- Can be used as an ad space

Type	Dimensions			Article no.
	A [mm]	B [mm]		
Special Labels for QUICK	70	50.8	150	F55023

Quick Fastener Strap for QUICK Sign Holder



Quick fastener strap made of grey, heat-resistant plastic.

- Material: Plastic


Type	Dimensions			Article no.
	A [mm]	B [mm]		
Fastener Strap for QUICK	775	9	100	F55024

MeiFlow L UC Pump groups

Flange pump group DN 40 – 65 for heat distribution up to 2300 kW.
(unmixed heating circuit for large manifold up to 2,300 kW)

For completion of the large manifold system. With or without recirculation pump; axial distance freely selectable from 250 mm, 3 shut-off valves, integrated backflow preventer, 3 fill and drain ball valves, 2 thermometers, additional connection options ½" in the flow line and return line, dirt trap, piping and connector parts, including BigFixLock unions for the manifold (connection DN 50 for all models), connecting pieces for the heating circuits made from seamless steel pipe in accordance with pump dimension with pipe nut; including EPP insulation.



Type	Model	Connection			Order Code
		DN	"		
UC DN 40	Without pump	40	1 ½"	1	M66537EA
UC DN 40	Without pump, with pump cut-out */**	40	1 ½"	1	M66537EAS
UC DN 40	Without pump, with pump cut-out for MMNA3 40 -100 F**	40	1 ½"	1	M66537.21EAS
UC DN 40	Without pump, with pump cut-out for Stratos 40 / 1 - 8	40	1 ½"	1	M66537.16WIEAS
UC DN 40	With Grundfos pump MMNA3 40 – 100 F	40	1 ½"	1	M66537.21
UC DN 40	With Wilo pump Stratos 40 / 1 – 4	40	1 ½"	1	M66537.14WI
UC DN 40	With Wilo pump Stratos 40 / 1 – 8	40	1 ½"	1	M66537.16WI
UC DN 40	With Wilo pump Stratos MAXO 40/0,5-4	40	1 ½"	1	M66537.28WI
UC DN 40	With Wilo pump Stratos MAXO 40/0,5-8	40	1 ½"	1	M66537.27WI
UC DN 50	Without pump	50	2"	1	M66538EA
UC DN 50	Without pump, with pump cut-out */**	50	2"	1	M66538EAS
UC DN 50	Without pump, with pump cut-out for MMNA3 50 -100 F	50	2"	1	M66538.21EAS
UC DN 50	Without pump, with pump cut-out for Stratos 50 / 1 - 10 **	50	2"	1	M66538.13WIEAS
UC DN 50	With Grundfos pump MMNA3 50 – 100 F	50	2"	1	M66538.21
UC DN 50	With Wilo pump Stratos 50 / 1 – 8	50	2"	1	M66538.12WI
UC DN 50	With Wilo pump Stratos 50 / 1 – 10	50	2"	1	M66538.13WI
UC DN 50	With Wilo pump Stratos MAXO 50/0,5-12	50	2"	1	M66538.29WI
UC DN 50	With Wilo pump Stratos MAXO 50/0,5-8	50	2"	1	M66538.27WI
UC DN 65	Without pump	65	2 ½"	1	M66539EA
UC DN 65	Without pump, with pump cut-out */**	65	2 ½"	1	M66539EAS
UC DN 65	Without pump, with pump cut-out for MMNA3 65 -120 F	65	2 ½"	1	M66539.22EAS
UC DN 65	Without pump, with pump cut-out for Stratos 65 / 1 - 12	65	2 ½"	1	M66539.12WIEAS
UC DN 65	With Grundfos pump MMNA3 65 – 120 F	65	2 ½"	1	M66539.22
UC DN 65	With Wilo pump Stratos 65 / 1 – 12	65	2 ½"	1	M66539.12WI
UC DN 65	With Wilo pump Stratos MAXO 65/0,5-12	65	2 ½"	1	M66539.29WI

* For selected pumps of the manufacturers Grundfos and Wilo.

** Suitable flange spacers available for length compensation for Grundfos Magna3 or Wilo Stratos.

Technical Data MeiFlow L UC

Specifications	DN 40	DN 50	DN 65
Dimensions HxWxD approx. (per line, without pump) [mm]	920×245×280	920×245×280	1000×245×280
Connections heating circuit (pipe-ø, including groove for BigFixLock) [mm]	48.3	60.3	76.1
Connection manifold / boiler (BigFixLock clamp)	DN 40×DN 50	DN 50	DN 65×DN 50
Axial distance [mm]	> 250	> 250	> 250
Max. operating temperature [°C]	110	110	110
Permissible positive operating pressure [PN]	10	10	10
Thermometers	2×0 – 120 °C	2×0 – 120 °C	2×0 – 120 °C
Backflow preventer	1× (in the flow line)	1× (in the flow line)	1× (in the flow line)
Dirt trap	1× (in the return line)	1× (in the return line)	1× (in the return line)
Installed length of pump [mm]	250	280	340
Kvs value [m³/h]	9.75	18.7	31.7
Power P¹⁾ [kW]			
Magna3 xx-100 F or 120F	147-220 / 6,3	184-276 / 7,9	582-872 / 25
Stratos xx / 1 – 4	49 - 73	167 - 251	-
Stratos xx / 1 – 8	126 - 188	184 - 276	-
Stratos xx / 1 –10 or 12	-	-	570 - 855
Flow rate V [m³/h]			
Magna3 xx-100 F or 120F	6.3	7.9	25
Stratos xx / 1 – 4	2.1	7.2	-
Stratos xx / 1 – 8	5.4	7.9	-
Stratos xx / 1 –10 or 12	-	-	24.5

1) Power P in [kW] at 20 K/30 K temperature differential and 2 mWS residual delivery head.
Note: It is possible to swap flow and return line sides.


MeiFlow L MC Pump groups

Flange pump group DN 40 – 65 for heat distribution up to 2300 kW.
(mixer circuit for large manifold up to 2,300 kW)

For completion of the large manifold system. With or without recirculation pump; axial distance 250 mm, 2 shut-off valves, integrated backflow preventer, 3-way flange mixer, 3 fill and drain ball valves, 2 thermometers, additional connection options ½" in the flow line and return line, dirt trap, piping and connector parts, including BigFixLock unions for the manifold (connection DN 50 for all models), connecting pieces for the heating circuits made from seamless steel pipe in accordance with pump dimension with pipe nut; including EPP insulation.

Note: supply line left, supply line cannot be changed.



Type	Model	Connection			Order Code
		DN	"		
MC DN 40	Without pump	40	1 ½"	1	M66547EA
MC DN 40	Without pump, with pump cut-out */**	40	1 ½"	1	M66547EAS
MC DN 40	Without pump, with pump cut-out for MMNA3 40 -100 F**	40	1 ½"	1	M66547.21EAS
MC DN 40	Without pump, with pump cut-out for Stratos 40 / 1 - 8	40	1 ½"	1	M66547.16WIEAS
MC DN 40	With Grundfos pump MMNA3 40 – 100 F	40	1 ½"	1	M66547.21
MC DN 40	With Wilo pump Stratos 40 / 1 – 4	40	1 ½"	1	M66547.14WI
MC DN 40	With Wilo pump Stratos 40 / 1 – 8	40	1 ½"	1	M66547.16WI
MC DN 40	With Wilo pump Stratos MAXO 40/0,5-4	40	1 ½"	1	M66547.28WI
MC DN 40	With Wilo pump Stratos MAXO 40/0,5-8	40	1 ½"	1	M66547.27WI
MC DN 50	Without pump	50	2"	1	M66548EA
MC DN 50	Without pump, with pump cut-out */**	50	2"	1	M66548EAS
MC DN 50	Without pump, with pump cut-out for MMNA3 50 -100 F	50	2"	1	M66548.21EAS
MC DN 50	Without pump, with pump cut-out for Stratos 50 / 1 - 10 **	50	2"	1	M66548.13WIEAS
MC DN 50	With Grundfos pump MMNA3 50 – 100 F	50	2"	1	M66548.21
MC DN 50	With Grundfos pump MMNA3 32 – 100	50	2"	1	M66548.26
MC DN 50	With Wilo pump Stratos 50 / 1 – 8	50	2"	1	M66548.12WI
MC DN 50	With Wilo pump Stratos 50 / 1 – 10	50	2"	1	M66548.13WI
MC DN 50	With Wilo pump Stratos MAXO 50/0,5-8	50	2"	1	M66548.27WI
MC DN 50	With Wilo pump Stratos MAXO 50/0,5-12	50	2"	1	M66548.29WI
MC DN 65	Without pump	65	2 ½"	1	M66549EA
MC DN 65	Without pump, with pump cut-out */**	65	2 ½"	1	M66549EAS
MC DN 65	Without pump, with pump cut-out for MMNA3 65 -120 F	65	2 ½"	1	M66549.22EAS
MC DN 65	Without pump, with pump cut-out for Stratos 65 / 1 - 12	65	2 ½"	1	M66549.12WIEAS
MC DN 65	With Grundfos pump MMNA3 65 – 120 F	65	2 ½"	1	M66549.22
MC DN 65	With Wilo pump Stratos 65 / 1 – 12	65	2 ½"	1	M66549.12WI
MC DN 65	With Wilo pump Stratos MAXO 65/0,5-12	65	2 ½"	1	M66549.29WI
MC DN 65	With Wilo pump Stratos MAXO 65/0,5-16	65	2 ½"	1	M66549.27WI

* For selected pumps of the manufacturers Grundfos and Wilo.

** Suitable flange spacers available for length compensation for Grundfos Magna3 or Wilo Stratos.

Technical Data MeiFlow L MC

Specifications	DN 40	DN 50	DN 65
Dimensions HxWxD approx. (per line, without pump) [mm]	920 × 245 × 280	920 × 245 × 280	1000 × 245 × 280
Connections heating circuit (pipe-ø, including groove for BigFixLock) [mm]	48.3	60.3	76.1
Connection manifold / boiler (BigFixLock clamp)	DN 40 × DN 50	DN 50	DN 65 × DN 50
Axial distance [mm]	250	250	250
Max. operating temperature [°C]	110	110	110
Permissible positive operating pressure [PN]	10	10	10
Thermometers	2 × 0 – 120 °C	2 × 0 – 120 °C	2 × 0 – 120 °C
Backflow preventer	1 × (in the flow line)	1 × (in the flow line)	1 × (in the flow line)
Dirt trap	1 × (in the return line)	1 × (in the return line)	1 × (in the return line)
Installed length of pump [mm]	250	280	340
Kvs value [m³/h]	8.8	17.8	30.0
Power P¹⁾ [kW]			
Magna3 xx-100 F or 120F	69 - 103	91 - 136	281 - 422
Stratos xx / 1 – 4	23 - 35	81 - 122	-
Stratos xx / 1 – 8	58 - 87	91 - 136	-
Stratos xx / 1 – 10 or 12	-	-	274 - 412
Flow rate V [m³/h]			
Magna3 xx-100 F or 120F	5.9	7.8	24.2
Stratos xx / 1 – 4	2.0	7.0	-
Stratos xx / 1 – 8	5.0	7.8	-
Stratos xx / 1 – 10 or 12	-	-	23.6


1) Power P in [kW] at 10 K/15 K temperature differential and 2 mWS residual delivery head.

MeiFlow L UC shut-off set



Shut-off set for MeiFlow L UC with insulation and BigFixLock coupling for additional shut-off between pump groups and large manifold.

- Construction height: 370 mm.
- With shut-off valve.


Type	Pump group	Connection to heating circuit [mm]		Order Code
FL-UK shut-off set DN 40	DN 40	48.3	1	M66537EWI
FL-UK shut-off set DN 50	DN 50	60.3	1	M66538EWI
FL-UK shut-off set DN 65	DN 65	76.1	1	M66539EWI

MeiFlow L MC shut-off set



Shut-off set for MeiFlow L MC with insulation and BigFixLock coupling for additional shut-off between pump groups and large manifold.


- Construction height: 370 mm.
- With two shut-off valves.

Type	Pump group	Connection to heating circuit [mm]		Order Code
FL-MK shut-off set DN 40	DN 40	48.3	1	M66547EWI
FL-MK shut-off set DN 50	DN 50	60.3	1	M66548EWI
FL-MK shut-off set DN 65	DN 65	76.1	1	M66549EWI

Meter installation fitting MeiFlow L UC / MC




Meter installation fitting for large manifold pump groups as extension for installation outside of the flange pump group MeiFlow L UC / MC.

Type	Pump group		Order Code
Meter installation fitting FL-UK / FL-MK DN 40	DN 40	1	M61825.40Z
Meter installation fitting FL-UK / FL-MK DN 50	DN 50	1	M61825.50Z
Meter installation fitting FL-UK / FL-MK DN 65	DN 65	1	M61825.65Z

MeiFlow L MC servomotor

Servomotor for MeiFlow L MC pump groups.




Type	Pump group	Model		Order Code
MeiFlow L MC servomotor 1	DN 40 / 50	230V/50 Hz, 15Nm	1	M66341.6
MeiFlow L MC servomotor 2	DN 65	230V/50 Hz, 20Nm running time 130 sec. for 90°	1	M66345.7
MeiFlow L MC servomotor 3	DN 40 / 50 / 65	24 V, 0 – 10 V controller	1	M66345.8

Meter installation fitting MeiFlow L UC / MC




Meter installation fitting for large manifold pump groups as extension for installation outside of the flange pump group MeiFlow L UC / MC.

Type	Pump group		Order Code
Meter installation fitting FL-UK / FL-MK DN 40	DN 40	1	M61825.40Z
Meter installation fitting FL-UK / FL-MK DN 50	DN 50	1	M61825.50Z
Meter installation fitting FL-UK / FL-MK DN 65	DN 65	1	M61825.65Z

Pump group wall brackets

Wall bracket of pump groups including 2 BigFixLock clamps.




Type	BigFixLock clamps (2)	axial distance [mm]	wall distance [mm]		Order Code
Wall bracket DN 50	DN 50 / DN 50	250	220	1	M16335.72
Wall bracket DN 65	DN 65 / DN 65	250	220	1	M16335.73

Pump group flange spacers



Flange spacer for MeiFlow L pump groups as length compensation for Grundfos Magna3 or Wilo Stratos.

Type	Installed length	Model		Order Code
Flange spacer 220	220	für L UC/L MC DN 40 x 30	1	M45102.015
Flange spacer 240 UK	240	für L UC DN 50 x 40	1	M45102.016
Flange spacer 240 MK	240	für L MC DN 50 x 40	1	M45102.017
Flange spacer 280 UK	280	für L UC DN 65 x 60	1	M45102.018
Flange spacer 280 MK	280	für L MC DN 65 x 60	1	M45102.019


BigFixLock



Connection clamp (e.g. for heat generator (WEZ)).

The "BigFixLock" quick-connection system is particularly impressive due to its quick and easy installation. During installation, the pipes are laid out end to end with a specially shaped sealing ring, and grey cast iron half-shells are placed around the pipes in such a way that they lie in the beading of the pipe ends. The half-shells secure both the pipe ends and the seal in place.

- 1 pair (2 x).

Type	Ø pipe (V, HZW)*		Ø pipe (heat generator)*			Order Code
	DN	External dimension [mm]	DN	External dimension [mm]		
BigFixLock DN 40 - DN 40	40	48.3	40	48.3	1	M66259.21
BigFixLock DN 50 - DN 40	50	60.3	40	48.3	1	M66259.23
BigFixLock DN 50 - DN 50	50	60.3	50	60.3	1	M66259.31
BigFixLock DN 50 - DN 65	50	60.3	65	76.1	1	M66257.33
BigFixLock DN 65 - DN 65	65	76.1	65	76.1	1	M66259.41
BigFixLock DN 80 - DN 65	80	88.9	65	76.1	1	M66259.532
BigFixLock DN 80 - DN 80	80	88.9	80	88.9	1	M66259.51
BigFixLock DN 100 - DN 100	100	114.3	100	114.3	1	M66259.61
BigFixLock DN 150 - DN 125	150	168.3	125	141.3	1	M66259.832
BigFixLock DN 150 - DN 150	150	168.3	150	168.3	1	M66259.81
BigFixLock DN 200 - DN 200	200	219.1	200	219.1	1	M66259.91


*HZW = Boiler guard / V = Manifold / WEZ = Heat generator

BigFixLock S



Connection clamp with welded connection.

- 1 pair (2 x).

Type	Ø pipe (V, HZW)*		Ø pipe (heat generator)* (welded connection)			Order Code
	DN	External dimension [mm]	DN	External dimension [mm]		
BigFixLock S DN 40 - DN 40	40	48.3	40	48.3	1	M66259.27
BigFixLock S DN 50 - DN 40	50	60.3	40	48.3	1	M66259.371
BigFixLock S DN 50 - DN 50	50	60.3	50	60.3	1	M66259.372
BigFixLock S DN 65 - DN 65	65	76.1	65	76.1	1	M66259.47
BigFixLock S DN 80 - DN 65	80	88.9	65	76.1	1	M66259.572
BigFixLock S DN 80 - DN 80	80	88.9	80	88.9	1	M66259.573
BigFixLock S DN 100 - DN 100	100	114.3	100	114.3	1	M66259.675
BigFixLock S DN 150 - DN 125	150	168.3	125	141.3	1	M66259.872
BigFixLock S DN 150 - DN 150	150	168.3	150	168.3	1	M66259.873
BigFixLock S DN 200 - DN 200	200	219.1	200	219.1	1	M66259.972


*HZW = Boiler guard / V = Manifold / WEZ = Heat generator

BigFixLock F



Connection clamp with flange connection.

- 1 pair (2 x).

Type	Ø pipe (V, HZW)*		Ø pipe (heat generator)* (flange connection) DN		Order Code
	DN	External dimension [mm]			
BigFixLock F DN 50 - DN 40	50	60.3	40	1	M66259.391
BigFixLock F DN 50 - DN 50	50	60.3	50	1	M66259.392
BigFixLock F DN 80 - DN 65	80	88.9	65	1	M66259.592
BigFixLock F DN 50 - DN 65	50	60.3	65	1	M66259.393
BigFixLock F DN 80 - DN 80	80	88.9	80	1	M66259.593
BigFixLock F DN 100 - DN 100	100	114.3	100	1	M66259.695
BigFixLock F DN 150 - DN 125	150	168.3	125	1	M66259.892
BigFixLock F DN 150 - DN 150	150	168.3	150	1	M66259.893
BigFixLock F DN 200 - DN 200	200	219.1	200	1	M66259.992


*HZW = Boiler guard / V = Manifold / WEZ = Heat generator

BigFixLock W including insulation



Connection clamp with welded connection, including insulation.
When used without boiler guard. When using the boiler guard, please select unions without insulation. Connections directly from the manifold to the heat generator (without boiler guard) should be selected without insulation.

- 1 pair (2 x).
- Further unions upon request.

Type	Ø pipe (V, HZW)*		Ø pipe (heat generator)* (welded connection)			Order Code
	DN	External dimension [mm]	DN	External dimension [mm]		
BigFixLock W DN 100 - DN 40	100	114.3	40	48,3	1	M66258.671
BigFixLock W DN 100 - DN 50	100	114.3	50	60,3	1	M66258.672
BigFixLock W DN 100 - DN 65	100	114.3	65	76,1	1	M66258.673
BigFixLock W DN 100 - DN 80	100	114.3	80	88,9	1	M66258.674
BigFixLock W DN 150 - DN 100	150	168.3	100	114,3	1	M66258.871
BigFixLock W DN 150 - DN 125	150	168.3	125	141,3	1	M66258.872
BigFixLock W DN 150 - DN 150	150	168.3	150	168,3	1	M66258.873
BigFixLock W DN 200 - DN 200	200	219.1	200	219,1	1	M66258.972


*HZW = Boiler guard / V = Manifold / WEZ = Heat generator

BigFixLock F including insulation



Connection clamp with flange connection including insulation.
When used without boiler guard. When using the boiler guard, please select unions without insulation. Connections directly from the manifold to the heat generator (without boiler guard) should be selected without insulation.

- 1 pair (2 x).
- Further unions upon request.

Type	Ø pipe (V, HZW)*		Ø pipe (heat generator)* (flange connection) DN		Order Code
	DN	External dimension [mm]			
BigFixLock F DN 100 - DN 40	100	114.3	40	1	M66258.691
BigFixLock F DN 100 - DN 50	100	114.3	50	1	M66258.692
BigFixLock F DN 100 - DN 65	100	114.3	65	1	M66258.693
BigFixLock F DN 100 - DN 80	100	114.3	80	1	M66258.694
BigFixLock F DN 150 - DN 100	150	168.3	100	1	M66258.891
BigFixLock F DN 150 - DN 125	150	168.3	125	1	M66258.892
BigFixLock F DN 150 - DN 150	150	168.3	150	1	M66258.893
BigFixLock F DN 200 - DN 200	200	219.1	200	1	M66258.992


*HZW = Boiler guard / V = Manifold / WEZ = Heat generator

BigFixLock E - Transition fitting to the heating circuit



Connection clamp with elbow.

- 1 pair (2 x).


Type	Ø pipe			Order Code
	DN	External dimension [mm]		
BigFixLock E DN 40	40	48.3	1	M66259.245
BigFixLock E DN 50	50	60.3	1	M66259.345
BigFixLock E DN 65	65	76.1	1	M66259.445

BigFixLock M - Transition fitting to the heating circuit



Connection clamp with male-threaded connection.

- 1 pair (2 x).


Type	Ø pipe			Order Code
	DN	External dimension ["]		
BigFixLock M DN 40	40	R 1 1/2" M	1	M66259.26
BigFixLock M DN 50	50	R 2" M	1	M66259.36
BigFixLock M DN 65	65	R 2 1/2" M	1	M66259.46

BigFixLock P- Transition fitting to the heating circuit



Connection clamp with pressing joint of carbon steel with M-contour.

- 1 pair (2 x).

Type	Ø pipe			Order Code
	DN	External dimension [mm]		
BigFixLock P DN 40	40	42	1	M66259.28
BigFixLock P DN 50	50	54	1	M66259.38

COMPLETE SYSTEM UP TO 100 KW (M-LINE)

The Meibes system for heating systems up to 100 kW comprises a manifold, pump groups, quick-fitting screw connections and hydraulic diverter. The modular system allows any possible combination. The pump groups are available in various models from DN25 / DN32 and come pre-assembled and insulated.

They must simply be connected with the manifold. If required, a meter installation fitting can be provided and integrated immediately. There is a wide selection of high-efficiency pumps available.

Advantages for you

- Short installation times and speedy exchange
- Reliable design and calculation thanks to a complete modular system from the hydraulic diverter to the pump group.
- 100% leak-tested, immediately ready-for-use.

MeiFlow M UC-LFC pump groups


Unmixed heating circuit.

Pre-assembled and insulated pump group MeiFlow M UC-LFC for heating circuit controller.

Including flow line sensor, return line sensor and differential pressure sensor. Up to UC-LFC2 (DN 32) with threaded connections. Bottom outlet piece 1 1/2" M, top outlet piece female thread 1 1/4" (DN 32). From UC-LFC3 (DN 40) with connecting pieces made from seamless steel pipe in accordance with pump dimension including BigFixLock nut.

Please also order the pump control system and corresponding union fittings for the upper and lower connection.



Type	Model		Order Code
UC-LFC2	With Magna 32 - 100	1	M66814.2H
UC-LFC3	With Magna3 40-120F	1	M66537.1H
UC-LFC4	With Magna3 50-120F	1	M66538.1H
UC-LFC5	With Magna3 65-120F	1	M66539.1H

MeiFlow M MC-LFC pump groups

Mixed heating circuit.


Pre-assembled and insulated pump groups MeiFlow M MC-LFC for heating circuit controller with three-way mixer.

Including flow line and return line temperature sensor and differential pressure sensor.

Up to MC-LFC2 (DN 32) with threaded connections. Bottom outlet piece 1 1/2" M, top outlet piece female thread in accordance with pump dimension. From MC-LFC3 (DN 40) with connecting pieces made from seamless steel pipe in accordance with pump dimension including BigFixLock nut.

Please also order the pump control system and corresponding union fittings for the upper and lower connection.



Type	Model		Order Code
MC-LFC2	With Magna 32 - 100	1	M66834.1H
MC-LFC3	With Magna3 40-120F	1	M66547.1H
MC-LFC4	With Magna3 50-120F	1	M66548.1H
MC-LFC5	With Magna3 65-120F	1	M66549.1H


MeiFlow M MC-LFC pump group (up to a max. 10 interface stations)

Pump group with quick mixer and Magna 32 – 60 for small Logotherm systems up to a max. 10 interface stations.

Pre-assembled and insulated pump group with LFCH-M controller; For improved control of the network dynamics in small systems at high tank temperatures (with solar charging, for example).


Directly immersed temperature sensor in the FL ball valve for rapid reaction; fast, constant 3-way mixer with 35 sec. running time; top outlet piece: 1 1/4" F flat sealing, bottom: 1 1/2" M flat sealing; including controller, 230 V power supply unit and sensors.



Type	Model		Order Code
MC-LFC	With Magna 32-60	1	M66834H2S


MeiTronic LFC (Typ LFCH/LFCH-M)

Differential pressure controlled heating circuit control for optimized operation of the hydraulic network.

Typ		Bestell- nummer
MeiTronic LFC	1	M10575.306

Control set

With differential pressure sensor and temperature sensor.


Type		Order Code
Control set	1	M10575.304

MeiFlow M UC pump groups

Manifold pump group DN 25 – 32
(unmixed heating circuit for large manifold or suitable in system up to 100 kW)

Complete with or without recirculating pump (installed length 180 mm) with connection cable; two ball valves (on return line side with backflow limiter (manually adjustable with DN25 and DN32); two contact thermometers integrated in the ball valve handle (indicated range 0 – 120 °C); one pump ball valve with Meibes flange; EPP insulation; axial distance freely selectable from 175 mm; bottom outlet piece 1 ½" M flat sealing, top outlet piece with female thread in accordance with pump dimension.



Type	Model	Connection			Order Code
		DN	"		
UC DN 25	Without pump	25	1"	1	M66813EA
UC DN 25	With Grundfos UPM3 Hybrid 25-70**	25	1"	1	M66813.36
UC DN 25	With Grundfos Alpha2.1 25-60	25	1"	1	M66813.30
UC DN 25	With Grundfos MMNA 3 25-60	25	1"	1	M66813.64
UC DN 25	With Wilo Yonos PICO 25/1-6	25	1"	1	M66813.10WI
UC DN 25	With Wilo Stratos PARA 25 / 1-7*	25	1"	1	M66813.31WI
UC DN 32	Without pump	32	1 ¼"	1	M66814EA
UC DN 32	With Grundfos UPM3 Hybrid 32-70**	32	1 ¼"	1	M66814.36
UC DN 32	With Grundfos Alpha2.1 32-60	32	1 ¼"	1	M66814.30
UC DN 32	With Grundfos MMNA 3 32-60	32	1 ¼"	1	M66814.64
UC DN 32	With Wilo Yonos PICO 30/1-6	32	1 ¼"	1	M66814.10WI
UC DN 32	With Wilo Stratos PARA 32 / 1-7*	32	1 ¼"	1	M66814.31WI
UC DN 32+ for greater flow rates	Without pump	32	1 ¼"	1	M66814.05EA
UC DN 32+ for greater flow rates	With Grundfos UPM3 Hybrid 32-70**	32	1 ¼"	1	M66814.55
UC DN 32+ for greater flow rates	With Grundfos Alpha2.1 32-60	32	1 ¼"	1	M66814.35
UC DN 32+ for greater flow rates	With Grundfos MMNA 3 32-60	32	1 ¼"	1	M66814.65
UC DN 32+ for greater flow rates	With Wilo Yonos PICO 30/1-6	32	1 ¼"	1	M66814.15WI
UC DN 32+ for greater flow rates	With Wilo Stratos PARA 32 / 1-7*	32	1 ¼"	1	M66814.35WI

* Including additional option: Control signal 0 – 10 V.

** Optional PWM signal cable available.

Technical Data MeiFlow M UC

Specifications	DN 25	DN 32	DN 32+
Dimensions HxWxD approx. (per line, without pump) [mm]	550 x 175 x 240	550 x 175 x 240	550 x 175 x 240
Heating circuit connections	1" F	1 ¼" F	1 ¼" F
Manifold connection	1 ½" M (fld.)	1 ½" M (fld.)	1 ½" M (fld.)
Axial distance [mm]	> 200	> 200	> 200
Max. operating temperature [°C]	110	110	110
Permissible positive operating pressure [PN]	10	10	10
Thermometers	2 × 0 – 120 °C	2 × 0 – 120 °C	2 × 0 – 120 °C
Backflow preventer	1 × (in the return line), 200mmWS, for installation	1 × (in the return line), 200mmWS, for installation	not for installation
Installed length of pump [mm]	180	180	180
Kvs value [m³/h]	7.2	7.6	11.7
Power P¹⁾ [kW]			
UPM3 Hybrid xx-70	60 - 91	63 - 94	67 - 101
Alpha2.1 xx-60	51 - 77	53 - 80	58 - 87
Magna3 xx-60	84 - 126	86 - 129	107 - 160
Yonos Pico xx/ 1-6	49 - 73	51 - 77	56 - 84
Stratos Para xx / 1-7	74 - 112	77 - 115	86 - 129
Flow rate V [m³/h]			
UPM3 Hybrid xx-70	2.6	2.7	2.9
Alpha2.1 xx-60	2.2	2.3	2.5
Magna3 xx-60	3.6	3.7	4.6
Yonos Pico xx/ 1-6	2.1	2.2	2.4
Stratos Para xx / 1-7	3.2	3.3	3.7

1) Power P in [kW] at 20 K/30 K temperature differential and 2 mWS residual delivery head.
Note: It is possible to swap flow and return line sides.


MeiFlow M MC pump groups

Manifold pump group DN 25 - 32
(mixer circuit for large manifold or suitable in system up to 100 kW)

Complete with or without recirculating pump (installed length 180 mm) with connection cable; two ball valves (on return line side with backflow limiter, manually adjustable with DN25 and DN32); two contact thermometers integrated in the ball valve handle (indicated range 0-120 °C); one 3-way T-mixer including continuously adjustable bypass; EPP insulation; axial distance from 250 - 250 mm (corrugated pipe on the mixer bypass expandable by 50 mm); bottom outlet piece 1 1/2" M flat sealing, top outlet piece with female thread in accordance with pump dimension.

Note: supply line left, supply line cannot be changed.



Type	Model	Connection			Order Code
		DN	"		
MC DN 25	Without pump	25	1"	1	M66833EA
MC DN 25	With Grundfos UPM3 Hybrid 25-70**	25	1"	1	M66833.36
MC DN 25	With Grundfos Alpha2.1 25-60	25	1"	1	M66833.30
MC DN 25	With Grundfos MMNA 3 25-60	25	1"	1	M66833.64
MC DN 25	With Wilo Yonos PICO 25/1-6	25	1"	1	M66833.10WI
MC DN 25	With Wilo Stratos PARA 25 / 1-7*	25	1"	1	M66833.31WI
MC DN 32	Without pump	32	1 1/4"	1	M66834EA
MC DN 32	With Grundfos UPM3 Hybrid 32-70**	32	1 1/4"	1	M66834.36
MC DN 32	With Grundfos Alpha2.1 32-60	32	1 1/4"	1	M66834.30
MC DN 32	With Grundfos MMNA 3 32-60	32	1 1/4"	1	M66834.64
MC DN 32	With Wilo Yonos PICO 30/1-6	32	1 1/4"	1	M66834.10WI
MC DN 32	With Wilo Stratos PARA 32 / 1-7*	32	1 1/4"	1	M66834.31WI
MC DN 32+ for greater flow rates	Without pump	32	1 1/4"	1	M66834.05EA
MC DN 32+ for greater flow rates	With Grundfos UPM3 Hybrid 32-70**	32	1 1/4"	1	M66834.55
MC DN 32+ for greater flow rates	With Grundfos Alpha2.1 32-60	32	1 1/4"	1	M66834.35
MC DN 32+ for greater flow rates	With Grundfos MMNA 3 32-60	32	1 1/4"	1	M66834.65
MC DN 32+ for greater flow rates	With Wilo Yonos PICO 30/1-6	32	1 1/4"	1	M66834.15WI
MC DN 32+ for greater flow rates	With Wilo Stratos PARA 32 / 1-7*	32	1 1/4"	1	M66834.35WI

* Including additional option: Control signal 0 - 10 V.

** Optional PWM signal cable available.

Technical Data MeiFlow M MC

Specifications	DN 25	DN 32	DN 32+
Dimensions HxWxD approx. (per line, without pump) [mm]	550 x 175 x 240	550 x 175 x 240	550 x 175 x 240
Heating circuit connections	1" F	1 ¼" F	1 ¼" F
Manifold connection	1 ½" AD (fld.)	1 ½" AD (fld.)	1 ½" AD (fld.)
Axial distance [mm]	200 - 250	200 - 250	200 - 250
Max. operating temperature [°C]	110	110	110
Permissible positive operating pressure [PN]	10	10	10
Thermometers	2 × 0 – 120 °C	2 × 0 – 120 °C	2 × 0 – 120 °C
Backflow preventer	1 × (in the return line), 200mmWS, for installation	1 × (in the return line), 200mmWS, for installation	not for installation
Installed length of pump [mm]	180	180	180
Kvs value [m³/h]	5.8	6.1	9.8
Power P¹⁾ [kW]			
UPM3 Hybrid xx-70	28 - 42	29 - 44	33 - 49
Alpha2.1 xx-60	23 - 35	24 - 37	28 - 42
Magna3 xx-60	37 - 56	38 - 58	48 - 72
Yonos Pico xx/ 1-6	22 - 33	23 - 35	27 - 40
Stratos Para xx / 1-7	34 - 51	35 - 52	41 - 61
Flow rate V [m³/h]			
UPM3 Hybrid xx-70	2.4	2.5	2.8
Alpha2.1 xx-60	2.0	2.1	2.4
Magna3 xx-60	3.2	3.3	4.1
Yonos Pico xx/ 1-6	1.9	2.0	2.3
Stratos Para xx / 1-7	2.9	3.0	3.5


1) Power P in [kW] at 10 K/ 15 K temperature differential and 2 mWS residual delivery head.

MeiFlow M UC-Z pump groups

Manifold pump groups DN 25
(unmixed heating circuit for large manifold or suitable in system up to 100 kW)

Complete with or without recirculating pump (installed length 180 mm) with connection cable; two ball valves (on return line side with backflow limiter); two contact thermometers integrated in the ball valve handle (indicated range 0 - 120 °C); one pump ball valve with Meibes flange; EPP insulation; axial distance freely selectable from 175 mm; bottom outlet piece 1 ½" M flat sealing, top outlet piece 1" F, meter installation fitting with telescopic piece and reducers for heat flow meter ¾" (110 mm installed length) and 1" (130 mm installed length, sensor sleeve ½")



Type	Model	Connection			Order Code
		DN	"		
UC-Z DN 25	Without pump	25	1"	1	M66813ZEA
UC-Z DN 25	With Grundfos UPM3 Hybrid 25-70**	25	1"	1	M66813.36Z
UC-Z DN 25	With Grundfos Alpha2.1 25-60	25	1"	1	M66813.30Z
UC-Z DN 25	With Grundfos MMNA 3 25-60	25	1"	1	M66813.64Z
UC-Z DN 25	With Wilo Yonos PICO 25/1-6	25	1"	1	M66813.10ZWI
UC-Z DN 25	With Wilo Stratos PARA 25 / 1-7*	25	1"	1	M66813.31ZWI

* Including additional option: Control signal 0 – 10V.

** Optional PWM signal cable available.

Technical Data MeiFlow M UC-Z

Specifications	V-UK-Z DN 25
Dimensions HxWxD approx. (per line, without pump) [mm]	550 x 175 x 240
Heating circuit connections	1" F
Manifold connection	1 ½" M (fld.)
Axial distance [mm]	> 200
Max. operating temperature [°C]	110
Permissible positive operating pressure [PN]	10
Thermometers	2 × 0 – 120 °C
Backflow preventer	1 × (in the return line), 200mmWS, for installation
Installed length of pump [mm]	180
Kvs value [m³/h]	7.2
Power P ¹⁾ [kW]	
UPM3 Hybrid xx-70	60 - 91
Alpha2.1 xx-60	51 - 77
Magna3 xx-60	84 - 126
Yonos Pico xx/ 1-6	49 - 73
Stratos Para xx / 1-7	74 - 112
Flow rate V [m³/h]	
UPM3 Hybrid xx-70	2.6
Alpha2.1 xx-60	2.2
Magna3 xx-60	3.6
Yonos Pico xx/ 1-6	2.1
Stratos Para xx / 1-7	3.2


1) Power P in [kW] at 20 K/30 K temperature differential and 2 mWS residual delivery head.
Note: It is possible to swap flow and return line sides.

MeiFlow M MC-Z pump groups

Manifold pump group DN 25 with meter installation fitting for unmixed heating circuits (mixer circuit for large manifold or suitable in system up to 100 kW)

Complete with or without recirculating pump (installed length 180 mm) with connection cable; two ball valves (on return line side with backflow limiter); two contact thermometers integrated in the ball valve handle (indicated range 0 - 120 °C); one 3-way T-mixer including continuously adjustable bypass; EPP insulation; axial distance from 250 to 250 mm (corrugated pipe on the mixer bypass expandable by 50 mm); meter installation fitting with telescopic piece, sensor sleeve ½", fit size: 1" 90-130 mm, bottom outlet piece 1 ½" M flat sealing, top outlet piece 1" F.



Type	Model	Connection			Order Code
		DN	"		
MC-Z DN 25	Without pump	25	1"	1	M66833ZEA
MC-Z DN 25	With Grundfos UPM3 Hybrid 25-70**	25	1"	1	M66833.36Z
MC-Z DN 25	With Grundfos Alpha2 25-60	25	1"	1	M66833.30Z
MC-Z DN 25	With Grundfos MAGNA 3 25-60	25	1"	1	M66833.64Z
MC-Z DN 25	With Wilo Yonos PICO 25/1-6	25	1"	1	M66833.10ZWI
MC-Z DN 25	With Wilo Stratos PARA 25/1-7*	25	1"	1	M66833.31ZWI

* Including additional option: Control signal 0 – 10 V.

** Optional PWM signal cable available.

Technical Data MeiFlow M MC-Z

Specifications	
Dimensions HxWxD approx. (per line, without pump) [mm]	550 x 175 x 240
Heating circuit connections	1" F
Manifold connection	1 ½" M (fld.)
Axial distance [mm]	200 - 250
Max. operating temperature [°C]	110
Permissible positive operating pressure [PN]	10
Thermometers	2 x 0 – 120 °C
Backflow preventer	1 x (in the return line), 200mmWS, for installation
Installed length of pump [mm]	180
Kvs value [m³/h]	5.8
Power P¹⁾ [kW]	
UPM3 Hybrid xx-70	28 - 42
Alpha2.1 xx-60	23 - 35
Magna3 xx-60	37 - 56
Yonos Pico xx/ 1-6	22 - 33
Stratos Para xx / 1-7	34 - 51
Flow rate V [m³/h]	
UPM3 Hybrid xx-70	2.4
Alpha2.1 xx-60	2.0
Magna3 xx-60	3.2
Yonos Pico xx/ 1-6	1.9
Stratos Para xx / 1-7	2.9

1) Power P in [kW] at 20 K/30 K temperature differential and 2 mWS residual delivery head.


Note: It is possible to swap flow and return line sides.

Spacer set MeiFlow M UC



Typical application with shut-off set 66833 EWI for same installation height as the pump groups.

- With insulation and threaded joints.


Type	Installation height [mm]		Order Code
Spacer set V-UK	90	1	M66813EWI

Shut-off set MeiFlow M MC

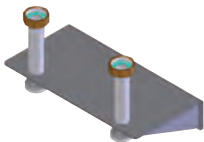



With additional shut-off between pump groups and large manifold.
Typical application as provisional blanking plug or as an additional shut-off for V-MK.

- With insulation and threaded joints.

Type	Installation height [mm]		Order Code
Shut-off set V-MK	90	1	M66833EWI

Pump group wall brackets



Type	BigFixLock clamps (2)	axial distance [mm]	wall distance [mm]		Order Code
Wall bracket up to DN 32		250	170	1	M16335.61
Wall bracket DN 40	DN 40 / DN 40	250	220	1	M16335.71

Union fitting for MeiFlow L MF



2 complete threaded joints. Necessary for Meibes large manifold.

Type	Connections			Order Code
		BigFixLock		
Union fitting MeiFlow M	1 1/2" F	DN 50 (60.3 mm)	1	M66305.50

Union fitting for other manifold manufacturers



2 complete threaded joints.

Type	Connections			Order Code
Union fitting MeiFlow L MF	1 1/2" M	1 1/2" F	1	M66305.5

MeiFlow M MF Manifold



(Axial distance 200 mm, for surface-mounted installation) EPP insulation, with 2 or 3 connection pairs directed upwards (1 1/2" union nut flat sealing), 1 connection pair directed downwards (2" union nut flat sealing with screw-in part 2" M x 1 1/2" F), for fitting of pump groups V-UK, V-MK; complete with required screw fitting and connection parts, two 1/2" sleeve sockets on the side for fill-and-drain valves, for example, for outputs up to 100 kW (at $\Delta T=20$ K or max. 4.5 m³/h with an acceptable pressure loss).

- Max. permissible pressure stage: PN 6.
- Max. permissible temperature: 110 °C.


Type		Order Code
Manifold 2 heating circuits	1	M66301.80
Manifold 3 heating circuits	1	M66301.81

Wall bracket for MeiFlow M MF



For manifolds up to 100 kW.

- 1 pair (2 x).
- With screws and rawl plugs.

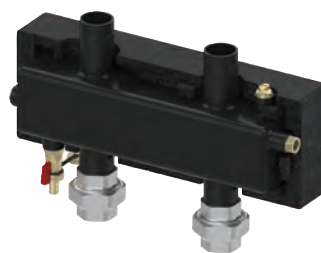
Type		Order Code
Wall bracket for manifold	1	M66337.10


MeiFlow M BG - Hydraulic balancer

Hydraulic balancer including air and dirt separator.

For horizontal or vertical installation, with manual air bleed device and fill-and-drain ball valve, including hose fitting and cap, 3/8" F immersion sleeve (internal diameter 10 mm) for flow line temperature sensor, threaded joints: 1 connection pair 1 1/2" M (top) / 1 1/2" F (boiler side), complete with insulation.

- Axial distance: 200 mm.
- Max. permissible pressure rating: PN 6.
- Max. permissible temperature: 110 °C.




Type	Model	Power (DT = 20 K) [kW]	Connections			Order Code
			Oben	Kesselseitig		
Hydraulic balancer 100kW	For MeiFlow M pump groups, with magnetite separator	100	1 1/2" M	1 1/2" F	1	M66394.1M
Hydraulic balancer 100kW	For MeiFlow M pump groups, without magnetite separator	100	1 1/2" M	1 1/2" F	1	M66394.1

Meter installation fitting for DN 32 (1 1/4")



As a supplement for installation outside of manifold pump group MeiFlow M UC/MC DN 32.


Type		Order Code
Meter installation fitting DN 32	1	M61825.32Z

Weather-compensated controller (Type 10B / 10 / 20)



Weather-compensated controller for room heating or cooling applications as well as domestic hot water heating. Controller for one or two heating circuits, switching over between heat sources, and the protection of the return line during storage tank loading. Combining functionalities for heating systems with one or two boilers, a heat pump, a storage tank, and a solar system. Temperature sensors optional, not in scope of delivery.

- Up to 52 preinstalled hydraulic schemes.
- Applicable for new or retrofit systems.
- For room heating or cooling and domestic hot water applications.
- Time programme.
- Solar system domestic hot water heating.
- Control of heating systems with a storage tank.
- Connection of two room units.
- BOOST function.
- Installation wizard for an easy and quick set-up.
- Operational diagnostics featuring error and excessive temperature warnings.
- Remote access with Wi-Fi module.

Type	Dimensions				Order Code
	Width [mm]	Height [mm]	Depth [mm]		
Weather-compensated Controller 10B	133	163	44	1	M10143.10
Weather-compensated Controller 10	133	163	44	1	M10143.11
Weather-compensated Controller 20	133	163	44	1	M10143.12

Technical Data Weather-compensated controller (Type 10B / 10 / 20)


Typical application	Type 10B	Type 10	Type 20
Radiator room heating system control	✓	✓	✓
Floor heating or cooling system control	✓	✓	✓
Convector heating or cooling system control	✓	✓	✓
Wall or ceiling heating or cooling system control	✓	✓	✓
Domestic hot water heating	✓	✓	✓
Technical characteristics			
No. of preset hydraulic schemes	7	17	52
No. of room units	2	2	2
No. of mechanical relays	6	6	7
No. of solid state relays	-	1	1
No. of analogue outputs (0-10 V or PWM) for the control of the circulation pump or an energy source	2	2	2
No. of temperature sensor inputs	7	7	7
BUS option – the interconnection with other controllers	✓	✓	✓
Heating circuits control			
Direct circuit	✓	✓	✓
Mixing circuit	✓	✓	✓
Direct and mixing circuit	-	✓	✓
Two mixing circuits	-	-	✓
Domestic hot water heating	✓	✓	✓
Switchover between direct heating circuit and domestic hot water heating	✓	✓	✓
Domestic hot water circulation	✓	✓	✓
Automatic switchover between heat sources	-	-	✓
Control of the supply line constant temperature	✓	✓	✓
Single-stage storage tank loading	-	-	✓
Heat source control			
Solid fuel boiler	✓	✓	✓
Solid fuel boiler with a pellet burner	-	-	✓
Liquid fuel boiler	✓	✓	✓
Liquid fuel boiler with a two-stage burner	✓	✓	✓
Combined boiler	-	-	✓
Gas flow boiler	-	-	✓
Heat pump	-	-	✓
Storage tank	✓	✓	✓
Auxiliary heating with electricity	✓	✓	✓
Solar collectors	-	✓	✓
Domestic hot water heating			
With a primary heating source	✓	✓	✓
With a storage tank	✓	✓	✓
Using a solar system	-	✓	✓
User functions			
Room heating or cooling according to the time programme	✓	✓	✓
Automatic winter/summer mode switchover	✓	✓	✓
PARTY function – activation of the comfort operation mode	✓	✓	✓
ECO function – activation of the economy operation mode	✓	✓	✓
HOLIDAY function – activation of the operation mode during the holiday season	✓	✓	✓
Domestic hot water heating according to the time programme	✓	✓	✓
One-time domestic hot water heating	✓	✓	✓
BOOST function for intense room heating	✓	✓	✓
Function for screed drying	✓	✓	✓

System controller (Type 10B / 20)



Weather-compensated boiler controller for room heating and domestic hot water preparation unified with a boiler controller. The system controllers are capable of controlling one or two heating circuits, switching over between heating sources, and protecting the return line during storage tank loading. System controller including temperature sensors, outdoor temperature sensor and surface temperature sensor.

- Up to 52 preinstalled hydraulic schemes.
- Boiler and room control.
- Safety functions for boiler protection (Anti-freeze and overheating protection, mechanical thermo fuse to switch the boiler off at exceeded temperature 110 °C).
- Room heating or cooling according to a set time programme.
- Domestic hot water heating according to a set time programme.
- Connection of two room units.
- BOOST function.
- Installation wizard for an easy and quick set-up.
- Operational diagnostics featuring error and excessive temperature warnings.
- Remote access with Wi-Fi module.

Type	Dimensions				Order Code
	Width [mm]	Height [mm]	Depth [mm]		
System Controller 10B	211	148	63	1	M10143.23
System Controller 20	211	148	63	1	M10143.24

Technical Data System controller (Type 10B / 20)

Typical application	Type 10B	Type 20
Radiator room heating system control	✓	✓
Liquid fuel boiler control	✓	✓
Floor heating or cooling system control	✓	✓
Convactor heating or cooling system control	✓	✓
Wall or ceiling heating or cooling system control	✓	✓
Domestic hot water heating	✓	✓
Technical characteristics		
No. of preset hydraulic schemes	7	52
No. of room units	2	2
No. of mechanical relays	7	9
No. of solid state relays	-	1
No. of analogue outputs (0-10 V or PWM) for the control of the circulation pump or an energy source	2	2
No. of temperature sensor inputs	8	8
BUS option – the interconnection with other controllers	✓	✓
Heating circuits control		
Direct heating circuit	✓	✓
Mixing heating circuit	✓	✓
Direct and mixing heating circuit	-	✓
Two mixing heating circuits	-	✓
Domestic hot water heating	✓	✓
Switchover between direct heating circuit and domestic hot water heating	✓	✓
Domestic hot water circulation	✓	✓
Automatic switchover between heat sources	-	✓
Control of the supply line constant temperature	✓	✓
Single-stage storage tank loading	-	✓
Heat source control		
Solid fuel boiler	✓	✓
Solid fuel boiler with a pellet burner	-	✓
Liquid fuel boiler	✓	✓
Liquid fuel boiler with a two-stage burner	✓	✓
Combined boiler	-	✓
Gas flow boiler	-	✓
Heat pump	-	✓
Storage tank	✓	✓
Auxiliary heating with electricity	✓	✓
Solar collectors	-	✓
Domestic hot water heating		
With a primary heating source	✓	✓
With a storage tank	✓	✓
Using a solar system	-	✓
User functions		
Room heating or cooling according to the time programme	✓	✓
Automatic winter/summer mode switchover	✓	✓
PARTY function – activation of the comfort operation mode	✓	✓
ECO function – activation of the economy operation mode	✓	✓
HOLIDAY function – activation of the operation mode during the holiday season	✓	✓
Domestic hot water heating according to the time programme	✓	✓
One-time domestic hot water heating	✓	✓
BOOST function for intense room heating	✓	✓
Function for screed drying	✓	✓

Communication Module Wi-Fi



Wi-Fi communication module for remote access of controllers, room units and servomotors. Remote monitoring and device management via web or mobile application.

Wi-Fi module compatible to:


- Weather-compensated controller.
- System controller.
- Room unit RCD2.
- Weather-compensated servomotor.

Advantages:

- Connection of up to two controllers.
- LED indicating input and output statuses.
- Simple one-touch (WPS) Wi-Fi setup configuration.
- Convenient remote system management.

Technical specifications:

- Energy consumption: 0.5 W.
- Data usage during the communication with the platform: ~30 MB/controller/month.
- Method of installation: on the wall.
- Degree of protection: IP20 according to EN 60529.
- Safety class according to SIST EN 60730-1: II.
- Cross-section of network conductors: 0.5 - 0.75 mm².
- Cross-section of communication conductors: 0.25 - 0.33 mm².
- Permissible relative humidity: 85 % RH at 25 °C.
- Housing material: PC – thermoplastic.
- Ambient temperature: 5 - 40 °C.
- Storage temperature: -20 - 65 °C.

Type	Dimensions				Order Code
	Width [mm]	Height [mm]	Depth [mm]		
Communication module Wi-Fi	90	90	44	1	M10143.103

Technical Data Communication Module Wi-Fi


Technical characteristics	
LED indicating the input status	2
LED indicating platform connection status	✓
Communication interface reset button and WPS connection button	✓
Wired communication for controller connection	2
Network protocol	ModBus
Setup and installation	
Possibility of wall installation	✓
Simple installation and connection	✓

Outdoor temperature sensor Pt1000



Outdoor temperature sensor for system controllers and weather-compensated controllers.

- Sensor type: Pt1000.
- Sensor without cable.


Type	Dimensions				Order Code
	Width [mm]	Height [mm]	Depth [mm]		
Outdoor temperature sensor Pt1000	49	117	26	1	M10143.101

Surface temperature sensor Pt1000



Surface temperature system for boiler controllers and weather-compensated controllers.


- Sensor type: Pt1000.
- Cable length: 3 m.

Type	Dimensions				Order Code
	Width [mm]	Height [mm]	Depth [mm]		
Surface temperature sensor Pt1000	23	42	14	1	M10143.102

Room unit for weather-controlled controller



Digital room unit for servomotor MWR2 with weather-controlled controller with LCD display for easy and convenient operation of the heating system from the living room.

Type		Order Code
Room unit for weather-controlled controller	1	M66341.113

COMPLETE SYSTEM TO 70 KW (S-LINE)

Meibes boiler connection - components are universally applicable for all boiler types and manufacturers with pump groups and components up to 70 kW. The system comprises a manifold, pump groups and boiler guard (either with or without hydraulic diverter). The modular system allows any possible combination. The pump groups are available in various models from DN25 / DN32 and come pre-assembled and insulated.



The pump groups for unmixed heating circuits (UC); mixed heating circuits (MC); separation system; fixed set-point controller set and return flow booster are included in the MeiFlow product family.

The pump groups are compatible with the Meibes boiler connection program with 125 mm axial distance such as manifold, boiler guard etc. The high-quality 3-part EPP insulation design improves insulation and air supply in high-efficiency pumps.

Advantages for you


- Quick and easy installation
- 100% leak-tested, immediately ready-for-use
- Easily combined with one another without the need for ancillary components
- Different versions for different applications
- High quality standards

MeiFlow Shunt UD

The MeiFlow Shunt UD is a completely mechanically and hydraulically pre-assembled pump group with high flow rates for an increased heating capacity. The pump group works in accordance with the functional principle of an injection system. The flow line temperature is controlled in the return line on the primary side using the NexusValve Vivax control valve. The maximum capacity is preset by presetting the valve. The flow in the primary circuit can be variably adjusted to requirements by using the actuator. The MeiFlow Shunt UD also impresses with its appealing design and high-quality components. Moreover, the compact design simplifies operation as well as installation in the boiler room.

- Flow and return lines exchangeable (left/right)
- Energy-efficient thanks to EPP full insulation
- Quality product through installation of high-quality components
- Compact layout for space-saving integration
- High flow rates for an increased heating capacity
- Highly applicable for heating coils due to constant volumetric flow
- Permissible operating pressure: PN10
- Thermometer: 0 to 120 (130)°C
- Axial distance heating circuit: 90 mm



Type	Heating circuit connections	Boiler connections	Pump connections	Dimensions *			Flow rate [l/h]	Max. operating temp. [°C]	Weight [kg]		Order Code
				H. [mm]	W. [mm]	D. [mm]					
Shunt DN 15 S	G 3/4" F	G 1" F	1 1/2" F	460	410	261	110-558 **	110	10	1	M66120.10
Shunt DN 20 S	G 3/4" F	G 1" F	1 1/2" F	460	410	261	374-860 **	110	10	1	M66120.20
Shunt DN 20 H	G 3/4" F	G 1" F	1 1/2" F	460	410	261	860-2002 ***	110	10	1	M66120.30

* Dimensions only including the housing/insulation without pump and valves above

** Primary pressure of 50 kPa

*** Primary pressure of 35 kPa

MeiFlow Combi compact pump groups

Thermally-insulated, compact pump group for two heating circuits, either different or the same (UC / MC).

With common manifold, connecting options for temperature sensors, backflow preventer in the respective flow line, contact thermometers integrated in the grip elements of flow line and return line, third heating circuit, e.g. for tank charging in the optional accessory, e.g. for domestic water heater.


The product:

- For applications in smaller heating systems:
up to 51 KW in the unmixed heating circuit
up to 24 KW in the mixed heating circuit
- Hydraulically adaptable common manifold
- Available for unmixed (UC) and mixed (MC) heating circuits
- Available with different pump types

Advantage for you:

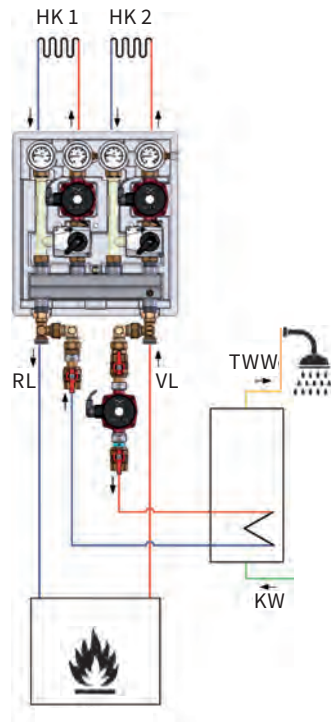
- Switchable manifold between standard or low differential model
- Compact EPP insulation
- Fully assembled, inspected and thermally insulated
- Up to 3 heating circuits with integration of a storage load
- Sensor immersion sleeve in the manifold and flow line ball valve e.g. for heat meter



Type	Model		Order Code
MeiFlow Combi 2 UC	With Grundfos UPM3 Hybrid 15-70*	1	M26103.3
MeiFlow Combi 2 UC	With 2x Grundfos UPM3 15-70*	1	MP26103UPM3
MeiFlow Combi 2 UC	With Wilo Yonos PARA RS 15 / 6	1	M26103.2
MeiFlow Combi UC/MC	With Grundfos UPM3 Hybrid 15-70*	1	M26102.3
MeiFlow Combi UC/MC	With 2x Grundfos UPM3 15-70*	1	MP26102UPM3
MeiFlow Combi UC/MC	With Wilo Yonos PARA RS 15 / 6	1	M26102.2
MeiFlow Combi 2 MC	With Grundfos UPM3 Hybrid 15-70*	1	M26101.3
MeiFlow Combi 2 MC	With Grundfos UPM3 15-70*	1	MP26101UPM3
MeiFlow Combi 2 MC	With Wilo Yonos PARA RS 15 / 6	1	M26101.2

* Optional PWM signal cable available.
Note: Mixer circuits incl. actuator.

Example connection of the MeiFlow Combi



Technical Data MeiFlow Combi

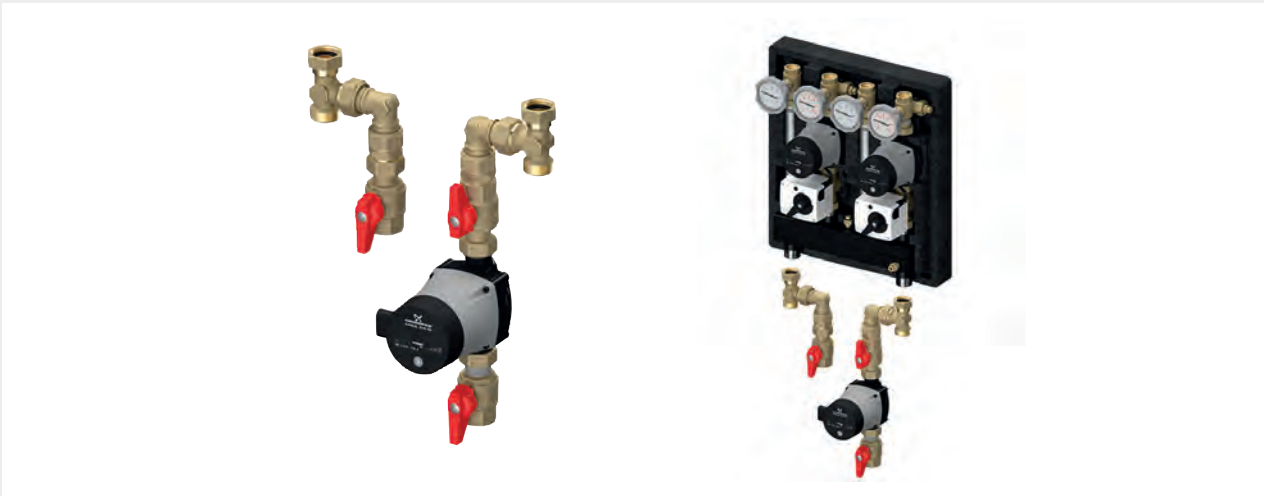
Specifications	2 UC	UC/MC	2 MC
Dimensions HxWxD approx. (per line, without pump) [mm]	460 x 410 x 261	460 x 410 x 261	460 x 410 x 261
Heating circuit connections	¾" F	¾" F	¾" F
Axial distance heating circuit [mm]	90	90	90
Manifold connection	1" M	1" M	1" M
Axial distance boiler [mm]	270	270	270
Max. operating temperature [°C]	110	110	110
Permissible positive operating pressure [PN]	6	6	6
Thermometers	4 × 0 – 120 °C	4 × 0 – 120 °C	4 × 0 – 120 °C
Backflow preventer	2 × (each in the flow line), 200mmWS, for installation	2 × (each in the flow line), 200mmWS, for installation	2 × (each in the flow line), 200mmWS, for installation
Installed length of pump [mm]	130	130	130

Technical Data MeiFlow Combi heating circuit

Specifications	UC	MC	Tank charging kit
Kvs value [m³/h]	5.1	2.9	5.1
Power P ¹⁾ [kW]			
UPM3 Hybrid 15-70	51 / 77	24 / 37	23 / 45
Yonos Para RS 15/6	43 / 65	20 / 31	26 / 38
Flow rate V [m³/h]			
UPM3 Hybrid 15-70	2.2	2.1	2.6
Yonos Para RS 15/6	1.85	1.75	2.2

1) UK: Power P at 20 K / 30 K temperature differential and 2 mWS residual delivery head.
 MC: Power P at 10 K / 15 K temperature differential and 2 mWS residual delivery head.
 Tank charging kit: Power P at 10 K / 15 K temperature differential and 0.5 mWS residual delivery head.

MeiFlow Combi tank charging kit



Type	Model		Order Code
MeiFlow Combi tank charging kit*	Without pump	1	M66356.84
MeiFlow Combi tank charging kit*	With Grundfos UPM3 Hybrid 15-70**	1	M66356.85
MeiFlow Combi tank charging kit*	With Grundfos UPM3 Hybrid 15-70**	1	M66356.88
MeiFlow Combi tank charging kit*	With Wilo Yonos PARA RS 15 / 6	1	M66356.86

* Additional unmixed heating circuit; for heat generators without internal pump only.
** Optional PWM signal cable available.


MeiFlow S UC pump groups

Pump group MeiFlow S UC DN 25 – 32

(unmixed heating circuit and tank charging for manifold up to 70 kW or suitable for surface-mounted installation)

Complete with or without recirculating pump (installed length 180 mm) with connection cable; two ball valves (on return line side with manually adjustable backflow limiter); two contact thermometers integrated in the ball valve handle (indicated range 0 – 120 °C); one pump ball valve with Meibes flange; EPP insulation; bottom outlet piece 1 ½" M flat sealing, top outlet piece with female thread in accordance with pump dimension; wall bracket.



Type	Model	Connection (uppermost)			Order Code
		DN	"		
UC DN 20		20	¾"	1	M66810EA
UC DN 25	Without pump	25	1"	1	M66811EA
UC DN 25	With Grundfos UPM3 Hybrid 25-70*	25	1"	1	M66811.36
UC DN 25	With Grundfos Alpha2.1 25-60	25	1"	1	M66811.30
UC DN 25	With Wilo Yonos PICO 25/1-6	25	1"	1	M66811.10WI
UC DN 25	With Wilo Stratos PARA 25/1-7*	25	1"	1	M66811.31WI
UC DN 25	With Wilo Stratos PICO 30/6	25	1"	1	M66811.32WI
UC DN 32	Without pump	32	1 ¼"	1	M66812EA
UC DN 32	With Grundfos UPM3 Hybrid 32-70*	32	1 ¼"	1	M66812.36
UC DN 32	With Grundfos Alpha2.1 32-60	32	1 ¼"	1	M66812.30
UC DN 32	With Wilo Yonos PICO 30/1-6	32	1 ¼"	1	M66812.10WI
UC DN 32	With Wilo Stratos PARA 30/1-7*	32	1 ¼"	1	M66812.31WI
UC DN 32	With Wilo Stratos PICO 30/6	32	1 ¼"	1	M66812.32WI

* Optional PWM signal cable available.

Technical Data MeiFlow S UC

Specifications	DN 25	DN 32
Dimensions HxWxD [mm]	420 x 250 x 255	420 x 250 x 255
Upper connections	G 1" F	G 1 ¼" F
Lower connection	G 1 ½" M (fld)	G 1 ½" M (fld)
Axial distance [mm]	125	125
Max. operating temperature [°C]	110	110
Permissible positive operating pressure [PN]	6	6
Thermometers	0 – 120 °C	0 – 120 °C
Components made of	Steel, brass, EPP insulation	Steel, brass, EPP insulation
Sealing materials	PTFE, EPDM	PTFE, EPDM
Kvs value [m³/h]	7.8	8

Note: It is possible to swap flow and return line sides.


MeiFlow S MC pump groups

Pump group MeiFlow S MC DN 25 – 32

(mixed heating circuit for manifold up to 70 kW or suitable for surface-mounted installation)

Complete with or without recirculating pump (installed length 180 mm) with connection cable; two ball valves (on return line side with manually adjustable backflow limiter); two contact thermometers integrated in the ball valve handle (indicated range 0 – 120 °C); 3-way T-mixer with continuously adjustable bypass; EPP insulation; bottom outlet piece 1 ½" M flat sealing, top outlet piece with female thread in accordance with pump dimension; wall bracket.



Type	Model	Connection (upper-most)		SL			Order Code
		DN	"	Left	Right		
MC R DN 20	Without pump	20	¾"	-	✓	1	M66830EA
MC L DN 25**	Without pump	25	1"	✓	-	1	ML66831EA
MC L DN 25**	With Grundfos UPM3 Hybrid 25-70*	25	1"	✓	-	1	ML66831.36
MC L DN 25**	With Grundfos Alpha2.1 25-60	25	1"	✓	-	1	ML66831.30
MC L DN 25**	With Wilo Yonos PICO 25/1-6	25	1"	✓	-	1	ML66831.10WI
MC L DN 25**	With Wilo Stratos PICO 30/6	25	1"	✓	-	1	ML66831.32WI
MC R DN 25	Without pump	25	1"	-	✓	1	M66831EA
MC R DN 25	With Grundfos UPM3 Hybrid 25-70*	25	1"	-	✓	1	M66831.36
MC R DN 25	With Grundfos Alpha2.1 25-60	25	1"	-	✓	1	M66831.30
MC R DN 25	With Wilo Yonos PICO 25/1-6	25	1"	-	✓	1	M66831.10WI
MC R DN 25	s Wilo Stratos PARA 25/1-7*	25	1"	-	✓	1	M66831.31WI
MC R DN 25	With Wilo Stratos PICO 30/6	25	1"	-	✓	1	M66831.32WI
MC R M DN 25	With Grundfos Alpha2.1 25-60, with actuator	25	1"	-	✓	1	M66831.30M
MC R M DN 25	With Grundfos UPM3 Hybrid 25-70*, with actuator	25	1"	-	✓	1	M66831.36M
MC R M DN 25	Without pump, with actuator	25	1"	-	✓	1	M66831EAM
MC L DN 32**	Without pump	32	1 ¼"	✓	-	1	ML66832EA
MC L DN 32**	With Grundfos UPM3 Hybrid 32-70*	32	1 ¼"	✓	-	1	ML66832.36
MC L DN 32**	With Grundfos Alpha2.1 32-60	32	1 ¼"	✓	-	1	ML66832.30
MC L DN 32**	With Wilo Yonos PICO 30/1-6	32	1 ¼"	✓	-	1	ML66832.10WI
MC L DN 32**	With Wilo Stratos PICO 30/6	32	1 ¼"	✓	-	1	ML66832.32WI
MC R DN 32	Without pump	32	1 ¼"	-	✓	1	M66832EA
MC R DN 32	With Grundfos UPM3 Hybrid 32-70*	32	1 ¼"	-	✓	1	M66832.36
MC R DN 32	With Grundfos Alpha2.1 32-60	32	1 ¼"	-	✓	1	M66832.30
MC R DN 32	With Wilo Yonos PICO 30/1-6	32	1 ¼"	-	✓	1	M66832.10WI
MC R DN 32	With Wilo Stratos PARA 30/1-7*	32	1 ¼"	-	✓	1	M66832.31WI
MC R DN 32	With Wilo Stratos PICO 30/6	32	1 ¼"	-	✓	1	M66832.32WI
MC R M DN 32	With Grundfos Alpha2.1 32-60, with actuator	32	1 ¼"	-	✓	1	M66832.30M
MC R M DN 32	With Grundfos UPM3 Hybrid 32-70*, with actuator	32	1 ¼"	-	✓	1	M66832.36M
MC R M DN 32	Without pump, with actuator	32	1 ¼"	-	✓	1	M66832EAM

* Optional PWM signal cable available.

** Picture is similar.

MeiFlow S MC pump groups, 3-way mixer Siemens


Pump group MeiFlow S MC DN 25 – 32

3-way mixer Siemens with a wide range of Kvs values

(mixed heating circuit for manifold up to 70 kW or suitable for surface-mounted installation)


Complete with or without recirculating pump (installed length 180 mm) with connection cable; two ball valves (on return line side with manually adjustable backflow limiter); two contact thermometers integrated in the ball valve handle (indicated range 0 – 120 °C); 3-way mixer with continuously adjustable bypass; EPP insulation; bottom outlet piece 1 ½" M flat sealing, top outlet piece with female thread in accordance with pump dimension; wall bracket.



Type	Model	Connection (upper-most)		Kvs of mixer		Order Code
		DN	"			
MC DN 25	Without pump	25	1"	1.6	1	MPVXB-1.6A66721EA
MC DN 25	Without pump	25	1"	2.5	1	MPVXB-2.5A66721EA
MC DN 25	Without pump	25	1"	4.0	1	MPVXB-4A66721EA
MC DN 25	With Grundfos Alpha2 25-60	25	1"	4.0	1	MPVXB-4A66721.30
MC DN 25	Without pump	25	1"	6.3	1	MPVXB-6.3A66721EA
MC DN 25	With Grundfos Alpha2 25-60	25	1"	6.3	1	MPVXB-6.3A66721.30
MC DN 25	Without pump	25	1"	8.0	1	MPVXB-8A66721EA
MC DN 25	With Grundfos Alpha2 25-60	25	1"	8.0	1	MPVXB-8A66721.30
MC DN 32	Without pump	32	1 ¼"	10.0	1	MPVXB-10A66722EA
MC DN 32	With Grundfos Alpha2 32-60	32	1 ¼"	10.0	1	MPVXB-10A66722.30
MC DN 32	With Grundfos Alpha2 32-60	32	1 ¼"	16.0	1	MPVXB-16A66722.30

* Optional PWM signal cable available.

Servomotors for Siemens mixers

Type	Model		Order Code
Servomotor 230 V	230 V	1	MXSSC319
Servomotor 24 V	24 V	1	MXSSC819
Servomotor 24 V, control signal 0-10 V	24 V, control signal 0 - 10 V	1	MXSSC619

Technical Data MeiFlow S MC

Specifications	DN 25	DN 32
Dimensions HxWxD [mm]	420 x 250 x 255	420 x 250 x 255
Upper connections	G 1" F	G 1 1/4" F
Lower connection	G 1 1/2" M (fld)	G 1 1/2" M (fld)
Axial distance [mm]	125	125
Max. operating temperature [°C]	110	110
Permissible positive operating pressure [PN]	6	6
Thermometers	0 – 120 °C	0 – 120 °C
Components made of	Steel, brass, EPP insulation	Steel, brass, EPP insulation
sealing materials	PTFE, EPDM	PTFE, EPDM
Kvs value [m³/h]	5.8	6.1

Kvs-value regulator

For optimal regulation of the mixer in systems with heat generators that have a high pressure loss (e.g. surface-mounted boilers). The KVS valve of the regulator should be roughly that of the heat generator.



Type		Order Code
Regulator Kvs 2.9	1	M58041.047
Regulator Kvs 5.5	1	M58041.048


MeiFlow S MC-W pump groups

Pump group DN 25 with weather-controlled heating system controller of the mixer heating circuit

Servomotor with integrated temperature regulation, including assembly kit. Wired with cable already fitted for direct mounting onto the mixer, 230V~, 50 Hz, running time 150 sec., 90°, 10 Nm; adjustment range 20 – 80 °C with emergency manual mode and visible position indicator; temperature sensor D=6 mm including cable wired with actuator.

Contact thermostat enables safety temperature limitation.
The pump is switched off if the defined supply temperature is exceeded.



Type	Model	Connection (uppermost)			Order Code
		DN	"		
MC-W DN25	Without pump	25	1"	1	M45890.8EA
MC-W DN25	With Grundfos UPM3 Hybrid 25-70*	25	1"	1	M45890.86
MC-W DN25	With Grundfos Alpha2.1 25-60	25	1"	1	M45890.80
MC-W DN25	With Wilo Yonos PICO 25/1-6	25	1"	1	M45890.8WI
MC-W DN25	With Wilo Stratos PICO 25/6	25	1"	1	M45890.82WI

Optional room unit available.

* Optional PWM signal cable and suitable heat flow meter available.

Technical Data MeiFlow S MC-W

Specifications	MC-W DN 25
Dimensions HxWxD [mm]	420 x 250 x 255
Heating circuit connections	G 1" F
Manifold/boiler connection	1 1/2" M (fld)
Axial distance [mm]	125
Max. operating temperature [°C]	110
Permissible positive operating pressure [PN]	10
Thermometers	2 x 0 – 120 °C
Backflow preventer	1 x (in the return line), 200mmWS, for installation
Installed length of pump [mm]	180
Kvs value [m³/h]	5.8
Power P ¹⁾ [kW]	
UPM3 Hybrid xx-70	28 / 42
Alpha2.1 xx-60	23 / 35
Yonos Pico xx/ 1-6	22 / 33
Stratos Pico xx / 6	24 / 37
Flow rate V [m³/h]	
UPM3 Hybrid xx-70	2.4
Alpha2.1 xx-60	2.0
Yonos Pico xx/ 1-6	1.9
Stratos Pico xx / 6	2.1


1) Power P at 10 K/ 15 K temperature differential and 2 mWS residual delivery head.
Actuator with constant heat regulation set: 230V integrated fixed set-point controller set.

MeiFlow S UC-M pump groups

Pump group DN 25 for unmixed heating circuit with a installation fitting for heat meters with a length of 110 and 130 mm.

Meter installation fitting with telescopic piece, ½" sensor sleeve, piping and screw fitting components, all fully assembled.



Type	Model	Connection (uppermost)			Order Code
		DN	"		
UC-M DN 25	Without pump	25	1"	1	M66811ZEA
UC-M DN 25	With Grundfos UPM3 Hybrid 25-70*	25	1"	1	M66811.36Z
UC-M DN 25	With Grundfos Alpha2.1 25-60	25	1"	1	M66811.30Z
UC-M DN 25	With Wilo Yonos PICO 25/1-6	25	1"	1	M66811.10ZWI
UC-M DN 25	With Wilo Stratos PICO 25/6	25	1"	1	M66811.32ZWI


* Optional PWM signal cable and suitable heat flow meter available.

MeiFlow S MC-M pump groups

Pump group DN 25 for mixed heating circuit with a installation fitting for heat meters with a length of 110 and 130 mm.

Meter installation fitting with telescopic piece, ½" sensor sleeve, piping and screw fitting components, all fully assembled.



Type	Model	Connection (uppermost)			Order Code
		DN	"		
MC-M DN 25	Without pump	25	1"	1	M66831ZEA
MC-M DN 25	With Grundfos UPM3 Hybrid 25-70*	25	1"	1	M66831.36Z
MC-M DN 25	With Grundfos Alpha2.1 25-60	25	1"	1	M66831.30Z
MC-M DN 25	With Wilo Yonos PICO 25/1-6	25	1"	1	M66831.10ZWI
MC-M DN 25	With Wilo Stratos PICO 25/6	25	1"	1	M66831.32ZWI


* Optional PWM signal cable and suitable heat flow meter available.

Technical Data MeiFlow S MC-M

Specifications	DN 25
Dimensions HxWxD [mm]	420 x 250 x 255
Heating circuit connections	G 1" F
Manifold/boiler connection	1 1/2" M (fld)
Axial distance [mm]	125
Max. operating temperature [°C]	110
Permissible positive operating pressure [PN]	10
Thermometers	2 x 0 – 120 °C
Backflow preventer	1 × (in the return line), 200mmWS, for installation
Installed length of pump [mm]	180
Kvs value [m³/h]	5.8
Power P ¹⁾ [kW]	
UPM3 Hybrid xx-70	28 / 42
Alpha2.1 xx-60	23 / 35
Yonos Pico xx/ 1-6	22 / 33
Stratos Pico xx / 6	24 / 37
Flow rate V [m³/h]	
UPM3 Hybrid xx-70	2.4
Alpha2.1 xx-60	2.0
Yonos Pico xx/ 1-6	1.9
Stratos Pico xx / 6	2.1

1) Power P at 10 K/ 15 K temperature differential and 2 mWS residual delivery head.
Actuator with constant heat regulation set: 230V integrated fixed set-point controller set.

Filter for pump unit M UC / MC-Z (instead of heat meter)


Typ		Order Code
Filter for pump unit M UC / MC-Z (instead of heat meter) 1" DN 32	1	MP58348

Constant heat regulation set MeiFlow S MC-CV

The constant heat regulation set is designed for a mixed heating circuit with constant flow line temperature, with a mixer for underfloor heating. The supply temperature is adjusted using the 3-way T-mixer. The adjustable bypass is used to mix water from the return line into the flow line. The contact thermostat included in delivery is a safety temperature monitor (safety temperature monitor).

Recirculation pump (installed length 180 mm) with connection cable, two ball valves (with manually adjustable backflow limiter in the return line), two contact thermometers, 3-way T-mixer with adjustable bypass, contact thermostat, wall bracket, return line pipe with actuator (230V~, 50 Hz) with integrated temperature controller (adjustment range 0 °C - 95 °C); flow line temperature sensor in flow line ball valve, EPP insulation, all fully assembled.



Type	Model	Connection (uppermost)			Order Code
		DN	"		
MC-CV DN 25	Without pump	25	1"	1	M45890.5EA
MC-CV DN 25	With Grundfos UPM3 Hybrid 25-70*	25	1"	1	M45890.56
MC-CV DN 25	With Grundfos Alpha2.1 25-60	25	1"	1	M45890.50
MC-CV DN 25	With Wilo Yonos PICO 25/1-6	25	1"	1	M45890.5WI
MC-CV DN 25	With Wilo Yonos PARA 25/1-6	25	1"	1	M45890.5WI
MC-CV DN 25	With Wilo Stratos PICO 25/6	25	1"	1	M45890.52WI

* Optional PWM signal cable and suitable heat flow meter available.

Technical Data Constant heat regulation set MeiFlow S MC-CV

Specifications	
Dimensions HxWxD [mm]	420 x 250 x 255
Heating circuit connections	G 1" F
Manifold/boiler connection	1 1/2" M (fld)
Axial distance [mm]	125
Max. operating temperature [°C]	110
Permissible positive operating pressure [PN]	10
Thermometers	2 x 0 – 120 °C
Backflow preventer	1 x (in the return line), 200mmWS, for installation
Installed length of pump [mm]	180
Kvs value [m³/h]	5.8
Power P¹⁾ [kW]	
UPM3 Hybrid xx-70	28 / 42
Alpha2.1 xx-60	23 / 35
Yonos Pico xx/ 1-6	22 / 33
Stratos Pico xx / 6	24 / 37
Flow rate V [m³/h]	
UPM3 Hybrid xx-70	2.4
Alpha2.1 xx-60	2.0
Yonos Pico xx/ 1-6	1.9
Stratos Pico xx / 6	2.1

1) Power P at 10 K / 15 K temperature differential and 2 mWS residual delivery head.
Actuator with constant heat regulation set: 230V integrated fixed set-point controller set.


MeiFlow S RLB return flow booster, 2-line model

The pump group with return flow booster is used for wood boilers to avoid tarring (gloss soot). This thermally insulated and combustible layer is created at temperatures <55 °C - 65 °C on parts exposed to flue gas when temperatures fall below the dew point. If the return line to the boiler is too cold, hot supply water is mixed in via a bypass. The wood burner quickly reaches uncritical temperatures during heating. Cold heating water, e.g. from a buffer tank, is preheated to 55 °C - 65 °C. A thermometer in the boiler return enables a quick function check. With pipe connections in DN 25 or DN 32 for up to 57 kW power (20 K, 2mWS residual delivery head)

The return riser is fitted below the manifold. Depending on the temperature of the return line at the boiler inflow, supply water is mixed into the boiler return. This means that the boiler will reach its operating temperature more rapidly and that the return line temperature will not fall below a pre-adjustable value during operation.

The aim is to avoid condensation in the combustion chamber (longer service life) and reduce harmful emissions. The level of the minimum return line temperature depends on the boiler type. Recirculation pump (installed length 180 mm) with connection cable, two ball valves (with manually adjustable backflow limiter in the return line), two contact thermometers, wall bracket, return line pipe, with 3-way T-mixer and servomotor (230V~, 50 Hz) with integrated temperature controller (adjustment range 0 °C - 95 °C) EPP insulation, all fully assembled.



Type	Model	Connection			Order Code
		DN	"		
RLB DN 25	Without pump	25	1"	1	M45841.5EA
RLB DN 25	Grundfos Alpha2L 25-60	25	1"	1	M45841.51
RLB DN 25	With Grundfos UPM3 Hybrid 25 - 70*	25	1"	1	M45841.56
RLB DN 25	With Wilo Yonos PICO 25 / 1 - 6	25	1"	1	M45841.51WI
RLB DN 25	With Wilo Yonos PARA 25 / 1 - 6	25	1"	1	MP45841.5PAWI
RLB DN 25	With Grundfos Alpha2.1 25 - 60	25	1"	1	M45841.50
RLB DN 25	With Wilo Stratos Pico 25/6	25	1"	1	M45841.52WI

* Optional PWM signal cable available.

Technical Data PG MeiFlow S RLB return flow booster, 2-line model

Specifications	
Electrical connection	~50 Hz / 230 V, 2-core, 2m
Power [W]	3.5
Torque [Nm]	10
Running time	150 (135) s / 90°
Emergency manual mode	Yes
Control range [°C]	20 - 80
Sensor	without
Protection code	IP40
Environment [°C]	5 - 50
Dimensions HxWxD [mm]	420 x 250 x 255
Heating circuit connections	1 1/2" M
Boiler connection	1" F
Axial distance boiler [mm]	125
Max. operating temperature [°C]	110
Permissible positive operating pressure [PN]	6
Thermometers	2 x 0 – 120 °C
Backflow preventer	1 x (wood boiler FL), 200mmWS
Installed length of pump [mm]	180
Actuator	230V, integrated fixed set-point controller (details: see Art.-No. 66341.33)
Kvs value [m³/h]	5.8
Power P¹⁾ [kW]	
UPM3 Hybrid xx-70	29 / 44
Yonos Para RS xx/6	24 / 36
Flow rate V [m³/h]	
UPM3 Hybrid xx-70	2.50
Yonos Para RS xx/6	2.05

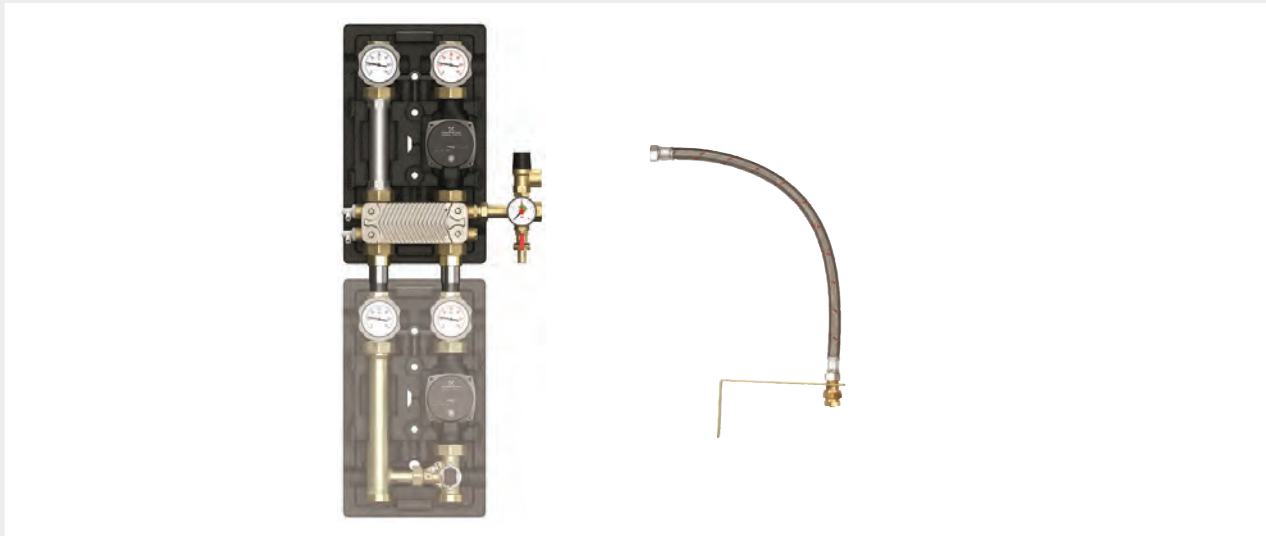
1) Power P at 10 K / 15 K temperature differential and 2 mWS residual delivery head.
Actuator with constant heat regulation set: 230V integrated fixed set-point controller set.


Separation system MeiFlow S UC-SD

For separating heating circuits at different pressures, media or water qualities.

Complete with recirculation pump (installed length 180 mm stainless steel), with connection cable, two ball valves, (with manually adjustable backflow limiter in the return line), two contact thermometers, compact heat exchanger with 20, 30 or 36 plates, 2 vent stoppers, safety group with safety valve 3 bar and manometer 4 bar, 1 fill and drain valve, return pipe, wall bracket, EPP insulation, screw connections for primary circuit with 1" female thread or male thread options

- Includes connector set for an expansion vessel with MM service coupling.
- Pump: Alpha 2 25-60 ES (stainless steel housing).
- Heat exchanger: Plate material W-No. 1.4401 solder material copper (99.9 %).
- Components made from stainless steel, brass, EPP insulation.
- Sealing material: PTFE, EPDM.



Type	Model	Connection			Order Code
		DN	"		
UC-SD DN 25	With Grundfos Alpha2 25-60 ES 20 plates	25	1"	1	M45811.21
UC-SD DN 25	With Grundfos Alpha2 25-60 ES 30 plates	25	1"	1	M45811.31
UC-SD DN 25	With Grundfos Alpha2 25-60 ES 36 plates	25	1"	1	M45811.37

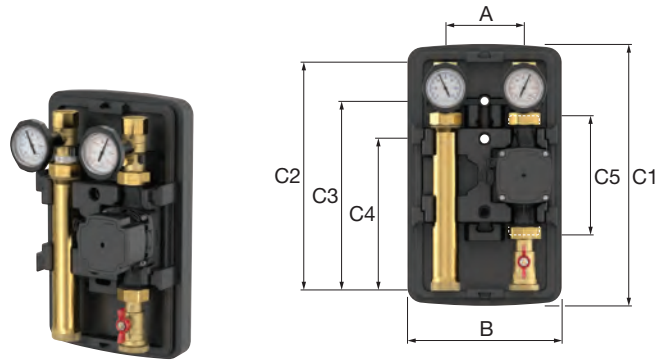
Technical Data Separation System MeiFlow S UC-SD


Specifications	20 plates	30 plates	36 plates
Upper connection	1" F	1" F	1" F
Lower connection	1" F or 1" M	1" F or 1" M	1" F or 1" M
Max. power for primary 65/40 °C, secondary 35/50 °C [kW]	27	30	31
Axial distance [mm]	125	125	125
Max. temperature [°C]	110	110	100
Permissible positive operating pressure [PN]	6	6	6
Dimensions HxWxD [mm]	420 x 250 x 255	420 x 250 x 255	420 x 250 x 255
Temperature display [°C]	0 to 120	0 to 120	0 to 120
Kvs value primary [m³/h]	4.0	5.6	6.4
Kvs value secondary [m³/h]	3.4	4.3	4.7
Power P ¹⁾ for primary 65/40 °C, secondary 35/50 °C [kW]	28.7	32.2	33.1
Flow rate V for primary 65/40 °C, secondary 35/50 °C [m³/h]	1.24 / 1.65	1.39 / 1.85	1.43 / 1.90

MeiFlow Top S UC pump groups

For unmixed heating circuit and tank charging for manifold up to 70 kW or suitable for surface-mounted installation.

Complete with or without recirculating pump; two ball valves (on return line side with manually adjustable backflow limiter); sensor mounting to be in the flow line; two contact thermometers integrated in the ball valve handle (indicated range 0-120 °C); one pump ball valve; high quality design EPP insulation; including wall bracket; it is possible to swap flow and return line sides.



Type	Model	Connection (uppermost)			Order Code
		DN	"		
Top S UC DN 25	Without pump	25	G 1" F	1	M66911EA
Top S UC DN 25	With Grundfos Alpha 2.1 25-60	25	G 1" F	1	M66911.30
Top S UC DN 25	With Grundfos UPM3 Hybrid 25-70*	25	G 1" F	1	M66911.36
Top S UC DN 25	With Wilo Yonos PICO Plus 25/1-6	25	G 1" F	1	M66911.10WI
Top S UC DN 25	With Wilo Stratos PICO Plus 25/1-6	25	G 1" F	1	M66911.32WI
Top S UC DN 32	Without pump	32	G 1 1/4" F	1	M66912EA
Top S UC DN 32	With Grundfos Alpha 2.1 32-60	32	G 1 1/4" F	1	M66912.30
Top S UC DN 32	With Grundfos UPM3 Hybrid 32-70*	32	G 1 1/4" F	1	M66912.36
Top S UC DN 32	With Wilo Yonos PICO Plus 30/1-6	32	G 1 1/4" F	1	M66912.10WI
Top S UC DN 32	With Wilo Stratos PICO Plus 30/1-6	32	G 1 1/4" F	1	M66912.32WI

Note: The flow line is, as standard, on the right-hand side.

* Optional PWM signal cable available.

MeiFlow Top S UC - Dimensions

Type	Dimensions						
	A [mm]	B [mm]	C1 [mm]	C2 [mm]	C3 [mm]	C4 [mm]	C5 [mm]
Top S UC DN 25 / DN 32	125	249	421	363.5	301.5	241	180

Technical Data MeiFlow Top S UC

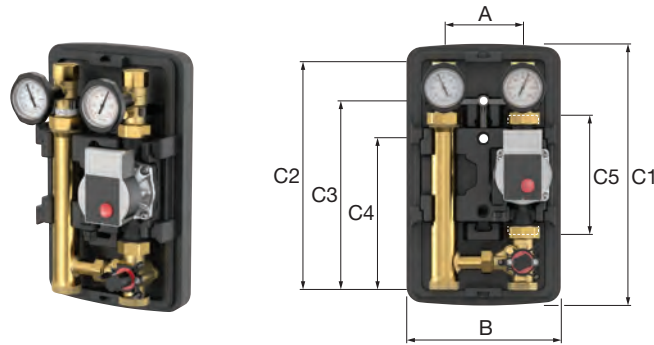
Specifications	DN 25	DN 32
	DN 25	DN 32
Dimensions HxWxD [mm]	421 x 249 x 220	421 x 249 x 220
Upper connections	G 1" F	G 1 1/4" F
Lower connection	G 1 1/2" M	G 1 1/2" M
Axial distance [mm]	125	125
Max. operating temperature [°C]	110*	110*
Permissible positive operating pressure [PN]	6	6
Thermometers [°C]	0 - 120	0 - 120
Components made of	Steel, brass, EPP insulation	Steel, brass, EPP insulation
Sealing materials	PTFE, EPDM	PTFE, EPDM
Installed length of pump [mm]	180	180
Kvs value [m³/h]	7.8	8.0
Sensor mounting	M10x1	M10x1


* Depends on the pump used.

MeiFlow Top S MC pump groups

For mixed heating circuit for manifold up to 70 kW or suitable for surface-mounted installation.

Complete with or without recirculating pump including angled connector; two ball valves (on return line side with manually adjustable backflow limiter); sensor mounting to be in the flow line; two contact thermometers integrated in the ball valve handle (indicated range 0 - 120 °C); 3-way T-mixer with continuously adjustable bypass; design EPP insulation; including wall bracket; it is possible to swap flow and return line sides; servomotor separately (optional).



Type	Model	Connection (uppermost)			Order Code
		DN	"		
Top S MC DN 25	Without pump	25	G 1" F	1	M66931EA
Top S MC DN 25	Without pump, with servomotor	25	G 1" F	1	M66931EAM
Top S MC DN 25	With Grundfos Alpha 2.1 25-60	25	G 1" F	1	M66931.30
Top S MC DN 25	With Grundfos UPM3 Hybrid 25-70*	25	G 1" F	1	M66931.36
Top S MC DN 25	With Wilo Yonos PICO Plus 25/1-6	25	G 1" F	1	M66931.10WI
Top S MC DN 25	With Wilo Stratos PICO Plus 25/1-6	25	G 1" F	1	M66931.32WI
Top S MC DN 25	With Grundfos Alpha 2.1 25-60, with servomotor	25	G 1" F	1	M66931.30M
Top S MC DN 25	With Grundfos UPM3 Hybrid 25-70*, with servomotor	25	G 1" F	1	M66931.36M
Top S MC DN 32	Without pump	32	G 1 1/4" F	1	M66932EA
Top S MC DN 32	With Grundfos Alpha 2.1 32-60	32	G 1 1/4" F	1	M66932.30
Top S MC DN 32	With Grundfos UPM3 Hybrid 32-70*	32	G 1 1/4" F	1	M66932.36
Top S MC DN 32	With Wilo Yonos PICO Plus 30/1-6	32	G 1 1/4" F	1	M66932.10WI
Top S MC DN 32	With Wilo Stratos PICO Plus 30/1-6	32	G 1 1/4" F	1	M66932.32WI

Note: The flow line is, as standard, on the right-hand side.

* Optional PWM signal cable available.

MeiFlow Top S MC - Dimensions

Type	Dimensions						
	A [mm]	B [mm]	C1 [mm]	C2 [mm]	C3 [mm]	C4 [mm]	C5 [mm]
Top S MC DN 25 / DN 32	125	249	421	363.5	301.5	241	180

Technical Data MeiFlow Top S MC

Specifications		
	DN 25	DN 32
Dimensions HxWxD [mm]	421 x 249 x 220	421 x 249 x 220
Upper connections	G 1" F	G 1 1/4" F
Lower connection	G 1 1/2" M	G 1 1/2" M
Axial distance [mm]	125	125
Max. operating temperature [°C]	110*	110*
Permissible positive operating pressure [PN]	6	6
Thermometers [°C]	0 - 120	0 - 120
Components made of	Steel, brass, EPP insulation	Steel, brass, EPP insulation
Sealing materials	PTFE, EPDM	PTFE, EPDM
Installed length of pump [mm]	180	180
Kvs value [m³/h]	5.8	6.0
Sensor mounting	M10x1	M10x1

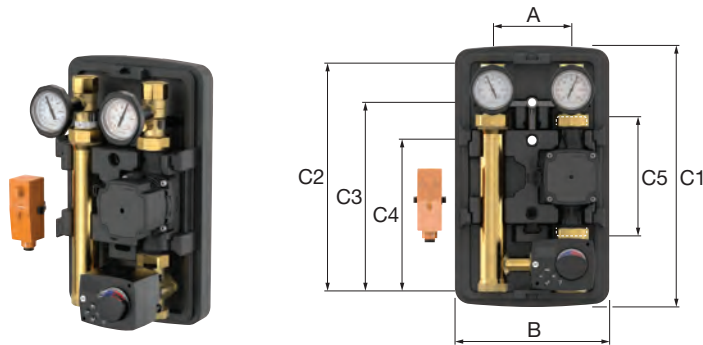
* Depends on the pump used.


MeiFlow Top S MC-W pump groups

For mixed heating circuits with weather-compensating circuit controller.

Complete with or without recirculating pump including angled connector; servomotor with compact, weather-compensating temperature regulator; including assembly kit. Mixer with servomotor already fitted (230V~, 50 Hz, running time 120 sec., 90°, 6 Nm). Intuitive operation and graphic display for ease of monitoring when in use. Including flow line temperature and outside temperature sensor. Sensor mounted in the flow line; it is possible to swap flow and return line sides.

Temperature limited for safety by contact temperature sensor (STW). The pump is switched off if the defined supply temperature is exceeded.



Type	Model	Connection (uppermost)			Order Code
		DN	"		
Top S MC-W DN 25	Without pump	25	G 1" F	1	M45991EA
Top S MC-W DN 25	With Grundfos Alpha 2.1 25-60	25	G 1" F	1	M45991.30
Top S MC-W DN 25	With Grundfos UPM3 Hybrid 25-70*	25	G 1" F	1	M45991.36
Top S MC-W DN 25	With Wilo Yonos PICO Plus 25/1-6	25	G 1" F	1	M45991.10WI
Top S MC-W DN 25	With Wilo Stratos PICO Plus 25/1-6	25	G 1" F	1	M45991.32WI

* Optional PWM signal cable available.

MeiFlow Top S MC-W - Dimensions

Type	Dimensions						
	A [mm]	B [mm]	C1 [mm]	C2 [mm]	C3 [mm]	C4 [mm]	C5 [mm]
Top S MC-W DN 25	125	249	421	363.5	301.5	241	180

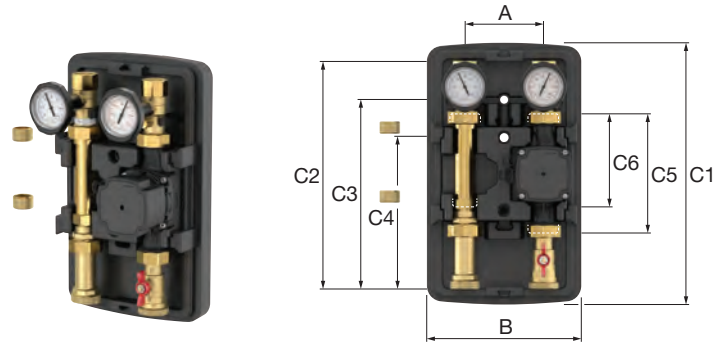
Technical Data MeiFlow Top S MC-W


Specifications	DN 25
Dimensions HxWxD [mm]	421 x 249 x 220
Heating circuit connections	G 1" F
Manifold/boiler connection	G 1 1/2" M
Axial distance [mm]	125
Max. operating temperature [°C]	110*
Permissible positive operating pressure [PN]	6
Temperature display [°C]	0 - 120
Installed length of pump [mm]	180
Kvs value [m³/h]	5.8
Sensor mounting	M10x1

* Depends on the pump used.

MeiFlow Top S UC-M pump groups

Pump group for unmixed heating circuit with a installation fitting for heat meters with a length of 110 and 130 mm; complete with or without recirculating pump. Meter installation fitting with telescopic piece, piping and screw fitting components; sensor mounting to be in the flow line; it is possible to swap flow and return line sides.



Type	Model	Connection (uppermost)			Order Code
		DN	"		
Top S UC-M DN 25	Without pump	25	G 1" F	1	M66911ZEA
Top S UC-M DN 25	With Grundfos Alpha 2.1 25-60	25	G 1" F	1	M66911.30Z
Top S UC-M DN 25	With Grundfos UPM3 Hybrid 25-70*	25	G 1" F	1	M66911.36Z
Top S UC-M DN 25	With Wilo Yonos PICO Plus 25/1-6	25	G 1" F	1	M66911.10ZWI
Top S UC-M DN 25	With Wilo Stratos PICO Plus 25/1-6	25	G 1" F	1	M66911.32ZWI

Note: The flow line is, as standard, on the right-hand side.

* Optional PWM signal cable and suitable heat flow meter available.

MeiFlow Top S UC-M - Dimensions

Type	Dimensions							
	A [mm]	B [mm]	C1 [mm]	C2 [mm]	C3 [mm]	C4 [mm]	C5 [mm]	C6 [mm]
Top S UC-M DN 25	125	249	421	363.5	301.5	241	180	110-130

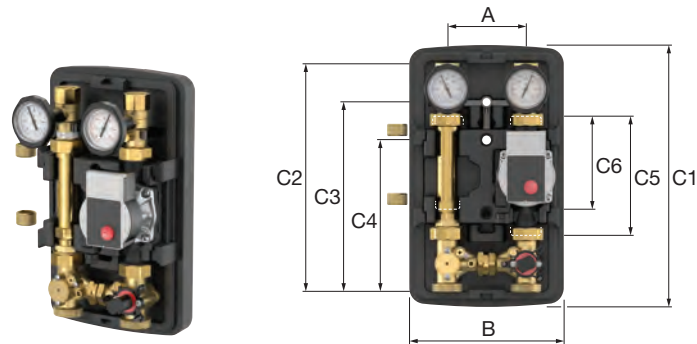
Technical Data MeiFlow Top S UC-M

Specifications	DN 25
Dimensions HxWxD [mm]	421 x 249 x 220
Heating circuit connections	G 1" F
Manifold/boiler connection	G 1 1/2" M
Axial distance [mm]	125
Max. operating temperature [°C]	110*
Permissible positive operating pressure [PN]	6
Temperature display [°C]	0 - 120
Installed length of pump [mm]	180
Kvs value [m³/h]	7.8
Sensor mounting	M10x1

* Depends on the pump used.

MeiFlow Top S MC-M pump groups

Pump group for unmixed heating circuit with a installation fitting for heat meters with a length of 110 and 130 mm; complete with or without recirculating pump including angled connector. Meter installation fitting with telescopic piece, piping and screw fitting components; sensor mounting to be in the flow line; it is possible to swap flow and return line sides.



Type	Model	Connection (uppermost)			Order Code
		DN	"		
Top S MC-M DN 25	Without pump	25	G 1" F	1	M66931ZEA
Top S MC-M DN 25	With Grundfos UPM3 Hybrid 25-70*	25	G 1" F	1	M66931.36Z
Top S MC-M DN 25	With Grundfos Alpha 2.1 25-60	25	G 1" F	1	M66931.30Z
Top S MC-M DN 25	With Wilo Yonos PICO Plus 25/1-6	25	G 1" F	1	M66931.10ZWI
Top S MC-M DN 25	With Wilo Stratos PICO Plus 25/1-6	25	G 1" F	1	M66931.32ZWI

Note: The flow line is, as standard, on the right-hand side.

* Optional PWM signal cable and suitable heat flow meter available.

MeiFlow Top S MC-M - Dimensions

Type	Dimensions							
	A [mm]	B [mm]	C1 [mm]	C2 [mm]	C3 [mm]	C4 [mm]	C5 [mm]	C6 [mm]
Top S MC-M DN 25	125	249	421	363.5	301.5	241	180	110-130

Technical Data MeiFlow Top S MC-M

Specifications	DN 25
Dimensions HxWxD [mm]	421 x 249 x 220
Heating circuit connections	G 1" F
Manifold/boiler connection	G 1 1/2" M
Axial distance [mm]	125
Max. operating temperature [°C]	110*
Permissible positive operating pressure [PN]	6
Temperature display [°C]	0 - 120
Installed length of pump [mm]	180
Kvs value [m³/h]	5.8
Sensor mounting	M10x1

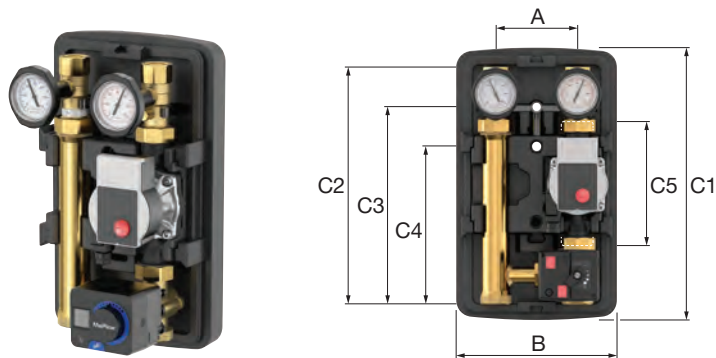
* Depends on the pump used.


Constant heat regulation set MeiFlow Top S MC-CV

Pump group with electronically controlled servomotor.

For a mixed heating circuit with constant flow line temperature. The temperature setpoint value is adjusted directly at the servomotor. The contact thermostat included in delivery is a safety temperature monitor (safety temperature monitor).

Complete with or without recirculating pump including angled connector; two ball valves (on return line side with manually adjustable backflow limiter); two contact thermometers integrated in the ball valve handle (indicated range 0 - 120 °C); 3-way T-mixer with adjustable bypass; servomotor (230V~,50 Hz,6 Nm) with integrated temperature controller (adjustment range 0 °C - 95 °C) and flow line temperature sensor; sensor mounting to be in the flow line; design EPP insulation; including wall bracket; it is possible to swap flow and return line sides.



Type	Model	Connection (uppermost)			Order Code
		DN	"		
Top S MC-CV DN 25	Without pump	25	G 1" F	1	M45990EA
Top S MC-CV DN 25	With Grundfos Alpha 2.1 25-60	25	G 1" F	1	M45990.30
Top S MC-CV DN 25	With Grundfos UPM3 Hybrid 25-70*	25	G 1" F	1	M45990.36
Top S MC-CV DN 25	With Wilo Yonos PICO Plus 25/1-6	25	G 1" F	1	M45990.10WI
Top S MC-CV DN 25	With Wilo Stratos PICO Plus 25/1-6	25	G 1" F	1	M45990.32WI

Note: The flow line is, as standard, on the right-hand side.

* Optional PWM signal cable available.

MeiFlow Top S MC-CV - Dimensions

Type	Dimensions						
	A [mm]	B [mm]	C1 [mm]	C2 [mm]	C3 [mm]	C4 [mm]	C5 [mm]
Top S MC-CV DN 25	125	249	421	363.5	301.5	241	180

Technical Data MeiFlow Top S MC-CV

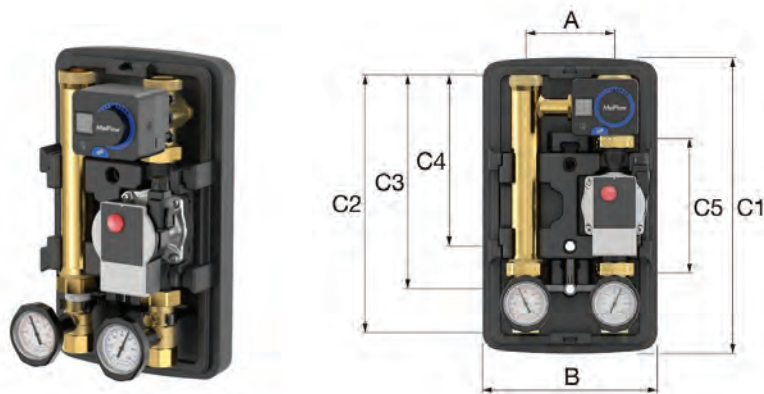
Specifications	DN 25
Dimensions HxWxD [mm]	421 x 249 x 220
Heating circuit connections	G 1" F
Manifold/boiler connection	G 1 1/2" M
Axial distance [mm]	125
Max. operating temperature [°C]	110*
Permissible positive operating pressure [PN]	6
Temperature display [°C]	0 - 120
Installed length of pump [mm]	180
Kvs value [m³/h]	5.8
Sensor mounting	M10x1


* Depends on the pump used.

MeiFlow Top S RLB return flow booster, 2-line model

A return flow temperature raiser is used in wood boilers to avoid tarring. This thermally insulated and combustible layer is created at temperatures <55 °C - 65 °C on parts exposed to flue gas when temperatures fall below the dew point. If the return line to the boiler is too cold, hot supply water is mixed in via a bypass. The wood burner quickly reaches required temperatures above the dew point during heating. A thermometer in the boiler return enables a quick function check.

Complete with or without recirculating pump inclusive angle plug; two ball valves (on return line side with manually adjustable backflow limiter); two contact thermometers integrated in the ball valve handle (indicated range 0 - 120 °C); 3-way T-mixer with adjustable bypass; servomotor (230V~,50 Hz) with integrated temperature controller (adjustment range 0 °C - 95 °C) and flow line temperature sensor; sensor mounting to be in the flow line; design EPP insulation; including wall bracket; it is possible to swap flow and return line sides.



Type	Model	Connection			Order Code
		DN	"		
Top S RLB DN 25	Without pump	25	G 1" F	1	M45941EA
Top S RLB DN 25	With Grundfos Alpha 2.1 25-60	25	G 1" F	1	M45941.30
Top S RLB DN 25	With Grundfos UPM3 Hybrid 25-70*	25	G 1" F	1	M45941.36
Top S RLB DN 25	With Wilo Yonos PICO Plus 25 / 1-6	25	G 1" F	1	M45941.10WI
Top S RLB DN 25	With Wilo Yonos PICO Plus 25 / 1-6	25	G 1" F	1	M45941.32WI

* Optional PWM signal cable available.

MeiFlow Top S RLB - Dimensions

Type	Dimensions						
	A [mm]	B [mm]	C1 [mm]	C2 [mm]	C3 [mm]	C4 [mm]	C5 [mm]
Top S RLB DN 25	125	249	421	363.5	301.5	241	180

Technical Data MeiFlow Top S RLB

Specifications	DN 25
Dimensions HxWxD [mm]	421 x 249 x 220
Heating circuit connections	G 1 1/2" M
Boiler connection	G 1" F
Axial distance boiler [mm]	125
Max. operating temperature [°C]	110*
Permissible positive operating pressure [PN]	6
Temperature display [°C]	0 - 120
Kvs value [m³/h]	5.8
Installed length of pump [mm]	180
Sensor mounting	M10x1

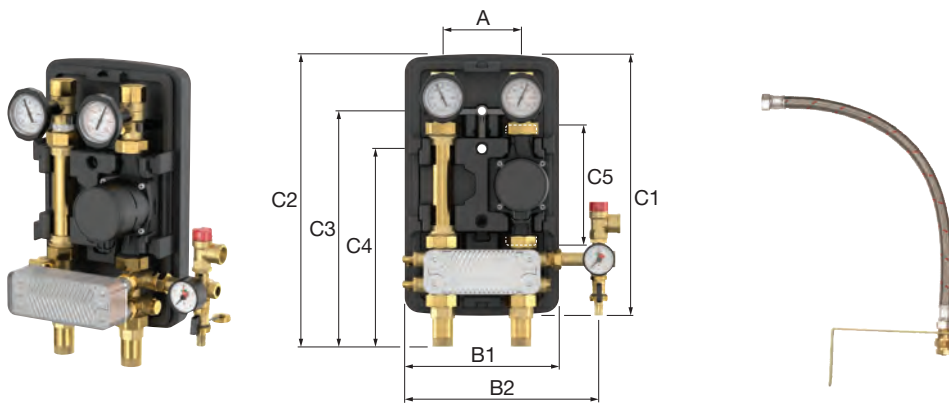
* Depends on the pump used.


Separation system MeiFlow Top S UC-SD

For the connection of a heating circuit separated from the rest of the heating system e.g. in the case of different pressures, media or water qualities.

Complete with recirculation pump with stainless steel housing, two ball valves (with manually adjustable backflow limiter in the return line), two contact thermometers integrated in the ball valve handle (indicated range 0 - 120 °C), compact heat exchanger with 20, 26 or 30 plates, 2 vent stoppers, safety group with safety valve 3 bar and manometer 4 bar, 1 fill and drain valve, wall bracket, design EPP insulation, screw connections for primary circuit with female thread or male thread options; including connector set for an expansion vessel with MAG service coupling; sensor mounting to be in the flow line.

- Pump: Alpha 2 25-60N (stainless steel housing) inclusive connecting cable.
- Heat exchanger: Plate material W-No. 1.4401 solder material copper (99.9 %).
- Components made from stainless steel, brass, EPP insulation.
- Sealing material: PTFE, EPDM.



Type	Model	Connection			Order Code
		DN	"		
Top S UC-SD 20	With Grundfos Alpha 2.1 25-60N 20 plates	25	G 1" F	1	M45911.222
Top S UC-SD 30	With Grundfos Alpha 2.1 25-60N 30 plates	25	G 1" F	1	M45911.302

MeiFlow Top S UC-SD - Dimensions

Type	Dimensions							
	A [mm]	B1 [mm]	B2 [mm]	C1 [mm]	C2 [mm]	C3 [mm]	C4 [mm]	C5 [mm]
Top S UC-SD 20 / 30	125	249	309	421	438.5	376.5	316	180

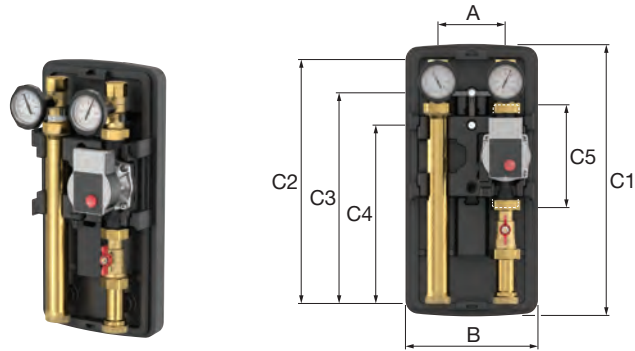
Technical Data Separation System MeiFlow Top S UC-SD


Specifications	20 plates	30 plates
Upper connection	G 1" F	G 1" F
Lower connection	G 1" F or G 1 1/2" M	G 1" F or G 1 1/2" M
Axial distance [mm]	125	125
Max. temperature [°C]	95	95
Permissible positive operating pressure [PN]	6	6
Dimensions HxWxD [mm]	421 x 249 x 220	421 x 249 x 220
Temperature display [°C]	0 to 120	0 to 120

MeiFlow Top S UC-L long version

For unmixed heating circuit and storage tank charging for manifold up to 70 kW or suitable for surface-mounted installation.

Complete with or without recirculating pump; two ball valves (on return line side with manually adjustable backflow limiter); sensor mounting to be in the flow line; two contact thermometers integrated in the ball valve handle (indicated range 0-120 °C); a pump ball valve is located below the pump; high quality design EPP insulation; including wall bracket; it is possible to swap flow and return line sides.



Type	Model	Connection (uppermost)			Order Code
		DN	"		
Top S UC-L DN 25	Without pump	25	G 1" F	1	M66915EA
Top S UC-L DN 25	With Grundfos Alpha 2.1 25-60	25	G 1" F	1	M66915.30
Top S UC-L DN 25	With Grundfos UPM3 Hybrid 25-70*	25	G 1" F	1	M66915.36
Top S UC-L DN 25	With Wilo Yonos PICO Plus 25/1-6	25	G 1" F	1	M66915.10WI
Top S UC-L DN 25	With Wilo Stratos PICO Plus 25/1-6	25	G 1" F	1	M66915.32WI

Note: The flow line is, as standard, on the right-hand side.

* Optional PWM signal cable available.

MeiFlow Top S UC-L - Dimensions

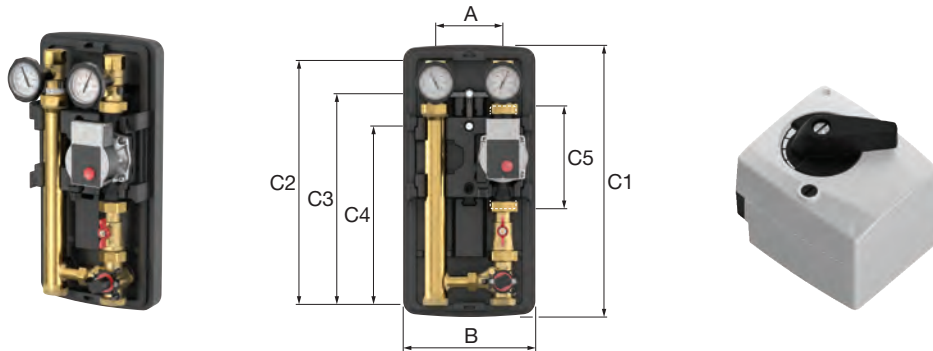
Type	Dimensions						
	A [mm]	B [mm]	C1 [mm]	C2 [mm]	C3 [mm]	C4 [mm]	C5 [mm]
Top S UC-L DN 25	125	249	511	363.5	391.5	331	180


MeiFlow Top S MC-L long version

Pump groups with additional isolating equipment.

For mixed heating circuit for manifold up to 70 kW or suitable for surface-mounted installation.

Complete with or without recirculating pump inclusive angle plug; two ball valves (on return line side with manually adjustable backflow limiter); sensor mounting to be in the flow line; two contact thermometers integrated in the ball valve handle (indicated range 0 - 120 °C); 3-way T-mixer with continuously adjustable bypass; a pump ball valve is located below the pump; servomotor (230V~,50 Hz,6 Nm); high quality design EPP insulation; including wall bracket; it is possible to swap flow and return line sides.



Type	Model	Connection (uppermost)			Order Code
		DN	"		
Top S MC-L M DN 25	Without pump, with actuator	25	G 1" F	1	M66935EAM
Top S MC-L M DN 25	With Grundfos Alpha 2.1 25-60	25	G 1" F	1	M66935.30M
Top S MC-L M DN 25	With Grundfos UPM3 Hybrid 25-70*	25	G 1" F	1	M66935.36M
Top S MC-L M DN 25	With Wilo Yonos PICO Plus 25/1-6	25	G 1" F	1	M66935.10WIM
Top S MC-L M DN 25	With Wilo Stratos PICO Plus 25/1-6	25	G 1" F	1	M66935.32WIM

Note: The flow line is, as standard, on the right-hand side.

* Optional PWM signal cable available.

MeiFlow Top S MC-L - Dimensions

Type	Dimensions						
	A [mm]	B [mm]	C1 [mm]	C2 [mm]	C3 [mm]	C4 [mm]	C5 [mm]
Top S MC-L DN 25	125	249	511	363.5	391.5	331	180

Technical Data MeiFlow Top S UC-L / MC-L

Specifications	UC-L	MC-L
Dimensions HxWxD [mm]	511 x 249 x 220	511 x 249 x 220
Upper connections	G 1" F	G 1" F
Lower connection	G 1 1/2" M	G 1 1/2" M
Axial distance [mm]	125	125
Max. operating temperature [°C]	110*	110*
Permissible positive operating pressure [PN]	6	6
Temperature display [°C]	0 - 120	0 - 120
Components made of	Steel, brass, EPP insulation	Steel, brass, EPP insulation
Sealing materials	PTFE, EPDM	PTFE, EPDM
Installed length of pump [mm]	180	180
Kvs value [m³/h]	7.7	5.7
Sensor mounting	M10x1	M10x1

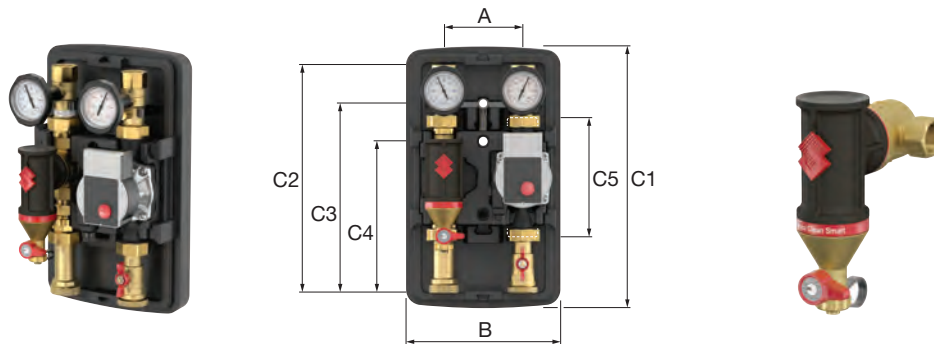
* Depends on the pump used.

MeiFlow Top S UC-CS pump groups with dirt separator

For unmixed heating circuit for manifold up to 70 kW or suitable for surface-mounted installation.

Complete with or without recirculating pump; integrated dirt separator Flamco Clean Smart; two ball valves (on return line side with manually adjustable backflow limiter); sensor mounting to be in the flow line; two contact thermometers integrated in the ball valve handle (indicated range 0 - 120 °C); flow line on the right (cannot be swapped); design EPP insulation; including wall bracket.

The Flamco Clean Smart dirt separator removes even the smallest particles of dirt and magnetite particles from the system water (included with delivery).



Type	Model	Connection (uppermost)			Order Code
		DN	"		
Top S UC-CS DN 25	Without pump	25	G 1" F	1	M66911CEA
Top S UC-CS DN 25	With Grundfos Alpha 2.1 25-60	25	G 1" F	1	M66911.30C
Top S UC-CS DN 25	With Grundfos UPM3 Hybrid 25-70*	25	G 1" F	1	M66911.36C
Top S UC-CS DN 25	With Wilo Yonos PICO Plus 25/1-6	25	G 1" F	1	M66911.10CWI
Top S UC-CS DN 25	With Wilo Stratos PICO Plus 25/1-6	25	G 1" F	1	M66911.32CWI
Top S UC-CS DN 32	Without pump	32	G 1 1/4" F	1	M66912CEA
Top S UC-CS DN 32	With Grundfos Alpha 2.1 32-60	32	G 1 1/4" F	1	M66912.30C
Top S UC-CS DN 32	With Grundfos UPM3 Hybrid 32-70*	32	G 1 1/4" F	1	M66912.36C
Top S UC-CS DN 32	With Wilo Yonos PICO Plus 30/1-6	32	G 1 1/4" F	1	M66912.10CWI
Top S UC-CS DN 32	With Wilo Stratos PICO Plus 30/1-6	32	G 1 1/4" F	1	M66912.32CWI

* Optional PWM signal cable available.

MeiFlow Top S UC-CS - Dimensions

Type	Dimensions						
	A [mm]	B [mm]	C1 [mm]	C2 [mm]	C3 [mm]	C4 [mm]	C5 [mm]
Top S UC-CS DN 25 / DN 32	125	249	421	363.5	301.5	241	180

Technical Data MeiFlow Top S UC-CS

Specifications	DN 25	DN 32
	DN 25	DN 32
Dimensions HxWxD [mm]	421 x 249 x 220	421 x 249 x 220
Upper connections	G 1" F	G 1 1/4" F
Lower connection	G 1 1/2" M	G 1 1/2" M
Axial distance [mm]	125	125
Max. operating temperature [°C]	110*	110*
Permissible positive operating pressure [PN]	6	6
Temperature display [°C]	0 - 120	0 - 120
Components made of	Steel, brass, EPP insulation	Steel, brass, EPP insulation
Sealing materials	PTFE, EPDM	PTFE, EPDM
Installed length of pump [mm]	180	180
Kvs value [m³/h]	6.7	6.9
Sensor mounting	M10x1	M10x1

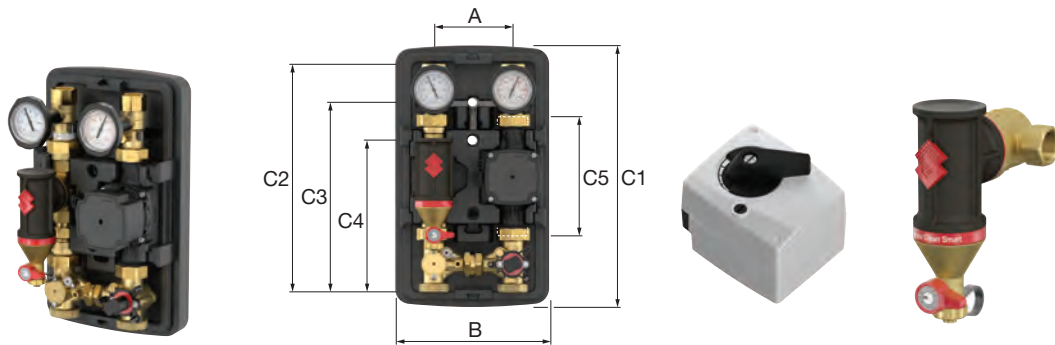
* Depends on the pump used.


MeiFlow Top S MC-CS pump groups with dirt separator

For mixed heating circuit for manifold up to 70 kW or suitable for surface-mounted installation.

Complete with or without recirculating pump including angled connector; integrated dirt separator Flamco Clean Smart; two ball valves (on return line side with manually adjustable backflow limiter); sensor mounting to be in the flow line; two contact thermometers integrated in the ball valve handle (indicated range 0 - 120 °C); 3-way T-mixer with continuously adjustable bypass; servomotor (230V~, 50 Hz, 6 Nm); flow line on the right (cannot be swapped); design EPP insulation; including wall bracket.

The Flamco Clean Smart dirt separator removes even the smallest particles of dirt and magnetite particles from the system water (included with delivery).



Type	Model	Connection (uppermost)			Order Code
		DN	"		
Top S MC-CS M DN 25	Without pump	25	G 1" F	1	M66931CEAM
Top S MC-CS M DN 25	With Grundfos Alpha 2.1 25-60	25	G 1" F	1	M66931.30CM
Top S MC-CS M DN 25	With Grundfos UPM3 Hybrid 25-70*	25	G 1" F	1	M66931.36CM
Top S MC-CS M DN 25	With Wilo Yonos PICO Plus 25/1-6	25	G 1" F	1	M66931.10CWIM
Top S MC-CS M DN 25	With Wilo Stratos PICO Plus 25/1-6	25	G 1" F	1	M66931.32CWIM
Top S MC-CS M DN 32	Without pump	32	G 1 1/4" F	1	M66932CEAM
Top S MC-CS M DN 32	With Grundfos Alpha 2.1 32-60	32	G 1 1/4" F	1	M66932.30CM
Top S MC-CS M DN 32	With Grundfos UPM3 Hybrid 32-70*	32	G 1 1/4" F	1	M66932.36CM
Top S MC-CS M DN 32	With Wilo Yonos PICO Plus 30/1-6	32	G 1 1/4" F	1	M66932.10CWIM
Top S MC-CS M DN 32	With Wilo Stratos PICO Plus 30/1-6	32	G 1 1/4" F	1	M66932.32CWIM

* Optional PWM signal cable available.

MeiFlow Top S MC-CS - Dimensions

Type	Dimensions [mm]						
	A	B	C1	C2	C3	C4	C5
Top S MC-CS DN 25 / 32	125	249	421	363.5	301.5	241	180

Technical Data MeiFlow Top S MC-CS

Specifications	DN 25	DN 32
	421 x 249 x 220	421 x 249 x 220
Dimensions HxWxD [mm]		
Upper connections	G 1" F	G 1 1/4" F
Lower connection	G 1 1/2" M	G 1 1/2" M
Axial distance [mm]	125	125
Max. operating temperature [°C]	110*	110*
Permissible positive operating pressure [PN]	6	6
Temperature display [°C]	0 - 120	0 - 120
Components made of	Steel, brass, EPP insulation	Steel, brass, EPP insulation
Sealing materials	PTFE, EPDM	PTFE, EPDM
Installed length of pump [mm]	180	180
Kvs value [m³/h]	4.4	4.6
Sensor mounting	M10x1	M10x1

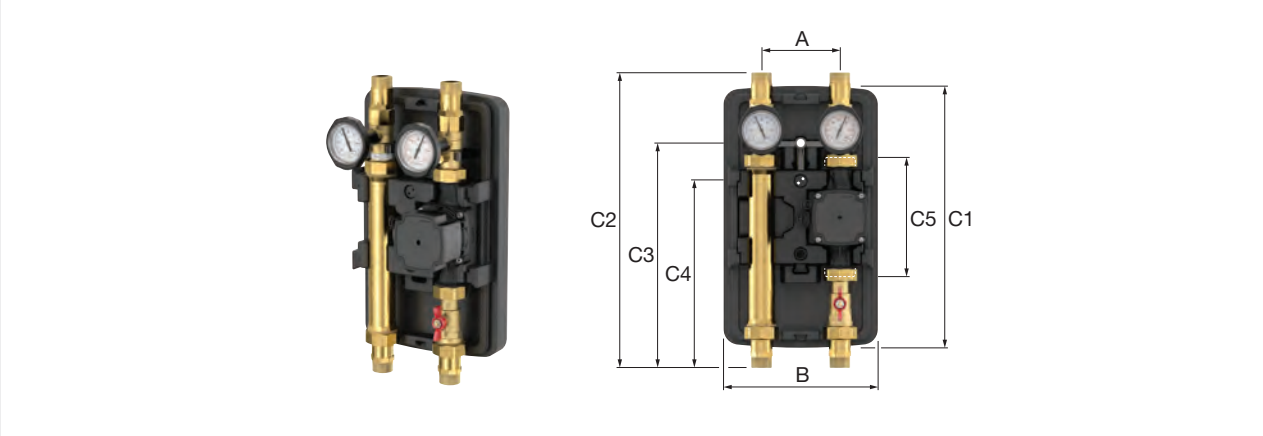
* Depends on the pump used.


MeiFlow Top S UC-X pump groups

Pump groups for cooling and heating applications.

For the wall-mounting of unmixed cooling and heating circuits, e.g. combined with heat pumps (switching mode).

Complete with or without recirculation pump; two ball valves (on return side with manually adjustable gravity brake); two contact thermometers integrated into ball valve handle (indicated range 0-120°C); a pump ball valve; closed EPP insulation to avoid condensation; axial distance 125 mm; includes wall bracket.



Type	Model	Connection (uppermost)			Order Code
		DN	"		
Top S UC-X DN 25	Without pump	25	G 1" M	1	M66911KEA
Top S UC-X DN 25	With Grundfos UPM3K Hybrid 25-70*	25	G 1" M	1	M66911.36K

* Optional PWM signal cable available.

MeiFlow Top S UC-X - Dimensions

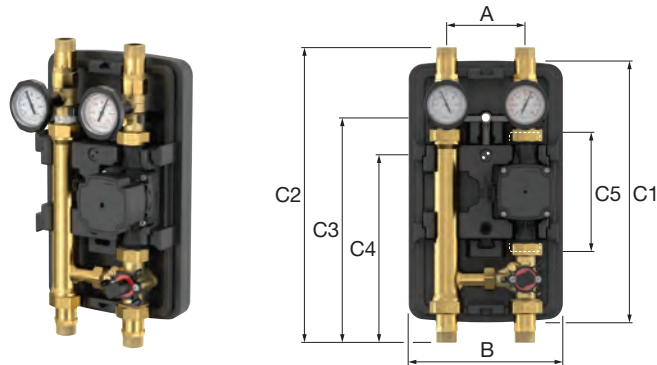
Type	Dimensions						
	A [mm]	B [mm]	C1 [mm]	C2 [mm]	C3 [mm]	C4 [mm]	C5 [mm]
Top S UC-X DN 25	125	249	421	471	359	296	180


MeiFlow Top S MC-X pump groups

Pump groups for cooling and heating applications.

For the wall-mounting of mixed cooling and heating circuits, e.g. combined with heat pumps (switching mode).

Complete with or without recirculation pump; two ball valves (on return side with manually adjustable gravity brake); two contact thermometers integrated into ball valve handle (indicated range 0-120°C); 3-way T-mixer with continuously adjustable bypass; closed EPP insulation to avoid condensation; axial distance 125 mm; includes wall bracket.



Type	Model	Connection (uppermost)			Order Code
		DN	"		
Top S MC-X DN 25	Without pump	25	G 1" M	1	M66931KEA
Top S MC-X DN 25	With Grundfos UPM3K Hybrid 25-70 *	25	G 1" M	1	M66931.36K

* Optional PWM signal cable available.

MeiFlow Top S MC-X - Dimensions

Type	Dimensions						
	A [mm]	B [mm]	C1 [mm]	C2 [mm]	C3 [mm]	C4 [mm]	C5 [mm]
Top S MC-X DN 25	125	249	421	471	359	296	180

Technical Data MeiFlow Top S UC-X / MC-X


Specifications	UC-X	MC-X
Dimensions HxWxD [mm]	421 x 249 x 220	421 x 249 x 220
Upper connections	G 1" F	G 1" F
Lower connection	G 1 1/2" F	G 1 1/2" F
Axial distance [mm]	125	125
Permissible positive operating pressure [PN]	6	6
Thermometers	0 - 120 °C	0 - 120 °C
Components made of	Steel, brass, EPP insulation	Steel, brass, EPP insulation
Sealing materials	PTFE, EPDM	PTFE, EPDM
Installed length of pump [mm]	180	180
Kvs value [m³/h]	7.8	5.8
Sensor mounting	M10x1	M10x1

Note: The flow line is, as standard, on the right-hand side.

Clamping ring screw union




Union fitting for boiler connection system (1 piece).

Type	Model		Order Code
Clamping ring screw union 28 x 1	28 mm x 1" M	1	MG29611.14
Clamping ring screw union 35 x 1 1/4	35 mm x 1 1/4" M	1	MG29611.15

Set of threaded joints



For installation of the pump groups without manifold.

Type	Model		Order Code
Set of threaded joints 1 1/2 x 1	1 1/2" F x 1" F	1	M66305.1
Set of threaded joints 1 1/2 x 1 1/4	1 1/2" F x 1 1/4" F	1	M66305.2
Screw connection with clamping ring	1" M x 28 mm	1	20400192
Screw connection with clamping ring	1 1/4" M x 35 mm	1	20400196

Press connections




Press connections with M-contour as a set (2 pieces). Self-sealing with O-ring.

Type	Model	DN		Order Code
Press connection G 1"	G 1" M x 8 mm	25	1	MN80597.0006
Press connection G 1 1/4"	G 1 1/4" M x 35 mm	32	1	MN80597.007

Immersion sleeve MeiFlow Top S

Immersion sleeve M10x1 for MeiFlow Top S pump groups. Indirectly immersed. For temperature sensor 4 to 6 mm.


Type	Model	Dimensions			Weight [kg]		Order Code
		Height	Width	Length			
Immersion sleeve	M10 x 1	34,5	13	13	0.024	1	M90253.29

Servomotor

Wired with cable for direct mounting on the mixer group with 3-way T-mixer (MeiFlow (Top) S und M), running time 140 sec. 90°, 6 Nm with emergency manual mode and visible position indicator.

- Including assembly kit.




Type	Model		Order Code
Servomotor 230 V	230 V	1	M66341
Servomotor 24 V	24 V	1	M66341.3
Servomotor 24 V, 0 - 10 V styrning	24 V, 0 - 10 V control	1	M66341.7
Assembly kit <07/03	Assembly kit for mixers manufactured prior to 07/03	1	M66341.02
Servomotor relay	For operation on heating system controllers with relay output e.g. Viessmann Vitotronic	1	M66341.4

Servomotor with weather-controlled controller, incl. assembly kit




Weather-compensating heating controller for mixer heating circuits; including flow line temperature and outside temperature sensor; cable wired with servomotor.

Type		Order Code
Servomotor MWR2	1	M66341.36

PWM-Signal cable for Grundfos UPM3


PWM-Signal cable for UPM3.

Type	Length [m]		Order Code
Signal cable	1	1	M45101.762

Room unit for weather-controlled controller




Digital room unit for servomotor MWR2 with weather-controlled controller with LCD display for easy and convenient operation of the heating system from the living room.

Type		Order Code
Room unit for weather-controlled controller	1	M66341.113

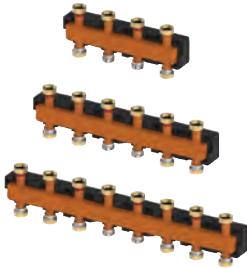
Contact thermostat (safety temperature monitor)



Component for boiler connection system.


Type		Order Code
Contact thermostat (safety temperature monitor)	1	M45160.01

MeiFlow S MF Manifold



Manifold up to 70 kW for up to 7 heating circuits. For pump groups MeiFlow S. Flow line/return line optionally hydraulically separated (black) or decoupled (orange).

With EPP insulation, each with 2, 3 or 4 connection points directed upwards or downwards (bottom connections may also be used), for assembly of the pump groups (universal combination possibilities for pump groups with 125 mm axial distance), suitable for pipe connection groups, with all necessary threaded joints and connectors included.

Type	For max. heating circuits	Model*		Order Code
Manifold 3 black	3	Hydraulically separated	1	M66301.2
Manifold 5 black	5	Hydraulically separated	1	M66301.3
Manifold 7 black	7	Hydraulically separated	1	M66301.4
Manifold 3 orange	3	Hydraulically decoupled	1	M66301.22
Manifold 5 orange	5	Hydraulically decoupled	1	M66301.31
Manifold 7 orange	7	Hydraulically decoupled	1	M66301.43

* Application limit: 70 kW at $\Delta T = 20\text{ K}$ or 3 m³/h and 0.04 bar (primary).


Note: On the "Hydraulically separated" model, the flow line and return line chambers are independent of one another. "Hydraulically decoupled" by way of liberal gaps in the separation plate.

Wall bracket for MeiFlow S MF



For manifolds up to 70 kW.

- 1 pair (2 x).
- With screws and rawl plugs.

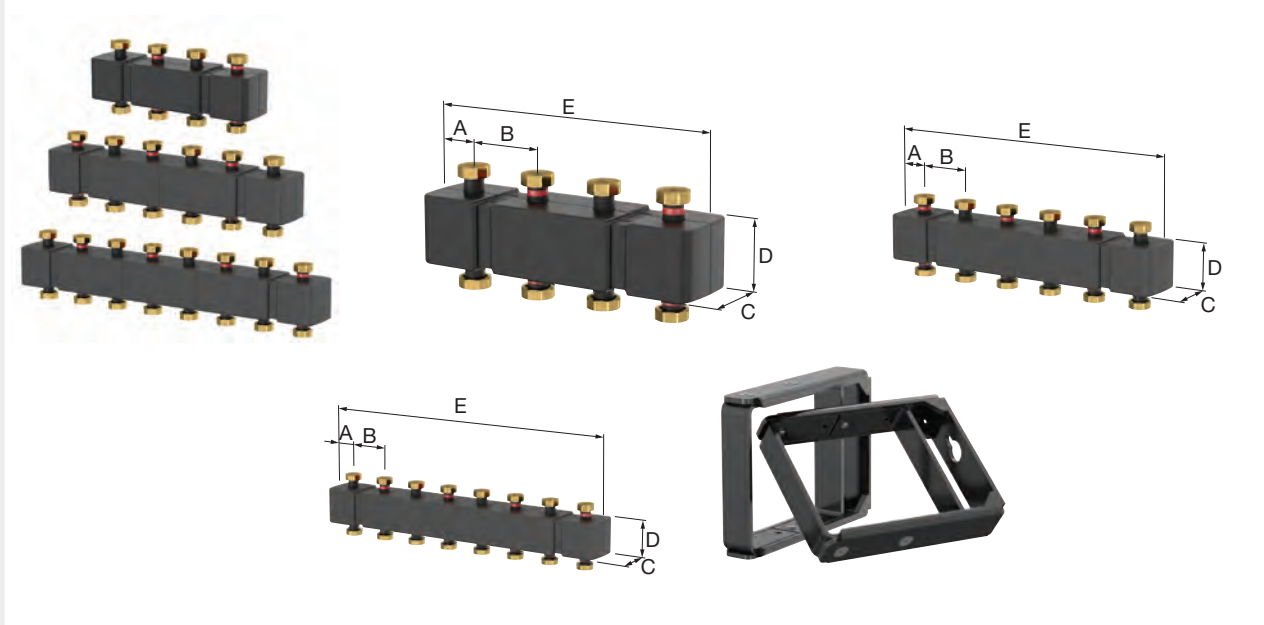
Type		Order Code
Wall bracket for manifold	1	M66337.3


MeiFlow Top S MF Manifold

Manifold up to 70 kW for up to 7 heating circuits. For pump groups MeiFlow Top S.

Flow line/return line optionally hydraulically separated (black) or low differential pressure (orange).

With EPP insulation and adjustable mounting brackets, each with 2, 3 or 4 connection points directed upwards or downwards (bottom connections may also be used), for assembly of the pump groups (universal combination possibilities for pump groups with 125 mm axial distance), suitable for pipe connection groups, with all necessary threaded joints and connectors included.



Type	For max. heating circuits	Model*	Dimensions						Order Code
			A [mm]	B [mm]	C [mm]	D [mm]	E [mm]		
Top S MF 3 HC	3	Standard	62.5	125	135	178	500	1	M66301.920
Top S MF 5 HC	5	Standard	62.5	125	135	178	750	1	M66301.930
Top S MF 7 HC	7	Standard	62.5	125	135	178	1000	1	M66301.940
Top S MF 3 HC - orange	3	Low differential pressure	62.5	125	135	178	500	1	M66301.922
Top S MF 5 HC - orange	5	Low differential pressure	62.5	125	135	178	750	1	M66301.932
Top S MF 7 HC - orange	7	Low differential pressure	62.5	125	135	178	1000	1	M66301.942

* Application limit: 70 kW at $\Delta T = 20\text{ K}$ or $3\text{ m}^3/\text{h}$ and 0.04 bar (primary).

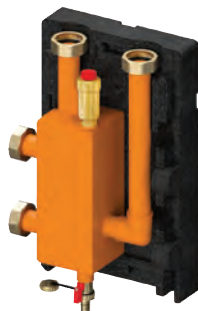
Note: On the "Standard" model, the flow line and return line chambers are independent of one another. "Low differential pressure" by way of liberal gaps in the separation plate.


MeiFlow S BG - Boiler Guard

Component for boiler connection system up to 70 kW.

Optionally with hydraulic diverter (orange) or without hydraulic diverter (black) including air / gas separator, dirt / sludge separator and a magnetite separator.

Horizontal and vertical axial distance 125 mm. Including immersion sleeve for flow line sensor with diameters up to 10 mm and insulation.




Type	Hydraulic balancer	Power * [kW]	Side connections			Order Code
			DN	"		
Boiler guard S DN 25 orange	✓	50	DN 25	1 1/2" F	1	M66393.21
Boiler guard S DN 25 orange without a magnetite separator	✓	50	DN 25	1 1/2"	1	M66391.2
Boiler guard S DN 32 orange	✓	70	DN 32	2" F	1	M66393.31
Boiler guard S DN 32 orange without a magnetite separator	✓	70	DN 32	2"	1	M66391.3
Boiler guard S DN 25 black	-	50	DN 25	1 1/2" F	1	M66392.21
Boiler guard S DN 25 black without a magnetite separator	-	50	DN 25	1 1/2"	1	M66390.2
Boiler guard S DN 32 black	-	70	DN 32	2" F	1	M66392.31
Boiler guard S DN 32 black without a magnetite separator	-	70	DN 32	2"	1	M66390.3

*at ΔT = 20 K.

Connector set for direct installation

For pump groups on boiler guard without manifold.



Type	Model		Order Code
Connector set 1 1/2	1 1/2" M × 1 1/2" F	1	M66356.9


Safety group K



Safety group fully sealed and insulated.

Comprising:

- Manifold piece with connection 1/2" F.
- Safety valve 1/2" x 3/4": 3 bar.
- Manometer: 4 bar.
- Bleed valve.

Type		Order Code
Safety group K	1	M66065


Connector set for expansion vessel



For direct, flexible connection to the expansion vessel return line with a max. diameter of 440 mm.

Comprising:

- Meiflex reinforced hose 3/4" F x 3/4" F, flat sealing, 700 mm in length.
- 2 3/4" seals.
- MM service coupling 3/4" (for detaching the expansion vessel without draining the system).
- Angle wall bracket with two screws, washers and rawl plugs respectively for surface mounting.

Type		Order Code
Connector set for expansion vessel	1	M66326.11


Circontrol C



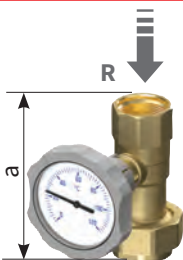
Pump shut-off set without backflow preventer.

2 Isolable ball valves with Meibes flange:

- 1x isolable ball valve.
- 1x isolable ball valve with thermometer in the handle, two union nuts and seals.


Type	Dimension A [mm]		Order Code
Circontrol C 1	359	1	M61122.1
Circontrol C 1 without pump	359	1	M61122
Circontrol C 1 with Wilo Yonos PARA 25/6	359	1	MP61122PAWI
Circontrol C 1 without pump with filter	359	1	MP61222
Circontrol C 1 with Grundfos Alpha2 25-40 with filter	359	1	MP61222.40
Circontrol C 1 with Grundfos Alpha2 25-60 with filter	359	1	MP61222.60
Circontrol C 1 1/4	370	1	M61124.1

Circontrol R

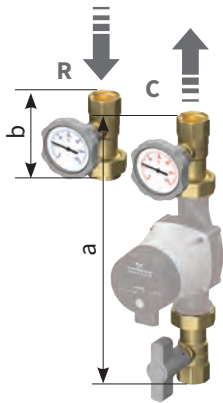


Return line set with backflow preventer.

Isolable ball valve with integrated backflow preventer with manual adjustment and thermometer in handle; screw fitting.

Type	Dimension A [mm]		Order Code
Circontrol R 1	117	1	M61126
Circontrol R 1 1/4	118	1	M61128


Circontrol C + R



Pump shut-off and return line set in the return line.

3 Isolable ball valves:

- 1x isolable ball valve (type C).
- 1x isolable ball valve (type C) with thermometer in the handle, two union nuts and seals.
- 1x isolable ball valve (type R) with integrated backflow preventer with manual adjustment and thermometer in the handle; screw fitting.


Type	Dimensions			Order Code
	C	R		
Circontrol C + R 1	359	117	1	M61127.1
Circontrol C + R 1 with Wilo Yonos PARA ²⁵/₆			1	MP61127PAWI
Circontrol C + R 1 1/4	370	118	1	M61129.1

Circontrol S



Pump shut-off set with backflow preventer for connection to tank.

Isolable ball valve with Meibes flange; in suction side with thermometer in the handle and integrated backflow preventer with manual adjustment; two union nuts and seals.


Type	Dimension A [mm]		Order Code
Circontrol S 1	359	1	M61130.1
Circontrol S 1 1/4	370	1	M61132.1

Circontrol B



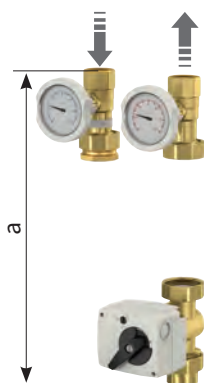
Pump shut-off set.

2 pump ball valves (pressure side with integrated backflow preventer) and air lock, complete with two union nuts and seals.

Type	Dimension A [mm]		Order Code
Circontrol B 1	353	1	M61821.0
Circontrol B 1 1/4	369	1	M61825

Note: Press unions and suitable RV available.

Circontrol G2 MC

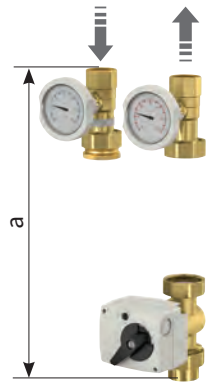


Complete pump shut-off and return line set including T-mixer. Servomotor optional available.

- 1x Ball valve including thermometer and non-return valve (RL).
- 1x Ball valve including thermometer (VL).
- 1x T-mixer with bypass.


Type	Dimension A [mm]		Order Code
Circontrol G2 MC	390	1	M61827.9

Circontrol G2 MC with servomotor

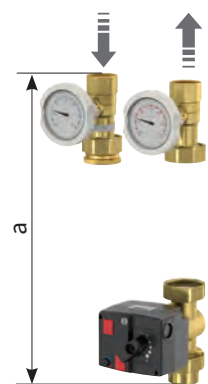


Complete pump shut-off and return line set in the return line, T-mixer and servomotor.

- 1x Ball valve including thermometer and non-return valve (RL).
- 1x Ball valve including thermometer (VL).
- 1x T-mixer with bypass.
- 1x Servomotor, 230V, 140 s.

Type	Dimension A [mm]		Order Code
Circontrol G2 MC with servomotor	390	1	M61827.7

Circontrol G2 MC with temperature control



Complete pump shut-off and return line set in the return line, T-mixer and servomotor with temperature control.


- 1x Ball valve including thermometer and non-return valve (RL).
- 1x Ball valve including thermometer (VL).
- 1x T-mixer with bypass.
- 1x Servomotor with temperature control and temperature sensor, 230V, 140 s.

Type	Dimension A [mm]		Order Code
Circontrol G2 MK with temperature control	390	1	M61827.8

Price advantaged sets

Price advantaged sets:

- pump group UC 1"
- pump group MC 1"
- Manifold for 2 heating circuits incl. brackets

Type	Model	Connection (uppermost)			Order Code
		DN	"		
UC DN 25	With Grundfos Alpha2 25-40	25	1"	1	MP66P11
UC DN 25	With Grundfos Alpha2 25-60	25	1"	1	MP66P11.6
UC DN 25	With Wilo Yonos PARA 25/6	25	1"	1	MP66P11PAWI
MC DN 25	With Grundfos Alpha2 25-40	25	1"	1	MP66P31
MC DN 25	With Grundfos Alpha2 25-60	25	1"	1	MP66P31.6
MC DN 25	With Wilo Yonos PARA 25/6	25	1"	1	MP66P31PAWI
Manifold for 2 heating circuits incl. brackets	3 [m³/h]			1	MP66801.2

Heating boiler separation system

Connection group with heat exchanger for protecting sensitive components


The product:

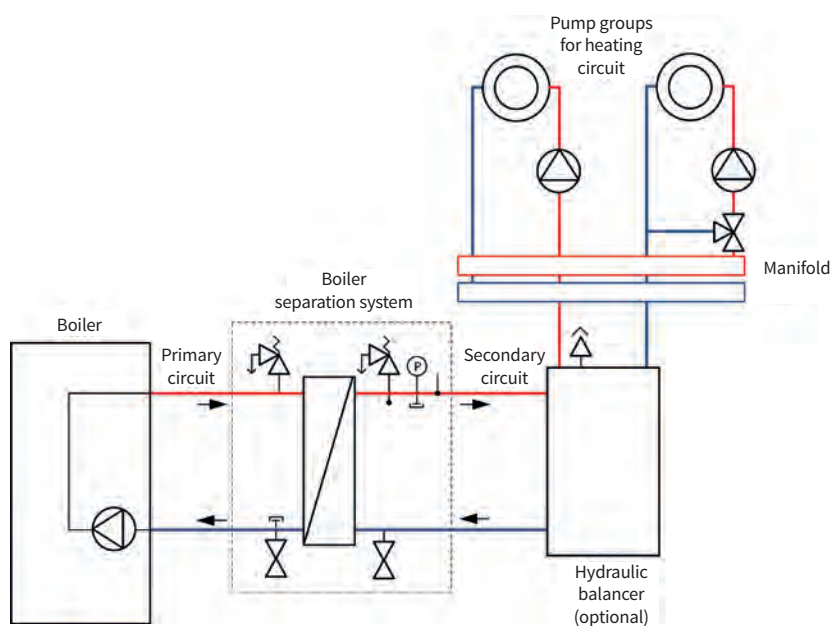
- Pre-assembled compact heat exchanger group with integrated fill and drain valves and safety valve.
- Connection options in the primary and secondary circuit for expansion vessel.
- For surface-mounted installation including white sheet steel cover.

Advantages for you:

- Separation from heating boiler and heating circuit for diverse pressures, media or water quality.
- Pre-assembled, insulated unit.
- Simple filling and draining of separate circuits.
- Large heat exchanger with thermal insulation.
- Safety valves including vent lines, secondary with manometer and MM connection.
- Can be converted to right-hand heating boiler.



Type	Model		Order Code
Boiler separation system	With cover	1	M45391.1
Boiler separation system	Without cover	1	M45391.11



Technical Data Boiler separation system

Specifications	Boiler separation system
Dimensions HxWxD [mm]	600 x 450 x 248
Connections – flow / return line	1 1/2" M (flat sealing)
Distance flow / return line [mm]	280
MM connections	3/4" M (flat sealing)
Max. positive pressure pressure (bar)	3
Max. operating temperature [°C]	95

Boiler separation system application


Application	Power [kW]	Heating circuit RL / SL [°C]	Boiler FL / RL [°C]
Radiators	75	50 / 70	80 / 60
	55	55 / 70	77 / 63
	38	60 / 70	75 / 65
Underfloor heating	38	35 / 45	50 / 40
	19	35 / 40	43 / 38

Heating boiler separation system extension set

Extension set for installation alongside the heat generator.

Two-sided connection (flow line and return line on external side of boiler) comprising: 2 x flexible corrugated pipe, insulated with 1 1/2" union nuts for flat sealing connection.



Type	Model		Order Code
Extension set 1	Length 350 mm and 350 mm	1	M66362.22
Extension set 2	Length 500 mm and 900 mm	1	M66362.23

TKM Compact for surface-mounted boiler with mixer motor

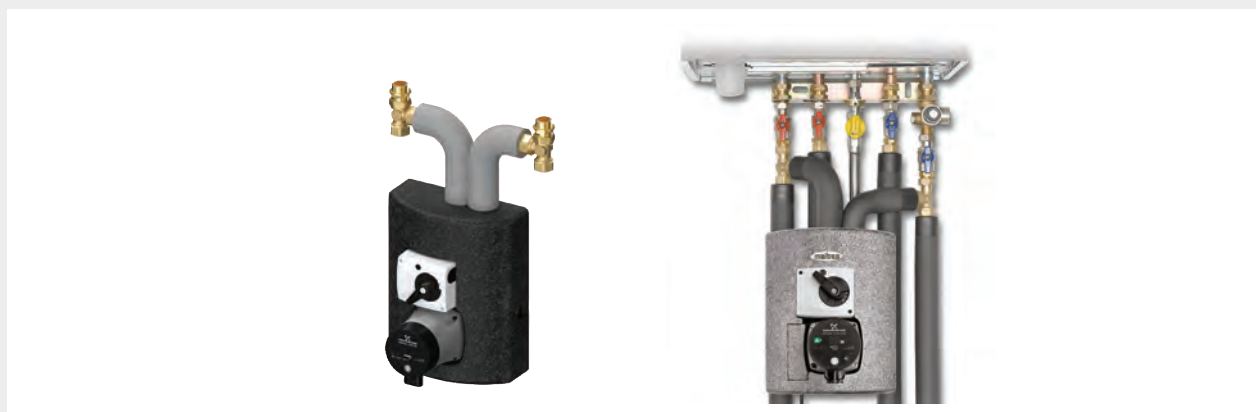
The product:


- Specifically for surface-mounted boiler up to 17 kW heating capacity ($\Delta T = 10\text{ K}$, $\Delta p = 0.2\text{ bar}$).
- With individual, flexible connections for all manufacturers / types.
- With integrated primary bypass.
- With servomotor for 3-point controller or thermostatic injection valve.
- Also available as a separation system.

Advantages for you:

- Compact mixing circuit for up to 3 heating circuits.
- Easy to install thanks to the quick-mounting system.
- Space-saving installation below or alongside the boiler.

TKM compact block made of brass with integrated primary bypass, mixer with adjustable bypass and fitted servomotor, pump with connection cable, immersion sleeve for flow line sensor, vent stoppers, connection set for installation below surface-mounted boiler consisting of two T-pieces and two stainless steel flexible connections, sealing set, EPP insulation, fully pre-assembled and leak-tested.



Type	Pump		Order Code
Compact mixing circuit with mixer motor	Grundfos Alpha2 15-60	1	M27400.3
Compact mixing circuit with fixed value motor MFR3	Grundfos Alpha2 15-60		M27400.4

TKM Compact for surface-mounted boiler with thermostatic valve

As with the compact mixing circuit with mixer motor, however, with thermostatic injection valve for surface-mounted boiler without mixing circuit control. The required supply temperature is adjusted using the thermostatic valve. (Control range 25 °C - 50 °C)



Type	Pump		Order Code
Compact mixing circuit with thermostatic valve	Grundfos Alpha2 15-60	1	M27409.3

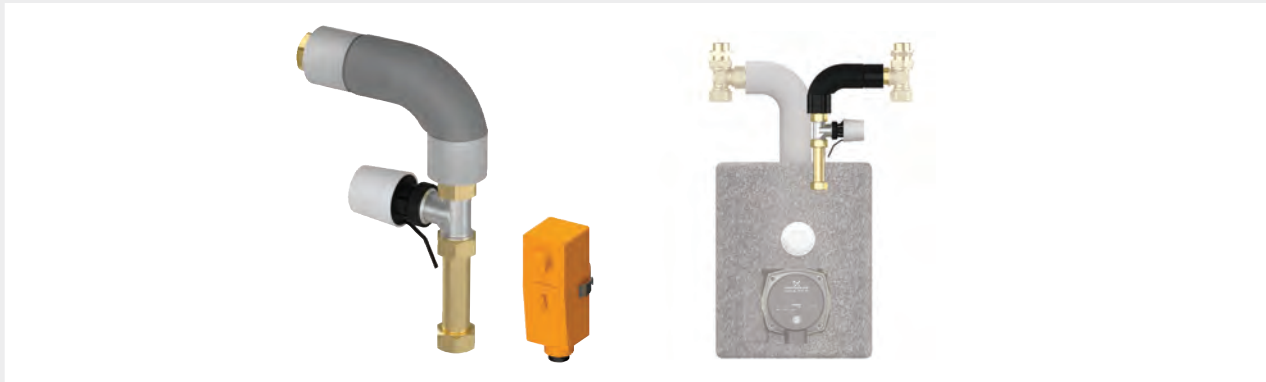
Technical Data TKM Compact


Specifications	
Dimensions (basic version) HxWxD [mm]	280 x 225 x 165
Upper connection	$\frac{3}{4}$ " M (boiler side)
Lower connection	$\frac{3}{4}$ " M Euro cone (low temperature circuit)
Axial distance [mm]	42
Components made of	Steel, brass, EPP insulation
sealing materials	O-ring EPDM
Max. positive pressure pressure (bar)	6
Max. operating temperature [°C]	110

Warning! When using the TKM basic version at operating temperatures (primary side) above 55 °C, safety module Art.-No. 27410.6 is required.

Safety module TKM

The safety module prevents an impermissible increase in temperature in the low temperature circuit in the event of a fault. If the temperature set at the temperature monitor is exceeded, the valve integrated into the flow line shuts the hot water intake to the heating circuit.



Type		Order Code
Safety module TKM	1	M27410.6


Technical Data Safety module TKM

Specifications	
Temperature monitor:	
Model	Bimetallic contact thermostat for attaching onto pipe (up to 2") using tension strap toggle function (changer), adjustable
Adjustment range [°C]	30 - 90
Switched power	16 (3) A, 250 V
Protection code	IP 30
Valve:	
Model	Straight-way valve with thermally-activated setting attachment, closed when currentless
Voltage	230 V AC / DC
Protection code	IP 43
Protection class	Insulated

TKM Compact Separation system

Compact block made from brass, mixer with adjustable bypass and fitted servomotor, pump with cable, compact heat exchanger, immersion sleeve for flow line sensor, vent stoppers, wall bracket, EPP insulation, fill and drain ball valve for bleeding, 3/4" M connection option for expansion vessel, connector set for installation below the surface-mounted boiler comprising two T-pieces and two flexible connections made from stainless steel.



Type	Pump	Number of plates		Order Code
Compact mixing circuit separation system 20	Grundfos Alpha2 15-60	20	1	M27408.21
Compact mixing circuit separation system 30	Grundfos Alpha2 15-60	30	1	M27408.31

Technical Data TKM Compact Separation system

Specifications	20 plates	30 plates
Max. power [kW] (primary: 65/45 °C secondary: 35/45 °C residual delivery head: 0.15 bar)	11	13
Max. power [kW] (primary: 50/35 °C secondary: 30/35 °C residual delivery head: 0.15 bar)	5	6.5

Flow rate limiter with display

Installation set consists of:
2 flow rate limiters complete with screw fittings, seals and flexible connection.



Type	[l/min]	Connections		Order Code
Flow rate limiter with display	2 - 8	3/4" F/M	1	M27410.1

SOLUTIONS FOR THERMAL SOLAR SYSTEMS

Meibes offers a complete range of solar stations for collector surfaces from 5 - 150 qm. All solar stations and solar controllers are ErP-ready. With the SolaVentec, Meibes offer a new generation of solar stations which function using valve technology (without backflow limiters). Wide selection of accessories to create an individual design complete the product range.

MeiFlow S Sol-1R

Single-line solar station S ¾" for collector surface up to 14 m² (Highflow) or 31 m² (Lowflow) with flow rate display 1 - 13 l/min.

Solar pump module as 1-line model complete with or without recirculation pump (DN 15, installed length 130 mm) shut-off ball valve including thermometer and metallic backflow limiters (manually adjustable) integrated in the ball, recirculation pump suitable for solar applications, safety module including manometer with two fill and drain valves and pre-installed safety valve, multi-functional fitting with flow rate controller or shut-off system, fill and drain valve and connection for an expansion vessel on the suction side of the pump, with flow rate limiter (combination display for propylene glycol mixture 40% and water (1 - 13 l / min)).




Type	Model		Order Code
MeiFlow S Sol-1R	Without pump	1	M45719.2EA
MeiFlow S Sol-1R	With Grundfos UPM3 Hybrid 15 - 70 PWM	1	M45719.9
MeiFlow S Sol-1R	With Wilo Yonos Para ST 15 / 7 PWM	1	M45719.9WI

MeiFlow S Sol-1R-SC with integrated MeiTronic Sol Basic solar controller

As with the single-line solar station S ¾", however, with integrated MeiTronic Sol Basic solar controller.

(thermometer not included in the ball valve for this variant) Digital temperature differential controller for thermal solar systems (1 collector field, 1 tank), full graphic, backlit black/white display, operation via rotary/push control and ESC key, 3 inputs for PT 1000 sensor, analogue or PWM output for high-efficiency pump, speed regulation, pre-configured hydraulics diagram, Triac output, error monitoring, manual operation option, collector safety function; recool function; commissioning/ service assistant, fixed T and Delta T regulation, tube collector function, shut-off delay for outputs, anti-freeze, sensor monitoring, monitoring of output parameters, operating hours counter 1 for outputs, solar yield measurement for pump control including data output, yield recording possible without volumetric flow meter, scope of supply includes 2 PT 1000 universal temperature sensors.



Type	Model		Order Code
MeiFlow S Sol-1R-SC	Without pump	1	M45719.24EA
MeiFlow S Sol-1R-SC	With Grundfos UPM3 Hybrid 15 - 70 PWM	1	M45719.94
MeiFlow S Sol-1R-SC	S Grundfos UPM3 Solar 15 - 75	1	MP45719.24UPM3
MeiFlow S Sol-1R-SC	S Grundfos UPM3 Solar 15 - 75 - PWM Signal	1	MP45719.24UPM3PWM
MeiFlow S Sol-1R-SC	With Wilo Yonos Para ST 15/7 PWM	1	M45719.94WI
MeiFlow S Sol-1R-SC	S Wilo Yonos Para ST 15/6	1	MP45719.24PAWI

Technical Data MeiFlow S Sol-1R-SC

Specifications	MeiFlow S Sol-1R-SC
Collector surface	Up to 14 m ² (high-flow) or 31m ² (low-flow)
Operating temperature	120 °C, 140 °C for short periods (observe max. permissible temperature of the pump)
Safety valve	6 bar
Thermometer indicated range	20 °C / 150 °C
Manometer indicated range	0 - 10 bar
Flow rate display	Water 1.0 – 13.0 l/min, glycol 0.8 – 10.3 l/min
Sealing material	Asbestos-free fibre sealant, EPDM
Components made of	Steel, brass, glass, EPP insulation
Upper connection	¾" F
Lower connection	¾" F
Expansion vessel connection	¾" M
Axial distance	100 mm
Dimension without solar control *	Approx. H 385 x W 200 x D 185 mm
Dimension with solar control *	Approx. H 430 x W 200 x D 185 mm

* With insulation and safety group.


MeiFlow S Sol-2R

Two-line solar station S $\frac{3}{4}$ "; for collector surface up to 14 m² (Highflow) or 31 m² (Lowflow) with flow rate display 1 - 13 l/min.

Solar pump module as 2-line model complete with or without recirculation pump (DN 15, installed length 130 mm), shut-off ball valves including thermometer and metallic backflow limiters (manually adjustable) integrated in the ball, recirculation pump suitable for solar applications, safety module including manometer with fill and drain valve and pre-installed safety valve, multi-functional fitting with flow rate controller or shut-off system, two fill and drain valves and connection for an expansion vessel on the suction side of the pump. With flow rate display (combination display for propylene glycol mixture 40% and water). Optionally with permanent air vent for the continuous separation of air.

Digital temperature differential controller for thermal solar systems (1 collector field, 1 tank).



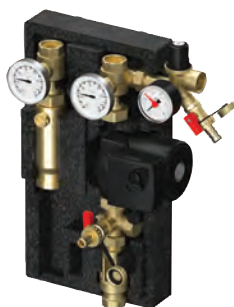
Type	Model	With controller	With permanent-air vent		Order Code
MeiFlow S Sol-2R	With Grundfos UPM3 Solar 15-75	-	-	1	MP45705.6UPM3
MeiFlow S Sol-2R	With Grundfos UPM3 Solar 15-75 - PWM Signál	-	-	1	MP45705.6UPM3PWM
MeiFlow S Sol-2R	With Wilo Yonos Para ST 15 / 7 PWM	-	-	1	M45705.10WI
MeiFlow S Sol-2R	Without pump	-	✓	1	M45705.6EA
MeiFlow S Sol-2R	With Grundfos UPM3 Hybrid 15 - 70 PWM	-	✓	1	M45705.10
MeiFlow S Sol-2R	With Wilo Yonos Para ST 15/6	-	-	1	MP45705.6PAWI


MeiFlow S Sol-2R-SC with integrated MeiTronic Sol Basic solar controller

Two-line solar station S ¾" with integrated MeiTronic Sol Basic solar controller for collector surface up to 14 m² (Highflow) or 31 m² (Lowflow) with flow rate display 1 - 13 l/min.

Solar pump module as 2-line model complete with or without recirculation pump (DN 15, installed length 130 mm), shut-off ball valves including thermometer and metallic backflow limiters (manually adjustable) integrated in the ball, recirculation pump suitable for solar applications, safety module including manometer with fill and drain valve and pre-installed safety valve, multi-functional fitting with flow rate controller or shut-off system, two fill and drain valves and connection for an expansion vessel on the suction side of the pump. With flow rate display (combination display for propylene glycol mixture 40% and water). Optionally with permanent air vent installed in the flow line for the continuous separation of air.

Digital temperature differential controller for thermal solar systems (1 collector field, 1 tank).



Type	Model	With controller	With permanent-air vent		Order Code
MeiFlow S Sol-2R-SC	Without pump	✓	-	1	M45705.24EA
MeiFlow S Sol-2R-SC	With Grundfos UPM3 Hybrid 15 - 70 PWM	✓	-	1	M45705.94
MeiFlow S Sol-2R-SC	With Grundfos UPM3 Solar 15-75	-	-	1	MP45705.64UPM3
MeiFlow S Sol-2R-SC	With Grundfos UPM3 Solar 15-75 - PWM Signal	✓	-	1	MP45705.64UPM3PWM
MeiFlow S Sol-2R-SC	With Wilo Yonos Para ST 15 / 7 PWM	✓	-	1	M45705.94WI
MeiFlow S Sol-2R-SC	Without pump	✓	✓	1	M45705.64EA
MeiFlow S Sol-2R-SC	With Grundfos UPM3 Hybrid 15 - 70 PWM	✓	✓	1	M45705.14
MeiFlow S Sol-2R-SC	With Wilo Yonos Para ST 15/6	-	-	1	MP45705.64PAWI
MeiFlow S Sol-2R-SC	With Wilo Yonos Para ST 15/7 PWM	-	-	1	M45705.14WI

Technical Data MeiFlow S Sol-2R-SC

Specifications	Two-line solar station S ¾" BASIC PRO
Collector surface	Up to 14 m ² (high-flow) or 31m ² (low-flow)
Operating temperature	120 °C, 140 °C for short periods (observe max. permissible temperature of the pump)
Safety valve	6 bar
Thermometer indicated range	20 °C / 150 °C
Manometer indicated range	0 - 10 bar
Flow rate display	Water 1.0 – 13.0 l / min, glycol 0.8 – 10.3 l / min
Sealing material	Asbestos-free fibre sealant, EPDM
Components made of	Steel, brass, glass, EPP insulation
Upper connection	¾" F
Lower connection	¾" F
Expansion vessel connection	¾" M
Axial distance	100 mm
Dimension *	Approx. H 385 x W 300 x D 185 mm


* With insulation and safety group.

MeiFlow M Sol-2R

Two-line solar station M 3/4" for collector surface up to 14 m² (Highflow) or 31 m² (Lowflow) with flow rate display 1 - 13 l/min.

Complete with or without recirculation pump (DN25, installed length 180 mm) with connection cable; two ball valves with manually adjustable, metallic backflow limiter; two contact thermometers integrated in the ball valve handle (indicated range 20 – 150 °C); safety group with TÜV-approved safety valve (response pressure 6 bar), manometer (indicated range 0 – 10 bar), two rinse, fill and drain ball valves including hose fitting and cap, fittings for surface mounting; 2-part EPP insulation. Multi-functional fitting with flow rate controller and shut-off system, fill and drain ball valve and connections for an expansion vessel on the suction or pressure side of the pump with flow rate display (combined display for propylene glycol mixture 40% and water). With permanent air vent installed in the flow line for the constant separation of air as required.



Type	Model	With permanent-air vent		Order Code
MeiFlow M Sol-2R	Without pump	✓	1	M45804.5EA
MeiFlow M Sol-2R	With Grundfos UPM3 Hybrid 25 - 70 PWM	✓	1	M45804.10

Technical Data MeiFlow M Sol-2R

Specifications	
Collector surface	Up to 14 m ² (high-flow) or 31m ² (low-flow)
Operating temperature	Up to 110 °C, up to 130 °C for short periods (observe max. permissible temperature of the pump)
Safety valve	6 bar
Thermometer indicated range	20 °C / 150 °C
Manometer indicated range	0 - 10 bar
Volumetric flow limiter	Water 1.0 – 13.0 l / min, glycol 0.8 – 10.3 l / min
Sealing material	PTFE (Teflon), asbestos-free fibre sealant, EPDM, silicone
Components made of	Steel, brass, glass, EPP insulation
Upper connection	3/4" F
Lower connection	3/4" F
Expansion vessel connection	3/4" M
Axial distance	125 mm
Dimension *	ca. H 500 × W 320 × D 250 mm

* With insulation and safety group.


MeiFlow S Sol Top

Two-line solar station with valve technology and integrated thermal siphon for collector surfaces up to 71 m².

Gravity circulation 100% excluded. Highly efficient use of energy due to omission of backflow limiters, different connection options to MM and auxiliary vessel. Complete with recirculation pump (DN 25, installed length 180 mm) with connection cable, thermally separated valve unit in return line as shut-off and control device and thermostatic control valve with position indicator; siphon with integrated permanent air vent in the flow line and connection option for an auxiliary vessel; two contact thermometers, safety group with safety valve and manometer, two flushing, filling and draining ball valves; flow rate controller and shut-off system; flow rate display with combi scale for propylene glycol mixture and water

Note: The time setting for the tube collector function on the solar controller must be set to 4 min. when using the in combination with tube collectors.



Type	Model	For collector-surfaces (Highflow / Lowflow)		Order Code
MeiFlow S Sol Top	With Grundfos UPM3 Solar 25 - 145 PWM	14 m ² - 31 m ²	1	M45751.186

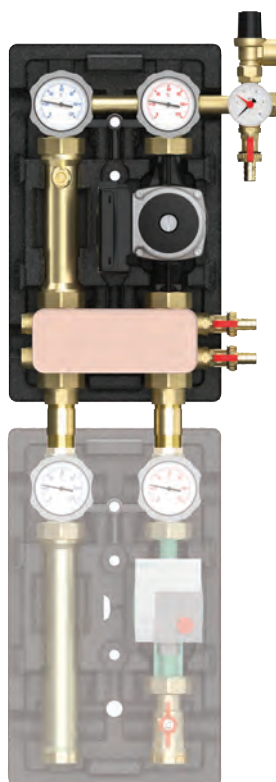
Technical Data MeiFlow S Sol Top


Specifications	
Collector surface	Up to 14 m ² with flow rate display 1 - 13 l/min up to 71 m ² with flow rate display 8 - 30 l/min
Operating temperature	Up to 110 °C, up to 130 °C for short periods (observe max. permissible temperature of the pump)
Safety valve	6 bar
Thermometer indicated range	20 °C / 150 °C
Manometer indicated range	0 - 10 bar
Volumetric flow limiter	Water: 1.0 - 13.0 l / min water: 8.0 - 30 l / min
Sealing material	PTFE (Teflon), asbestos-free fibre sealant, EPDM, silicone
Components made of	Steel, brass, glass, EPP insulation
Upper connection	3/4" F
Lower connection	3/4" F
Expansion vessel connection	3/4" M
Axial distance	Top: 100 mm bottom: 118 mm
Dimension	Approx. H 520 x W 250 x D 180 mm

MeiFlow M Sol 2R-SD

Solar separation system M for collector surface up to 12 m² for connection to the tank charging circuit.

Complete with or without recirculation pump (DN 25, installed length 180 mm) with connection cable; compact heat exchanger; two ball valves with manually adjustable, metallic backflow limiter; two contact thermometers integrated in ball valve handle (indicated range 20 – 150 °C); safety group with TÜV-approved safety valve (response pressure 6 bar), manometer (indicated range 0 – 10 bar), connector set for an expansion tank with MM service coupling, two rinse, fill and drain ball valves including hose fitting and cap; automatic air vent; fittings for surface mounting; 2-part EPP insulation; screw connection for the secondary circuit (either 1" M or 1" F as required).



Type	Model		Order Code
MeiFlow M Sol 2R-SD	Without pump	1	M45841.20EA

Technical Data MeiFlow M Sol 2R-SD

Separation system type	With 20 plates	With 26 plates
Max. output: primary 60/40 °C, secondary 20/50 °C min. residual delivery head primary 0.2 bar	5 kW	7 kW
Heat exchanger plate number	20	26
Aforementioned power corresponds approx. to collector surface	8 m ²	12 m ²
Operating temperature	Up to 110 °C, short periods 130 °C (observe max. permissible temp. of the pump)	Up to 110 °C, short periods 130 °C (observe max. permissible temp. of the pump)
Safety valve	6 bar	6 bar
Thermometer indicated range	20 °C / 150 °C	20 °C / 150 °C
Manometer indicated range	0 - 10 bar	0 - 10 bar
Sealing material	PTFE (Teflon), asbestos-free fibre sealant, EPDM, silicone	PTFE (Teflon), asbestos-free fibre sealant, EPDM, silicone
Components made of	Steel, brass, glass, EPP insulation	Steel, brass, glass, EPP insulation
Upper connection	3/4" F	3/4" F
Lower connection	1" F	1" F
Expansion vessel connection	3/4" M	3/4" M
Axial distance	125 mm	125 mm
Dimension	Approx. H 465 x W 320 x D 250 mm	Approx. H 465 x W 320 x D 250 mm


MeiFlow XL Sol 2R-SD

Solar XL heat exchanger solar station for collector surfaces up to 71 m².

With two recirculation pumps (DN 15, installed length 130 mm) with connection cable; two flow rate limiters; stainless steel plate heat exchangers; two bleeding devices; one primary sensor seat; four shut-off ball valves; four flushing, filling and draining ball valves including hose fittings and including safety groups for primary and secondary side; all installed and tested on a baseplate; stainless steel corrugated pipe connections with insulation. In EPP thermal insulation housing.

Solar stations in similar design as above, however, with switching valves for 2 collector fields and / or 2 heat consumers available upon request.

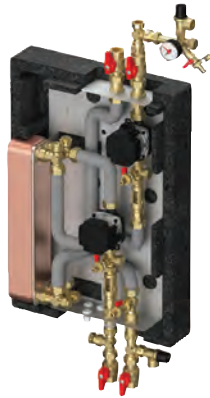



Type	Model		With flow-rate display [l/min]	For collector surfaces (Highflow / Lowflow) [m ²]		Order Code
	Primary	Secondary				
MeiFlow XL Sol 2R-SD / 1 - 13	With Grundfos UPM3 Hybrid 15 - 70	With Grundfos UPM3 Hybrid 5 - 70	1 - 13	14 - 31	1	M45140.16
MeiFlow XL Sol 2R-SD / 8 - 30	With Grundfos UPM3 15 - 145	With Grundfos UPM3 Hybrid 15 - 70	8 - 30	32 - 71	1	M45140.19

MeiFlow XL Sol 2R-SD-SC with integrated Energy Pro controller

As with MeiFlow XL Sol 2R-SD-SC, however, with integrated Energie Pro controller.

With two recirculation pumps (DN 15, installed length 130 mm) with connection cable; two flow rate limiters; stainless steel plate heat exchangers; two bleeding devices; one primary sensor seat; four shut-off ball valves; four flushing, filling and draining ball valves including hose fittings and including safety groups for primary and secondary side; all installed and tested on a baseplate; stainless steel corrugated pipe connections with insulation. In EPP thermal insulation housing.



Type	Model		With flow-rate display [l/min]		Order Code
	Primary	Secondary			
MeiFlow XL Sol 2R-SD-SC / 1 - 13	With Grundfos UPM3 Hybrid 15 - 70	With Grundfos UPM3 Hybrid 15 - 70	1 - 13	1	M45140.56
MeiFlow XL Sol 2R-SD-SC / 8 - 30	With Grundfos UPM3 15 - 145	With Grundfos UPM3 Hybrid 15 - 70	8 - 30	1	M45140.59

Technical Data MeiFlow XL Sol 2R-SD-SC


Separation system type	MeiFlow XL Sol 2R-SD-SC 1 - 13	MeiFlow XL Sol 2R-SD-SC 8 - 30
Collector surface	up to 31 m ²	up to 71 m ²
Operating temperature	Up to 110 °C, short periods 120 °C (observe max. permissible temp. of the pump)	Up to 110 °C, 120 °C for short periods (observe max. permissible temp. of the pump)
Manometer indicated range	Primary: 0 - 10 bar (accessories) secondary: 0 - 4 bar (accessories)	Primary: 0 - 10 bar (accessories) secondary: 0 - 4 bar (accessories)
Heat exchanger plate number	30	30
Max. output: primary 60 / 30 °C secondary 20 / 50 °C min. Residual delivery head primary 0.2 bar / sec. 0.1 bar)	18 kW (power with 31 m ² surface at 65% efficiency)	46 kW (power with 71 m ² surface at 65% efficiency)
Safety valve	Primary: 6 bar secondary: 3 bar	Primary: 6 bar secondary: 3 bar
Volumetric flow limiter	1 - 13 l/min	8 - 30 l/min
Sealing material	PTFE (Teflon), asbestos-free fibre sealant, EPDM	PTFE (Teflon), asbestos-free fibre sealant, EPDM
Components made of	Steel, brass, glass, EPP insulation	Steel, brass, glass, EPP insulation
Lower connection	1" F	1" F
Expansion vessel connection	3/4" M (accessories)	3/4" M (accessories)
Axial distance	65 mm	65 mm
Dimension	Approx. H 730 (1135) × W 500 (570) × D 250 mm	Approx. H 730 (1135) × W 500 (570) × D 250 mm

MeiFlow XXL Sol 2R-SD

Solar XXL heat exchanger solar station for collector surfaces up to 165 m².

Heat exchanger solar station, complete with two recirculation pumps, a stainless steel plate heat exchanger including block insulation, two volumetric flow limiters, two safety valves and manometers, four flushing, filling and draining ball valves, an air separator (secondary), a dirt trap (secondary), shut-off fittings with thermometer handles (on flow line side, secondary with backflow preventer), installation frame made from aluminium profiles with height-adjustable feet.



Type	Model (primary / secondary)	Flow rate- limiter [l/min]	Heat exchanger (plates)		Order Code
MeiFlow XXL Sol 2R-SD / 10 - 40	Primary and secondary with Wilo Stratos 30 / 1 - 12	10 - 40	30	1	M45142.14
MeiFlow XXL Sol 2R-SD / 10 - 40	Primary and secondary with Wilo Stratos 30-10	10 - 40	30	1	M45142.12
MeiFlow XXL Sol 2R-SD / 20 - 70	Primary and secondary with Wilo Stratos Para 30 / 1 - 12	20 - 70	60	1	M45142.22

Technical Data MeiFlow XXL Sol 2R-SD

Separation system type	MeiFlow XXL Sol 10 - 40	Solar XXL Sol 20 - 70
Collector surface	Up to 43 m ² (high-flow) or 95 m ² (low-flow)	Up to 74 m ² (high-flow) or 155 m ² (low-flow)
Max. output primary 60 / 30 °C secondary 20 / 50 °C min. Residual delivery head primary 0.2 bar / sec. 0.1 bar)	62 kW (power with 95 m ² surface at 65% efficiency)	100 kW (power with 155 m ² surface at 65% efficiency)
Volumetric flow limiter	10 - 40 l/min	20 - 70 l/min
Operating temperature	Up to 110 °C (observe max. permissible temperature of the pump)	Up to 110 °C (observe max. permissible temperature of the pump)
Safety valve	Primary: 10 bar, Secondary: 3 bar	Primary: 10 bar, Secondary: 3 bar
Manometer indicated range	Primary: 0 - 10 bar, secondary: 0 - 4 bar	Primary: 0 - 10 bar, secondary: 0 - 4 bar
Sealing material	PTFE (Teflon), asbestos-free fibre sealant, EPDM, FPM, silicone	PTFE (Teflon), asbestos-free fibre sealant, EPDM, FPM, silicone
Components made of	Steel, brass, glass, PUR insulation WT	Steel, brass, glass, PUR insulation WT
Upper connection	1 1/4" F	1 1/4" F
Lateral connection	1 1/4" F	1 1/4" F
Axial distance	Top: 129 mm, side: 103 mm	Top: 129 mm, side: 103 mm
Dimensions (including cladding)	Approx. H 840 x W 950 x D 290 mm	Approx. H 840 x W 950 x D 290 mm

Solar manual filling pump



Piston pump for manual filling and refilling or increasing the pressure of the solar system, 1 m filling hose, pressure build-up max. 6 bar.


Type		Order Code
Solar manual filling pump	1	M45100.2

Solar expansion set



With angle bracket for direct, flexible connection to the safety group of the solar station or to an additional screw fitting in the solar return line.


Comprising: stainless steel corrugated hose 2 x 3/4" F union nut x 500 mm; two seals 3/4"; one service coupling "Solar" 3/4" M/F for separating the expansion vessel without draining the system; angle wall bracket including fitting.

Type		Order Code
Solar expansion set	1	M66326.13

MM service coupling solar



Safety quick coupling in acc. with DIN 4751 Sheet 2 / 93 allows speedy replacement of the MM MM, 3/4" M x 3/4" F (when the screw fitting is disconnected, both open ends are closed automatically.)

Type		Order Code
MM service coupling solar	1	M69080.3

Extension set for solar separation system M




With flow rate meter 1 - 13 l /min, fill and drain valve with 1/2" hose fitting, G 3/4" M with end cap (e.g. for MM connection) bottom connection: 3/4" F, top connection: 1" union nut.

Type		Order Code
Extension set	1	M45110SET17

Connector set for auxiliary vessel




Pre-insulated copper pipe 22 x 1; brass T-piece (connections: clamping ring screw union 22 mm x 3/4" M x clamping ring screw union 22 mm); union nipple 3/4" M with cap closed for connection of the expansion vessel to the auxiliary and diaphragm expansion tank.

Type		Order Code
Auxiliary vessel connector set	1	M66326.18

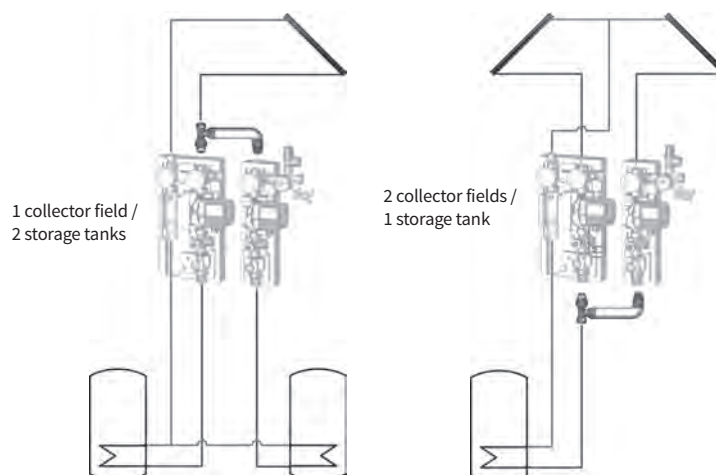
Connection system for two solar stations



Pre-insulated and pre-bent corrugated pipe with 2 x 3/4" union nuts; brass T-piece including unions to the solar stations 3/4" M for continuation of the connection lines by the customer; one cap 3/4".

Type		Order Code
Connection system for two solar stations	1	M66356.10

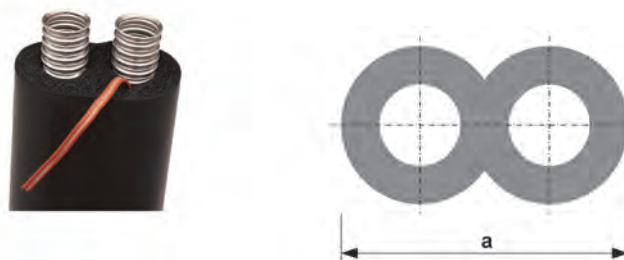
Example of connection possibilities




Inoflex stainless steel corrugated pipe with cable

Inoflex stainless steel corrugated pipe in double-line insulation with cable.

In fixed lengths or configurable up to a max. length of 40 m, with high-temperature-resistant EPDM rubber insulation up to 150 °C, up to 175 °C for short periods, insulation thickness 14 mm.

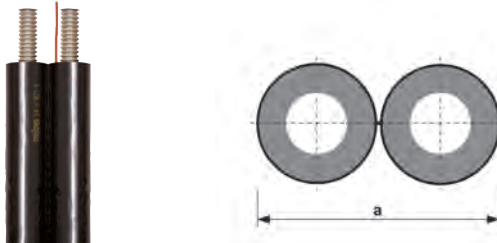



Type	Connection [DN]	Length [m]	Dimension (a) [mm]		Order Code
Inoflex with cable	16	-	92	1	M46123TSK
Inoflex with cable	16	10	92	1	M46123TSK10
Inoflex with cable	16	15	92	1	M46123TSK15
Inoflex with cable	16	20	92	1	M46123TSK20
Inoflex with cable	16	25	92	1	M46123TSK25
Inoflex with cable	20	20	98	1	M46122TSK20

Inoflex stainless steel corrugated pipe with cable and protective foil

Inoflex stainless steel corrugated pipe in double-line insulation with cable and protective foil.

As with Inoflex with cable, however, with foil coating as protection against mechanical stresses. Can be split into two individual lines.




Type	Connection [DN]	Length [m]	Dimension (a) [mm]		Order Code
Inoflex with cable / protective foil	16	-	108	1	M46123CSK
Inoflex with cable / protective foil	20	-	120	1	M46122CSK
Inoflex with cable / protective foil	16	10	108	1	M46123CSK10
Inoflex with cable / protective foil	16	15	108	1	M46123CSK15
Inoflex with cable / protective foil	16	20	108	1	M46123CSK20
Inoflex with cable / protective foil	16	25	108	1	M46123CSK25
Inoflex with cable / protective foil	20	10	120	1	M46122CSK10
Inoflex with cable / protective foil	20	15	120	1	M46122CSK15
Inoflex with cable / protective foil	20	20	120	1	M46122CSK20
Inoflex with cable / protective foil	20	25	120	1	M46122CSK25
Inoflex with cable / protective foil	20	30	120	1	M46122CSK30

Oval clamp set

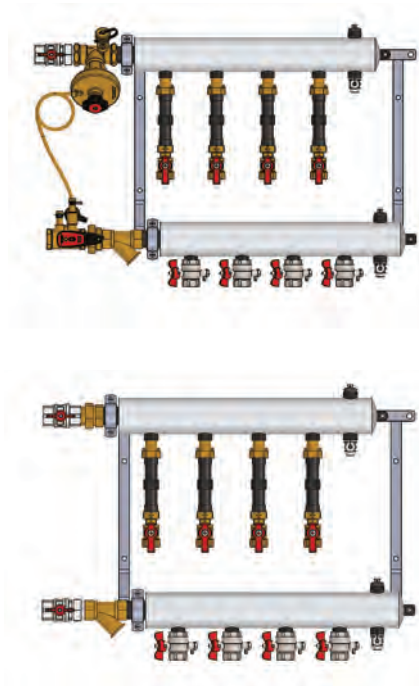


Oval clamp set comprising an oval clamp for securing the inoflex stainless steel corrugated pipe in double-line insulation DN 16 and DN 20 including hanger bolt M8 x 80 and rawl plug.

Type		Order Code
Oval clamp set	1	M69410.7

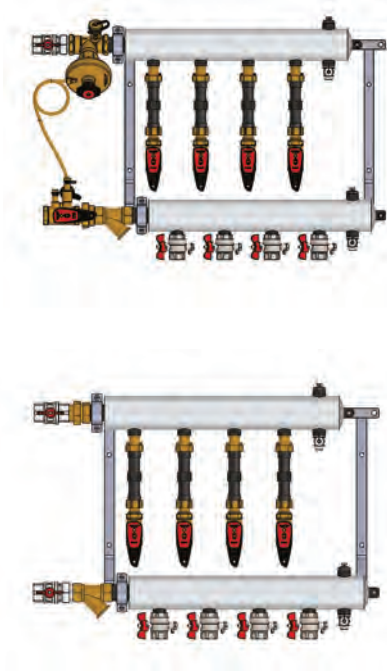
LOGOFLOOR MANIFOLDS


LogoFloor Type 0



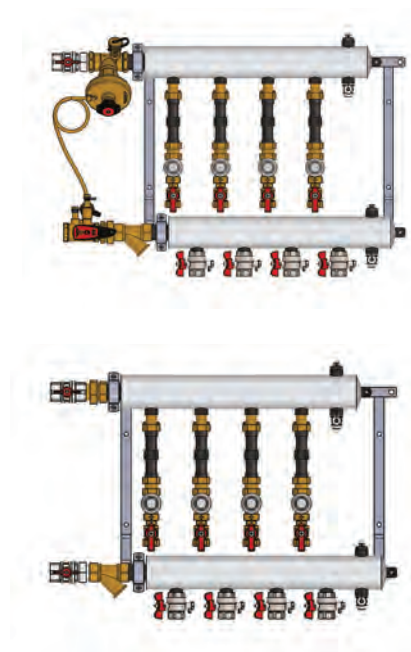
Type	Dimension [DN]	Number of heating circuits	Kv main supply/ heating circuit		Order Code
LogoFloor Type 0	20	2	2.2/5.0	1	LF22010.00
LogoFloor Type 0	20	3	2.2/5.0	1	LF32010.00
LogoFloor Type 0	20	4	2.2/5.0	1	LF42010.00
LogoFloor Type 0	20	5	2.2/5.0	1	LF52010.00
LogoFloor Type 0	20	6	2.2/5.0	1	LF62010.00
LogoFloor Type 0	20	7	2.2/5.0	1	LF72010.00
LogoFloor Type 0	20	8	2.2/5.0	1	LF82010.00
LogoFloor Type 0	20	9	2.2/5.0	1	LF92010.00
LogoFloor Type 0	20	10	2.2/5.0	1	LF102010.00
LogoFloor Type 0	20	11	2.2/5.0	1	LF112010.00
LogoFloor Type 0	25	2	3.4/5.0	1	LF22510.00
LogoFloor Type 0	25	3	3.4/5.0	1	LF32510.00
LogoFloor Type 0	25	4	3.4/5.0	1	LF42510.00
LogoFloor Type 0	25	5	3.4/5.0	1	LF52510.00
LogoFloor Type 0	25	6	3.4/5.0	1	LF62510.00
LogoFloor Type 0	25	7	3.4/5.0	1	LF72510.00
LogoFloor Type 0	25	8	3.4/5.0	1	LF82510.00
LogoFloor Type 0	25	9	3.4/5.0	1	LF92510.00
LogoFloor Type 0	25	10	3.4/5.0	1	LF102510.00
LogoFloor Type 0	25	11	3.4/5.0	1	LF112510.00
LogoFloor Type 0	32	2	5.0/5.1	1	LF23210.00
LogoFloor Type 0	32	3	5.0/5.1	1	LF33210.00
LogoFloor Type 0	32	4	5.0/5.1	1	LF43210.00
LogoFloor Type 0	32	5	5.0/5.1	1	LF53210.00
LogoFloor Type 0	32	6	5.0/5.1	1	LF63210.00
LogoFloor Type 0	32	7	5.0/5.1	1	LF73210.00
LogoFloor Type 0	32	8	5.0/5.1	1	LF83210.00
LogoFloor Type 0	32	9	5.0/5.1	1	LF93210.00
LogoFloor Type 0	32	10	5.0/5.1	1	LF103210.00
LogoFloor Type 0	32	11	5.0/5.1	1	LF113210.00
LogoFloor Type 0	20	2	6.8/5.0	1	LF22000.00
LogoFloor Type 0	20	3	6.8/5.0	1	LF32000.00
LogoFloor Type 0	20	4	6.8/5.0	1	LF42000.00
LogoFloor Type 0	20	5	6.8/5.0	1	LF52000.00
LogoFloor Type 0	20	6	6.8/5.0	1	LF62000.00
LogoFloor Type 0	20	7	6.8/5.0	1	LF72000.00
LogoFloor Type 0	20	8	6.8/5.0	1	LF82000.00
LogoFloor Type 0	20	9	6.8/5.0	1	LF92000.00
LogoFloor Type 0	20	10	6.8/5.0	1	LF102000.00
LogoFloor Type 0	20	11	6.8/5.0	1	LF112000.00
LogoFloor Type 0	25	2	9.9/5.0	1	LF22500.00
LogoFloor Type 0	25	3	9.9/5.0	1	LF32500.00
LogoFloor Type 0	25	4	9.9/5.0	1	LF42500.00
LogoFloor Type 0	25	5	9.9/5.0	1	LF52500.00
LogoFloor Type 0	25	6	9.9/5.0	1	LF62500.00
LogoFloor Type 0	25	7	9.9/5.0	1	LF72500.00
LogoFloor Type 0	25	8	9.9/5.0	1	LF82500.00
LogoFloor Type 0	25	9	9.9/5.0	1	LF92500.00
LogoFloor Type 0	25	10	9.9/5.0	1	LF102500.00
LogoFloor Type 0	25	11	9.9/5.0	1	LF112500.00
LogoFloor Type 0	32	2	14.9/5.0	1	LF23200.00
LogoFloor Type 0	32	3	14.9/5.0	1	LF33200.00
LogoFloor Type 0	32	4	14.9/5.0	1	LF43200.00
LogoFloor Type 0	32	5	14.9/5.0	1	LF53200.00
LogoFloor Type 0	32	6	14.9/5.0	1	LF63200.00
LogoFloor Type 0	32	7	14.9/5.0	1	LF73200.00
LogoFloor Type 0	32	8	14.9/5.0	1	LF83200.00
LogoFloor Type 0	32	9	14.9/5.0	1	LF93200.00
LogoFloor Type 0	32	10	14.9/5.0	1	LF103200.00
LogoFloor Type 0	32	11	14.9/5.0	1	LF113200.00

LogoFloor Type 1



Type	Dimension [DN]	Number of heating circuits	Kv main supply/ heating circuit		Order Code
LogoFloor Type 1	20	2	2.2/5.0	1	LF22010.20
LogoFloor Type 1	20	3	2.2/5.0	1	LF32010.20
LogoFloor Type 1	20	4	2.2/5.0	1	LF42010.20
LogoFloor Type 1	20	5	2.2/5.0	1	LF52010.20
LogoFloor Type 1	20	6	2.2/5.0	1	LF62010.20
LogoFloor Type 1	20	7	2.2/5.0	1	LF72010.20
LogoFloor Type 1	20	8	2.2/5.0	1	LF82010.20
LogoFloor Type 1	20	9	2.2/5.0	1	LF92010.20
LogoFloor Type 1	20	10	2.2/5.0	1	LF102010.20
LogoFloor Type 1	20	11	2.2/5.0	1	LF112010.20
LogoFloor Type 1	25	2	3.4/5.0	1	LF22510.20
LogoFloor Type 1	25	3	3.4/5.0	1	LF32510.20
LogoFloor Type 1	25	4	3.4/5.0	1	LF42510.20
LogoFloor Type 1	25	5	3.4/5.0	1	LF52510.20
LogoFloor Type 1	25	6	3.4/5.0	1	LF62510.20
LogoFloor Type 1	25	7	3.4/5.0	1	LF72510.20
LogoFloor Type 1	25	8	3.4/5.0	1	LF82510.20
LogoFloor Type 1	25	9	3.4/5.0	1	LF92510.20
LogoFloor Type 1	25	10	3.4/5.0	1	LF102510.20
LogoFloor Type 1	25	11	3.4/5.0	1	LF112510.20
LogoFloor Type 1	32	2	5.0/5.1	1	LF23210.20
LogoFloor Type 1	32	3	5.0/5.1	1	LF33210.20
LogoFloor Type 1	32	4	5.0/5.1	1	LF43210.20
LogoFloor Type 1	32	5	5.0/5.1	1	LF53210.20
LogoFloor Type 1	32	6	5.0/5.1	1	LF63210.20
LogoFloor Type 1	32	7	5.0/5.1	1	LF73210.20
LogoFloor Type 1	32	8	5.0/5.1	1	LF83210.20
LogoFloor Type 1	32	9	5.0/5.1	1	LF93210.20
LogoFloor Type 1	32	10	5.0/5.1	1	LF103210.20
LogoFloor Type 1	32	11	5.0/5.1	1	LF113210.20
LogoFloor Type 1	20	2	6.8/5.0	1	LF22000.20
LogoFloor Type 1	20	3	6.8/5.0	1	LF32000.20
LogoFloor Type 1	20	4	6.8/5.0	1	LF42000.20
LogoFloor Type 1	20	5	6.8/5.0	1	LF52000.20
LogoFloor Type 1	20	6	6.8/5.0	1	LF62000.20
LogoFloor Type 1	20	7	6.8/5.0	1	LF72000.20
LogoFloor Type 1	20	8	6.8/5.0	1	LF82000.20
LogoFloor Type 1	20	9	6.8/5.0	1	LF92000.20
LogoFloor Type 1	20	10	6.8/5.0	1	LF102000.20
LogoFloor Type 1	20	11	6.8/5.0	1	LF112000.20
LogoFloor Type 1	25	2	9.9/5.0	1	LF22500.20
LogoFloor Type 1	25	3	9.9/5.0	1	LF32500.20
LogoFloor Type 1	25	4	9.9/5.0	1	LF42500.20
LogoFloor Type 1	25	5	9.9/5.0	1	LF52500.20
LogoFloor Type 1	25	6	9.9/5.0	1	LF62500.20
LogoFloor Type 1	25	7	9.9/5.0	1	LF72500.20
LogoFloor Type 1	25	8	9.9/5.0	1	LF82500.20
LogoFloor Type 1	25	9	9.9/5.0	1	LF92500.20
LogoFloor Type 1	25	10	9.9/5.0	1	LF102500.20
LogoFloor Type 1	25	11	9.9/5.0	1	LF112500.20
LogoFloor Type 1	32	2	14.9/5.0	1	LF23200.20
LogoFloor Type 1	32	3	14.9/5.0	1	LF33200.20
LogoFloor Type 1	32	4	14.9/5.0	1	LF43200.20
LogoFloor Type 1	32	5	14.9/5.0	1	LF53200.20
LogoFloor Type 1	32	6	14.9/5.0	1	LF63200.20
LogoFloor Type 1	32	7	14.9/5.0	1	LF73200.20
LogoFloor Type 1	32	8	14.9/5.0	1	LF83200.20
LogoFloor Type 1	32	9	14.9/5.0	1	LF93200.20
LogoFloor Type 1	32	10	14.9/5.0	1	LF103200.20
LogoFloor Type 1	32	11	14.9/5.0	1	LF113200.20

LogoFloor Type 2



Type	Dimension [DN]	Number of heating circuits	Kv main supply/ heating circuit		Order Code
LogoFloor Type 2	20	2	2.2/5.0	–	LF22010.10
LogoFloor Type 2	20	3	2.2/5.0	–	LF32010.10
LogoFloor Type 2	20	4	2.2/5.0	–	LF42010.10
LogoFloor Type 2	20	5	2.2/5.0	–	LF52010.10
LogoFloor Type 2	20	6	2.2/5.0	–	LF62010.10
LogoFloor Type 2	20	7	2.2/5.0	–	LF72010.10
LogoFloor Type 2	20	8	2.2/5.0	–	LF82010.10
LogoFloor Type 2	20	9	2.2/5.0	–	LF92010.10
LogoFloor Type 2	20	10	2.2/5.0	–	LF102010.10
LogoFloor Type 2	20	11	2.2/5.0	–	LF112010.10
LogoFloor Type 2	25	2	3.4/5.0	–	LF22510.10
LogoFloor Type 2	25	3	3.4/5.0	–	LF32510.10
LogoFloor Type 2	25	4	3.4/5.0	–	LF42510.10
LogoFloor Type 2	25	5	3.4/5.0	–	LF52510.10
LogoFloor Type 2	25	6	3.4/5.0	–	LF62510.10
LogoFloor Type 2	25	7	3.4/5.0	–	LF72510.10
LogoFloor Type 2	25	8	3.4/5.0	–	LF82510.10
LogoFloor Type 2	25	9	3.4/5.0	–	LF92510.10
LogoFloor Type 2	25	10	3.4/5.0	–	LF102510.10
LogoFloor Type 2	25	11	3.4/5.0	–	LF112510.10
LogoFloor Type 2	32	2	5.0/5.1	–	LF23210.10
LogoFloor Type 2	32	3	5.0/5.1	–	LF33210.10
LogoFloor Type 2	32	4	5.0/5.1	–	LF43210.10
LogoFloor Type 2	32	5	5.0/5.1	–	LF53210.10
LogoFloor Type 2	32	6	5.0/5.1	–	LF63210.10
LogoFloor Type 2	32	7	5.0/5.1	–	LF73210.10
LogoFloor Type 2	32	8	5.0/5.1	–	LF83210.10
LogoFloor Type 2	32	9	5.0/5.1	–	LF93210.10
LogoFloor Type 2	32	10	5.0/5.1	–	LF103210.10
LogoFloor Type 2	32	11	5.0/5.1	–	LF113210.10
LogoFloor Type 2	20	2	6.8/5.0	–	LF22000.10
LogoFloor Type 2	20	3	6.8/5.0	–	LF32000.10
LogoFloor Type 2	20	4	6.8/5.0	–	LF42000.10
LogoFloor Type 2	20	5	6.8/5.0	–	LF52000.10
LogoFloor Type 2	20	6	6.8/5.0	–	LF62000.10
LogoFloor Type 2	20	7	6.8/5.0	–	LF72000.10
LogoFloor Type 2	20	8	6.8/5.0	–	LF82000.10
LogoFloor Type 2	20	9	6.8/5.0	–	LF92000.10
LogoFloor Type 2	20	10	6.8/5.0	–	LF102000.10
LogoFloor Type 2	20	11	6.8/5.0	–	LF112000.10
LogoFloor Type 2	25	2	9.9/5.0	–	LF22500.10
LogoFloor Type 2	25	3	9.9/5.0	–	LF32500.10
LogoFloor Type 2	25	4	9.9/5.0	–	LF42500.10
LogoFloor Type 2	25	5	9.9/5.0	–	LF52500.10
LogoFloor Type 2	25	6	9.9/5.0	–	LF62500.10
LogoFloor Type 2	25	7	9.9/5.0	–	LF72500.10
LogoFloor Type 2	25	8	9.9/5.0	–	LF82500.10
LogoFloor Type 2	25	9	9.9/5.0	–	LF92500.10
LogoFloor Type 2	25	10	9.9/5.0	–	LF102500.10
LogoFloor Type 2	25	11	9.9/5.0	–	LF112500.10
LogoFloor Type 2	32	2	14.9/5.0	–	LF23200.10
LogoFloor Type 2	32	3	14.9/5.0	–	LF33200.10
LogoFloor Type 2	32	4	14.9/5.0	–	LF43200.10
LogoFloor Type 2	32	5	14.9/5.0	–	LF53200.10
LogoFloor Type 2	32	6	14.9/5.0	–	LF63200.10
LogoFloor Type 2	32	7	14.9/5.0	–	LF73200.10
LogoFloor Type 2	32	8	14.9/5.0	–	LF83200.10
LogoFloor Type 2	32	9	14.9/5.0	–	LF93200.10
LogoFloor Type 2	32	10	14.9/5.0	–	LF103200.10
LogoFloor Type 2	32	11	14.9/5.0	–	LF113200.10

Measurement for LogoFloor manifolds Typ 0 and 1

Electronic heat meters

Electronic heat meter LogoPlus 0,6 m³/h

Ultrasonic heat meters

Ultrasonic heat meter Multical 302 0,6 m³/h, G3/4B, 165 mm, PN16; without remote reading, with M-Bus remote reading or with wireless wM-Bus remote reading.



Type	Model		Order Code
Electronic heat meter Logoplus 0,6 m ³ /h	Measurement without remote reading	1	M1289111.0001
Ultrasonic heat meter MC 302	Measurement without remote reading	1	KM320.1111.0000.00
Electronic heat meter Logoplus 0,6 m ³ /h; M-Bus	Measurement with M-Bus remote reading	1	M1289121.0001
Ultrasonic heat meter MC 302; M-Bus	Measurement with M-Bus remote reading	1	KM320.1111.3000.00
Electronic heat meter Logoplus 0,6 m ³ /h; wM-Bus	Measurement with wireless wM-Bus remote reading	1	M1289141.0001
Ultrasonic heat meter MC 302; wM-Bus	Measurement with wireless wM-Bus remote reading	1	KM320.1111.2000.00

Measurement and regulation for LogoFloor manifolds Typ 2

Electronic heat meters

Electronic heat meter LogoPlus 0,6 m³/h, electrothermal actuator ON / OFF, without current off 230 V, Meibes room thermostat with weekly program.

Ultrasonic heat meters with remote reading and thermostats

Ultrasonic heat meter Multical 302 0,6 m³/h, G3/4B, 165 mm, PN16; without remote reading, with M-Bus remote reading or with wireless wM-Bus remote reading; electrothermal actuator ON / OFF, without current off 230 V, Meibes room thermostat with weekly program.



Type	Model		Order Code
Electronic heat meter Logoplus 0,6 m ³ /h	Measurement and regulation without remote reading	1	LF001.110
Ultrasonic heat meter MC 302	Measurement and regulation without remote reading	1	LF050.110
Electronic heat meter Logoplus 0,6 m ³ /h; M-Bus	Measurement and regulation with M-Bus remote reading	1	LF003.110
Ultrasonic heat meter MC 302; M-Bus	Measurement and regulation with M-Bus remote reading	1	LF053.110
Electronic heat meter Logoplus 0,6 m ³ /h; wM-Bus	Measurement and regulation with wireless wM-Bus remote reading	1	LF002.110
Ultrasonic heat meter MC 302; wM-Bus	Measurement and regulation with wireless wM-Bus remote reading	1	LF052.110

Cabinets for LogoFloor Type 0, 1, 2

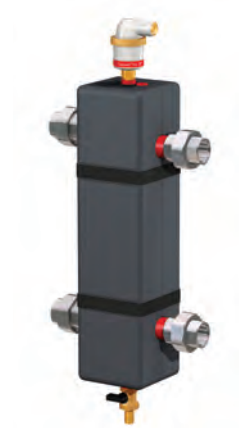


Type	Cabinet size H x D x W [mm]		Order Code
Cabinet into the wall	800 x 180 x 650	1	MX10255.650.800.180
Cabinet into the wall	800 x 180 x 850	1	MX10255.850.800.180
Cabinet into the wall	800 x 180 x 1050	1	MX10255.1050.800.180
Cabinet into the wall	800 x 180 x 1200	1	MX10255.1200.800.180
Cabinet into the wall	800 x 180 x 1450	1	MX10255.1450.800.180
Cabinet into the wall	800 x 180 x 1600	1	MX10255.1600.800.180

FLEXBALANCE ECOPLUS C

The FlexBalance EcoPlus C allows hydraulic separation between the primary and secondary circuits of commercial heating and cooling systems with air and dirt separation.


- No more overloaded pumps.
- Improved accurate regulation of the system.
- Considerably improved heat transfer.
- Higher output by the system.
- Intergration of air and dirt separation.
- Compact.
- Heat transfer level of 99%.
- Low flow resistance.
- Equipped with a Flexvent Top 3/8" white (28510).
- Equipped with a brass drain valve 1/2" and hose connection.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Minimum/Maximum working pressure: 0.2 / 10 bar.
- Minimum/Maximum working temperature: -10 °C / 110 °C.
- Vessel: steel ST 37/2, red coated RAL 3002.
- Insulation: EPP.
- A temperature sensor can be inserted in the sensor connection (G 1/2") with an immersion pipe. Inner diameter: 12.5 mm.



FlexBalance EcoPlus C

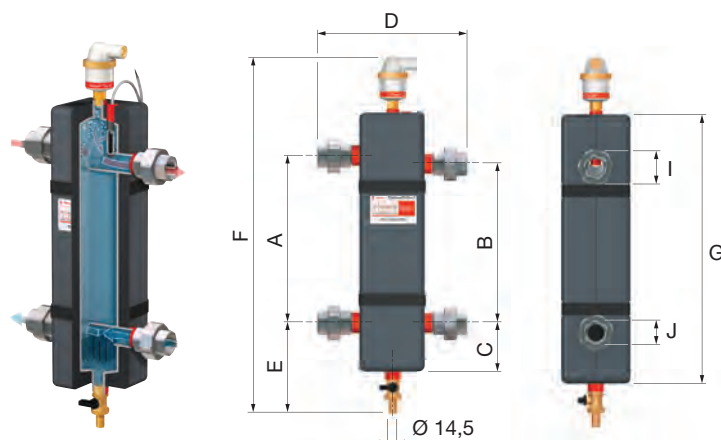
- Coupling (4x) with conical seal, galvanized steel.



Type	Connec- tion (4x)	Capa- city [l]	Max. power [kW]	Flow rate [l/s]	K _v * [m³/h] (ΔP = 1 bar)	Length immersion pipe [mm]	Weight [kg]		Order Code
FlexBalance EcoPlus C 1	G 1" F	1.4	60	0.7	26.6	80	11	1	28377
FlexBalance EcoPlus C 1 1/4	G 1 1/4" F	2.3	100	1.2	44.0	86	15	1	28378
FlexBalance EcoPlus C 1 1/2	G 1 1/2" F	3.8	140	1.6	64.0	92	20	1	28379
FlexBalance EcoPlus C 2	G 2" F	4.5	200	2.6	104.0	104	24	1	28380

* $K_v = Q / \sqrt{\Delta P}$ Q: Flow [m³/h] ΔP: Pressure loss over the product [bar]
Flow factor K_v: Rate of flow [m³/h] which results in a 1 bar pressure drop across the product.

FlexBalance EcoPlus C - Dimensions



Type	Dimensions								
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	I [mm]	J [mm]
FlexBalance EcoPlus C 1	290	276	85	262	160	620	455	55	38
FlexBalance EcoPlus C 1 ¼	340	321	85	280	160	680	505	67	48
FlexBalance EcoPlus C 1 ½	340	320	85	320	160	680	505	74	53
FlexBalance EcoPlus C 2	400	373	95	326	170	755	585	90	65

FLEXBALANCE BASIC ECOPLUS 1" - 2"

FlexBalance Basic EcoPlus

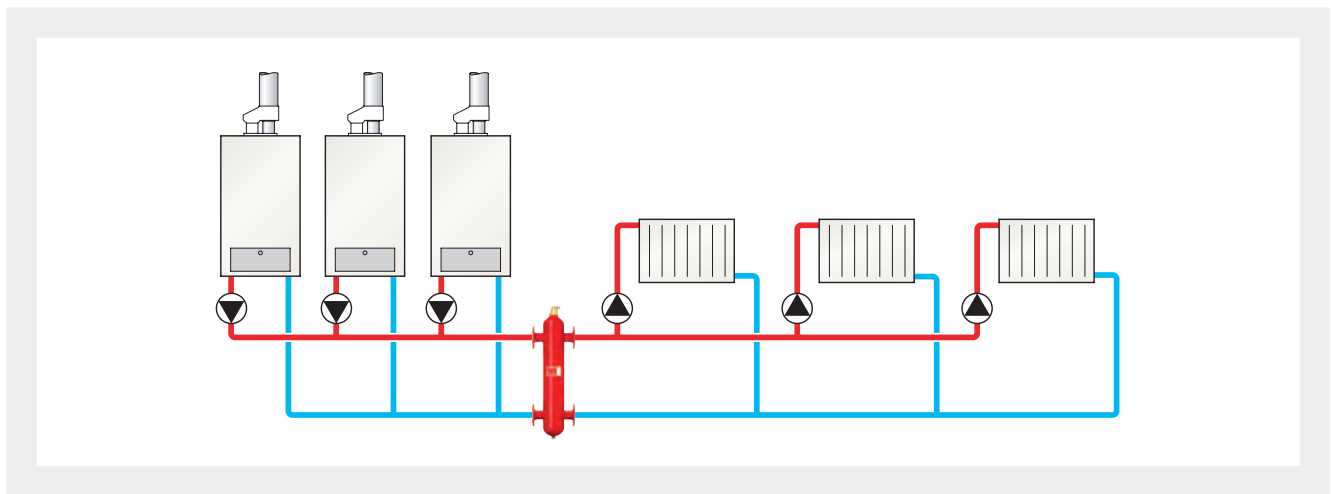


Type	Conn- ection	Capa- city [l]	Dimensions		Max. Power [kW]	Flow [m³/h]		Order Code
			Ø [mm]	H [mm]				
FlexBalance Basic EcoPlus 1"	G 1" F	1.0	76	600	40	3.5	1	M66372.5
FlexBalance Basic EcoPlus 1 ¼"	G 1 ¼" F	1.6	89	670	70	4.5	1	M66372.6
FlexBalance Basic EcoPlus 1 ½"	G 1 ½" F	2.7	114	670	100	6.0	1	M66372.7
FlexBalance Basic EcoPlus 2"	G 2" F	4.5	114	745	156	9.0	1	M66372.8

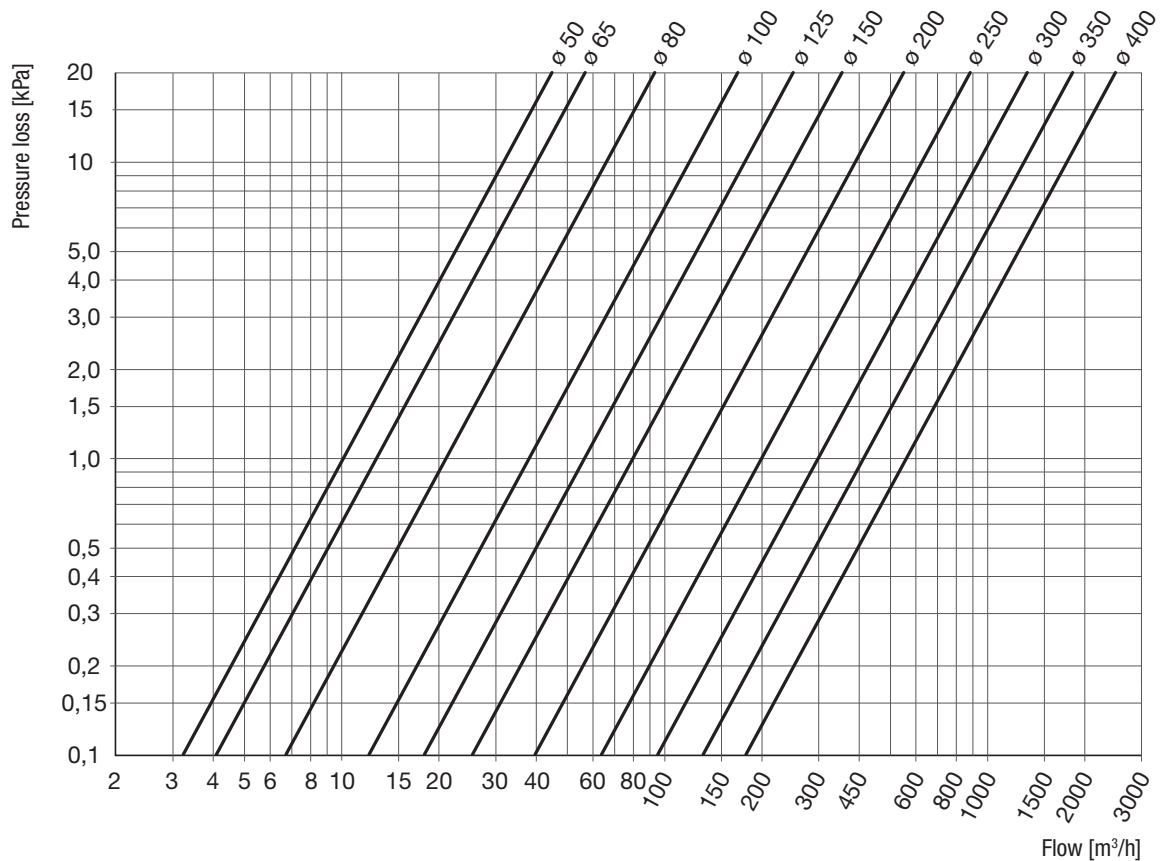
FLEXBALANCE HYDRAULIC BALANCER

For balancing hydraulic pressure in heating installations consisting of multiple circuits and pumps. FlexBalance hydraulic balancers are supplied with an automatic air vent and have a connection for a temperature sensor. The sensor can be connected using an immersion pipe (G 1/2").

- No more overloaded pumps.
- Improved accurate regulation of the system.
- Considerably improved heat transfer.
- Higher output by the system.



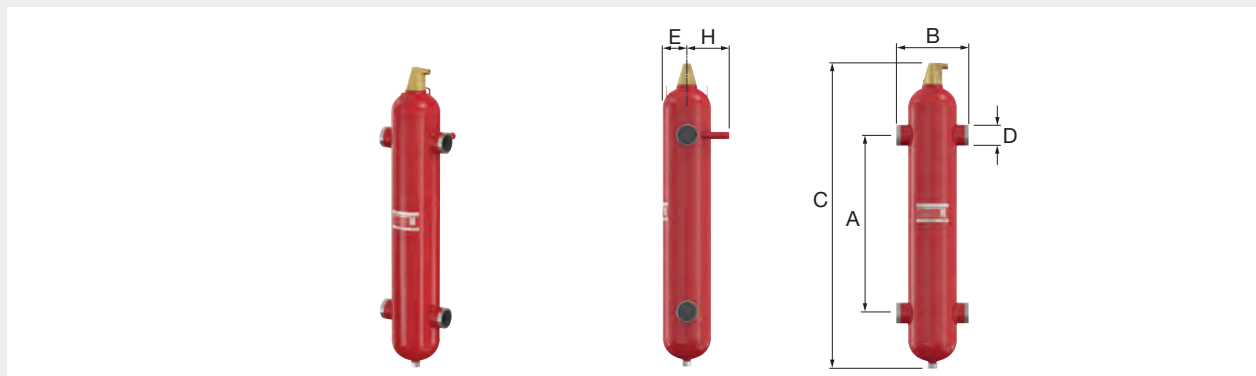
FlexBalance - Flow resistance




FlexBalance S

Conventional VDMA 24770 hydraulic balancer with welded connections.

- Suitable for addition of glycol-based anti-freeze up to 50%.
- Minimum/Maximum working pressure: 0.2 - 10 bar.
- Suitable for systems with a maximum flow temperature of 120 °C.
- Maximum flow rate:
Primary circuit: 2 m/s
Secondary circuit: 1.2 m/s.



Type	Capacity [l]	Connection DN	D [mm]	Capacity [kW] *	Flow in the system [m³/h]	K _v ** [m³/h] (ΔP = 1 bar)	Weight [kg]		Order Code
FlexBalance S 50	17	50	60.3	100 - 200	5 - 15	100	15	1	28431
FlexBalance S 65	21	65	76.1	180 - 330	10 - 17	136	16	1	28432
FlexBalance S 80	65	80	88.9	300 - 450	15 - 30	211	25	1	28433
FlexBalance S 100	78	100	114.3	400 - 770	25 - 55	378	33	1	28434

* Depending on flow velocity.

** $K_v = Q / \sqrt{\Delta P}$ Q: Flow [m³/h] ΔP: Pressure loss over the product [bar]

Flow factor K_v: Rate of flow [m³/h] which results in a 1 bar pressure drop across the product.



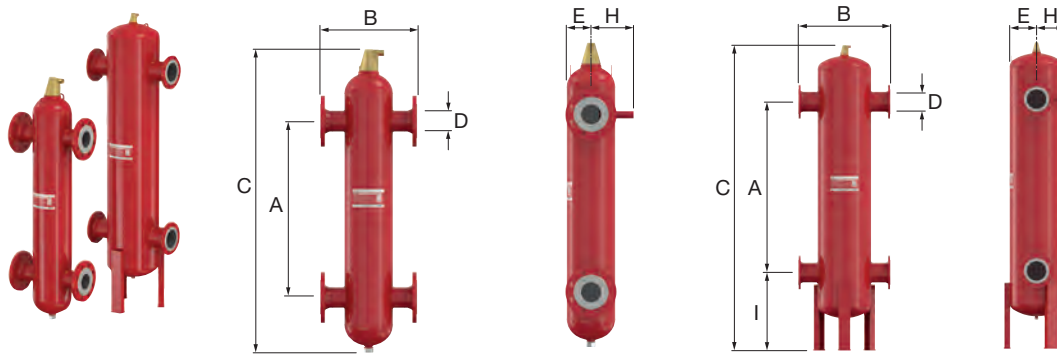
FlexBalance S - Dimensions


Type	Dimensions				
	A [mm]	B [mm]	C [mm]	E [mm]	H [mm]
FlexBalance S 50	490	260	900	88	154
FlexBalance S 65	635	260	1045	88	154
FlexBalance S 80	745	370	1340	135	188
FlexBalance S 100	965	366	1585	135	188

FlexBalance F

Conventional VDMA 24770 hydraulic balancer with flanged connections.

- Suitable for addition of glycol-based anti-freeze up to 50%.
- Minimum/Maximum working pressure: 0.2 / 10 bar.
- Suitable for systems with a maximum flow temperature of 120 °C.
- Maximum flow rate:
Primary circuit: 2 m/s
Secondary circuit: 1.2 m/s.
- FlexBalance DN150 and larger: Standard equipped with legs.



Type	Capacity [l]	Connection		Capacity [kW] *	Flow in the system [m³/h]	K _v ** [m³/h] (ΔP = 1 bar)	Weight [kg]		Order Code
		DN	D [mm]						
FlexBalance F 50	17	50	60.3	100 - 200	5 - 15	100	25	1	28441
FlexBalance F 65	21	65	76.1	180 - 330	10 - 17	136	28	1	28442
FlexBalance F 65 ***	21	65	76.1	180 - 330	10 - 17	136	28	1	28453
FlexBalance F 80	65	80	88.9	300 - 450	15 - 30	211	40	1	28443
FlexBalance F 100	78	100	114.3	400 - 770	25 - 55	378	51	1	28444
FlexBalance F 125	181	125	139.7	700 - 1150	35 - 80	560	97	1	28445
FlexBalance F 150	336	150	168.3	1000 - 1750	55 - 120	775	180	1	28446
FlexBalance F 200	800	200	219.1	1500 - 2800	90 - 200	1230	295	1	28447

* Depending on flow velocity.

** $K_v = Q / \sqrt{\Delta P}$ Q: Flow [m³/h] ΔP: Pressure loss over the product [bar]

Flow factor K_v: Rate of flow [m³/h] which results in a 1 bar pressure drop across the product.

*** 4 hole flanged version. Not according to EN 1092-1 PN16.



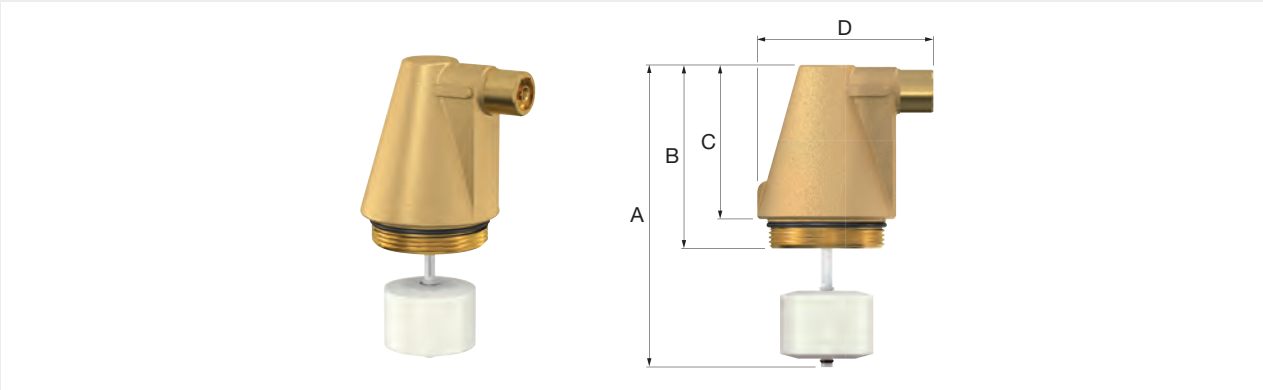
FlexBalance F - Dimensions


Type	Dimensions					
	A [mm]	B [mm]	C [mm]	E [mm]	H [mm]	I [mm]
FlexBalance F 50	490	350	900	88	154	-
FlexBalance F 65	635	350	1045	88	154	-
FlexBalance F 80	745	470	1340	135	188	-
FlexBalance F 100	965	470	1585	135	188	-
FlexBalance F 125	1180	635	2065	180	213	-
FlexBalance F 150	1430	774	2585	225	237	655
FlexBalance F 200	1860	1000	3355	300	277	825

Spare vent cap L

Cone-shaped air chamber equipped with a long float to create more distance to the vent valve. This reduces the risk of contamination of the valve seat to a minimum.

- Maximum system working pressure: 25 bar.
- Maximum working pressure: 10 bar.

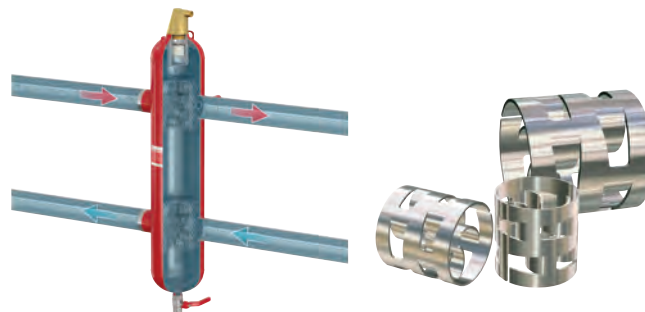


Type	Used for	Dimensions					Order Code
		A [mm]	B [mm]	C [mm]	D [mm]		
Spare vent cap L	Flamcovent (Smart) DN 50 - 600, Flamcovent Clean (Smart) DN 50 - 600, FlexBalance (Plus)	155	94	79	90	1	28555

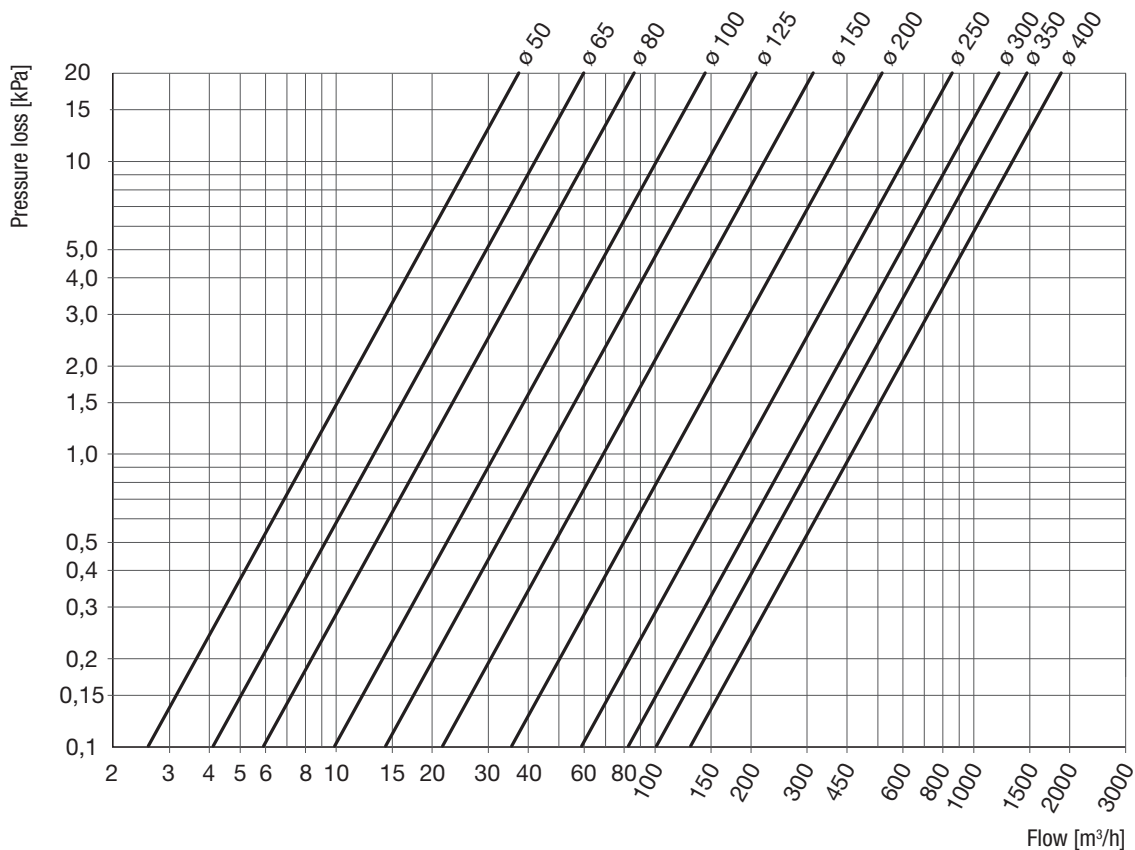
FLEXBALANCE PLUS HYDRAULIC BALANCER

For balancing hydraulic pressure in heating installations consisting of multiple circuits and pumps. FlexBalance Plus hydraulic balancers are supplied with an automatic air vent, a dirt chamber and a connection for a temperature sensor. The sensor can be connected using an immersion pipe (G ½"). The use of our patented PALL-ring technique enables a better response, returns higher efficiency, decreases total built-in height and shares its deaeration and dirt separation benefits.

- Intergration of air and dirt separation.
- No more overloaded pumps.
- Improved accurate regulation of the system.
- Considerably improved heat transfer.
- Higher output by the system.
- Excellent hydraulic control in combination with a large air and dirt separation capacity.
- Smaller construction height than standard hydraulic separators.



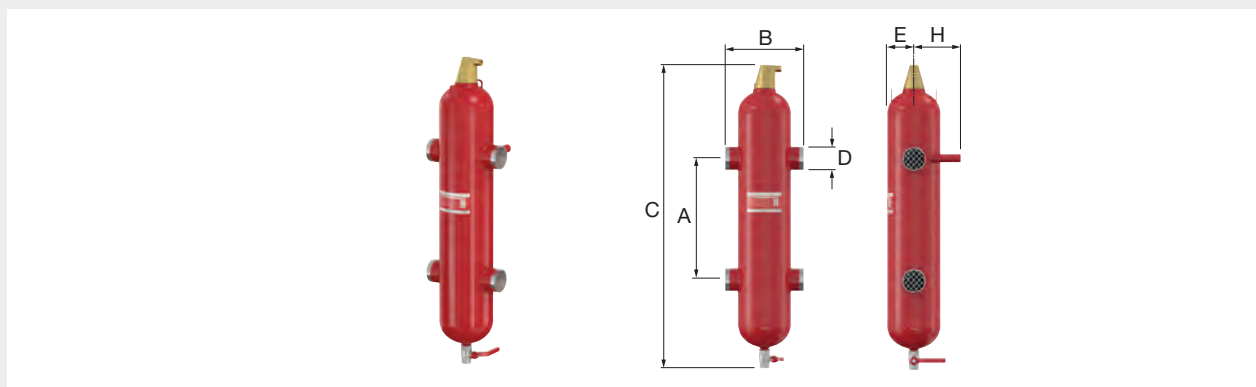
FlexBalance Plus - Flow resistance




FlexBalance Plus S

Conventional VDMA 24770 hydraulic balancer with welded connections.

- Suitable for addition of glycol-based anti-freeze up to 50%.
- Minimum/Maximum working pressure: 0.2 / 10 bar.
- Suitable for systems with a maximum flow temperature of 120 °C.
- Maximum flow rate:
Primary circuit: 2 m/s
Secondary circuit: 1.2 m/s.



Type	Capacity [l]	Connection DN	D [mm]	Capacity [kW] *	Flow in the system [m³/h]	K _v ** [m³/h] (ΔP = 1 bar)	Weight [kg]		Order Code
FlexBalance Plus S 50	17.5	50	60.3	100 - 200	5 - 15	81	18	1	28460
FlexBalance Plus S 65	17.5	65	76.1	180 - 330	10 - 17	131	18	1	28461
FlexBalance Plus S 80	56.0	80	88.9	300 - 450	15 - 30	189	35	1	28462
FlexBalance Plus S 100	56.0	100	114.3	400 - 770	25 - 55	317	37	1	28463

* Depending on flow velocity.

** $K_v = Q / \sqrt{\Delta P}$ Q: Flow [m³/h] ΔP: Pressure loss over the product [bar]

Flow factor K_v: Rate of flow [m³/h] which results in a 1 bar pressure drop across the product.



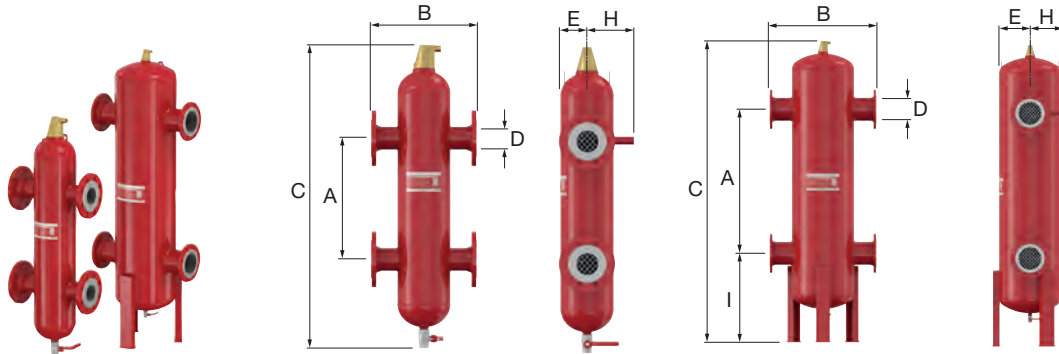
FlexBalance Plus S - Dimensions


Type	Dimensions				
	A [mm]	B [mm]	C [mm]	E [mm]	H [mm]
FlexBalance Plus S 50	400	260	950	88	154
FlexBalance Plus S 65	400	260	950	88	154
FlexBalance Plus S 80	625	370	1265	135	188
FlexBalance Plus S 100	625	366	1265	135	188

FlexBalance Plus F

Conventional VDMA 24770 hydraulic balancer with flanged connections.

- Suitable for addition of glycol-based anti-freeze up to 50%.
- Minimum/Maximum working pressure: 0.2 / 10 bar.
- Suitable for systems with a maximum flow temperature of 120 °C.
- Maximum flow rate:
Primary circuit: 2 m/s
Secondary circuit: 1.2 m/s.
- FlexBalance Plus DN150 and larger: Standard equipped with legs.



Type	Capacity [l]	Connection		Capacity [kW] *	Flow in the system [m³/h]	K _v ** [m³/h] (ΔP = 1 bar)	Weight [kg]		Order Code
		DN	D [mm]						
FlexBalance Plus F 50	17.5	50	60.3	100 - 200	5 - 15	81	28	1	28480
FlexBalance Plus F 65	17.5	65	76.1	180 - 330	10 - 17	131	30	1	28481
FlexBalance Plus F 65 ***	17.5	65	76.1	180 - 330	10 - 17	131	30	1	28479
FlexBalance Plus F 80	56.0	80	88.9	300 - 450	15 - 30	189	50	1	28482
FlexBalance Plus F 100	56.0	100	114.3	400 - 770	25 - 55	317	55	1	28483
FlexBalance Plus F 125	146.0	125	139.7	700 - 1150	35 - 80	460	109	1	28484
FlexBalance Plus F 150	272.0	150	168.3	1000 - 1750	55 - 120	679	197	1	28485
FlexBalance Plus F 200	671.0	200	219.1	1500 - 2800	90 - 200	1135	342	1	28486
FlexBalance Plus F 250	1547.0	250	273.0	2500 - 4500	110 - 350	1870	657	1	28487
FlexBalance Plus F 300	1547.0	300	323.9	4200 - 6400	150 - 500	2620	752	1	28488

* Depending on flow velocity.

** $K_v = Q / \sqrt{\Delta P}$ Q: Flow [m³/h] ΔP: Pressure loss over the product [bar]

Flow factor K_v: Rate of flow [m³/h] which results in a 1 bar pressure drop across the product.

*** 4 hole flanged version. Not according to EN 1092-1 PN16.



FlexBalance Plus F - Dimensions

Type	Dimensions					
	A [mm]	B [mm]	C [mm]	E [mm]	H [mm]	I [mm]
FlexBalance Plus F 50	400	350	950	88	154	-
FlexBalance Plus F 65	400	350	950	88	154	-
FlexBalance Plus F 80	625	470	1265	135	188	-
FlexBalance Plus F 100	625	470	1265	135	188	-
FlexBalance Plus F 125	830	635	1767	180	213	-
FlexBalance Plus F 150	1040	774	2175	225	237	645
FlexBalance Plus F 200	1400	1000	2895	300	277	825
FlexBalance Plus F 250	1850	1220	3646	400	325	977
FlexBalance Plus F 300	1850	1220	3646	400	369	977


BOILER GUARDS

MeiFlow L BG Boiler guard with hydraulic diverter

Welded round vessel with connecting pieces made from seamless steel pipe including BigFixLock nut. A cleaning opening with a 1" drain ball valve is featured in the base. An air vent which can be shut off automatically and an immersion sleeve for mounting of a temperature sensor are provided in the top section, including magnetite separator (depending on version), foot adjustable in height and EPP insulation.

- With hydraulic diverter.
- Max. permissible pressure rating: PN 6 (PN 10 upon request).
- Max. permissible temperature: 110 °C.



Type	Power [kW]	Pump- capacity [m³/h]	Magnetite separator	Connection		Axial distance		Order Code
				DN	mm			
MeiFlow L BG 135	135	6	✓	50	60.3	225	1	M66374.50M
MeiFlow L BG 280	280	12	✓	80	88.9	225	1	M66374.80M
MeiFlow L BG 700	700	30	✓	100	114.3	340	1	M66374.100M
MeiFlow L BG 1150	1150	50	✓	150	168.3	450	1	M66374.152M
MeiFlow L BG 2300	2300	100	✓	200	219.1	450	1	M66374.201M
MeiFlow L BG 135	135	6		50	60.3	225	1	M66374.50
MeiFlow L BG 280	280	12		80	88.9	225	1	M66374.80
MeiFlow L BG 700	700	30		100	114.3	340	1	M66374.100
MeiFlow L BG 1150	1150	50		150	168.3	450	1	M66374.152
MeiFlow L BG 2300	2300	100		200	219.1	450	1	M66374.201


The stated outputs and pump capacities are based on a 20 K temperature difference between flow line and return line and a maximum flow speed of 1.5 m/s.

MeiFlow L BG Boiler guard without hydraulic diverter

Welded round vessel with connecting pieces made from seamless steel pipe including BigFixLock nut. A cleaning opening with a 1" drain ball valve is featured in the base. An air vent which can be shut off automatically and an immersion sleeve for mounting of a temperature sensor are provided in the top section, including 1 magnetite separator (additional magnetite separator optional), foot adjustable in height and EPP insulation.

- With one magnetite separator.
- Max. permissible pressure rating: PN 6 (PN 10 upon request).
- Max. permissible temperature: 110 °C.



Type	Power [kW]	Pump- capacity [m³/h]	Magnetite separator	Connection		Axial distance		Order Code
				DN	mm			
MeiFlow L BG 135	135	6	✓	50	60.3	225	1	M66374.52M
MeiFlow L BG 280	280	12	✓	80	88.9	225	1	M66374.81M
MeiFlow L BG 700	700	30	✓	100	114.3	340	1	M66374.101M
MeiFlow L BG 1150	1150	50	✓	150	168.3	450	1	M66374.154M
MeiFlow L BG 2300	2300	100	✓	200	219.1	450	1	M66374.202M
MeiFlow L BG 135	135	6		50	60.3	225	1	M66374.52
MeiFlow L BG 280	280	12		80	88.9	225	1	M66374.81
MeiFlow L BG 700	700	30		100	114.3	340	1	M66374.101
MeiFlow L BG 1150	1150	50		150	168.3	450	1	M66374.154
MeiFlow L BG 2300	2300	100		200	219.1	450	1	M66374.202


The stated outputs and pump capacities are based on a 20 K temperature difference between flow line and return line and a maximum flow speed of 1.5 m/s.

BigFixLock for MeiFlow L BG



Unions from boiler guard to manifold.

- 1 pair (2 x).

Type	Ø pipe (HZW)*		Ø pipe (valve, angle, heat generator)*		Axial dis- tance		Order Code
	DN	External dimension [mm]	DN	External dimension [mm]			
BigFixLock DN 50 - DN 100	50	60.3	100	114.3	225	1	M66258.632
BigFixLock DN 80 - DN 100	80	88.9	100	114.3	225	1	M66258.634
BigFixLock DN 100 - DN 150	100	114.3	150	168.3	340	1	M66258.831
BigFixLock DN 150 - DN 150	150	168.3	150	168.3	450	1	M66259.81
BigFixLock DN 200 - DN 200	200	219.1	200	219.1	450	1	M66259.91

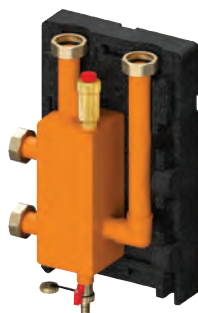
*HZW = Boiler guard / V= Manifold / W = Angle / WEZ = Heat generator


MeiFlow S BG - Boiler Guard

Component for boiler connection system up to 70 kW.

Optionally with hydraulic diverter (orange) or without hydraulic diverter (black) including air / gas separator, dirt / sludge separator and a magnetite separator.

Horizontal and vertical axial distance 125 mm. Including immersion sleeve for flow line sensor with diameters up to 10 mm and insulation.




Type	Hydraulic balancer	Power * [kW]	Side connections			Order Code
			DN	"		
Boiler guard S DN 25 orange	✓	50	DN 25	1 1/2" F	1	M66393.21
Boiler guard S DN 25 orange without a magnetite separator	✓	50	DN 25	1 1/2"	1	M66391.2
Boiler guard S DN 32 orange	✓	70	DN 32	2" F	1	M66393.31
Boiler guard S DN 32 orange without a magnetite separator	✓	70	DN 32	2"	1	M66391.3
Boiler guard S DN 25 black	-	50	DN 25	1 1/2" F	1	M66392.21
Boiler guard S DN 25 black without a magnetite separator	-	50	DN 25	1 1/2"	1	M66390.2
Boiler guard S DN 32 black	-	70	DN 32	2" F	1	M66392.31
Boiler guard S DN 32 black without a magnetite separator	-	70	DN 32	2"	1	M66390.3

*at $\Delta T = 20\text{ K}$.

Connector set for direct installation

For pump groups on boiler guard without manifold.




Type	Model		Order Code
Connector set 1 1/2	1 1/2" M × 1 1/2" F	1	M66356.9

INOFLEX STAINLESS CORRUGATED PIPE

inoflex - Fixed length stainless steel connection pipes



- Flexible on several planes.
- Corrugated pipe ends machined to be flat sealing at the factory.
- Scope of supply with 2 captive MS nuts and 2 seals.
- Stainless steel corrugated pipe material no.1.4404 in fixed lengths.
- With and without insulation (insulation thickness 13 mm).
- Insulated corrugated pipe can be used up to a max. 105 °C (constant temperature).


Type	Connection [DN]	[""]	Inclu- ding insula- tion	Length * [mm]	Weight [kg]		Order Code
Inoflex - Fixed DN12 x 300	12	1/2" F	✓	300	1.40	1	M46154.30S
Inoflex - Fixed DN12 x 500	12	1/2" F	✓	500	0.14	1	M46154.50S
Inoflex - Fixed DN12 x 700	12	1/2" F	✓	700	0.18	1	M46154.70S
Inoflex - Fixed DN12 x 1000	12	1/2" F	✓	1000	0.26	1	M46154.100S
Inoflex - Fixed DN16 x 300	16	3/4" F	✓	300	0.16	1	M46153.30S
Inoflex - Fixed DN16 x 500	16	3/4" F	✓	500	0.19	1	M46153.50S
Inoflex - Fixed DN16 x 700	16	3/4" F	✓	700	0.23	1	M46153.70S
Inoflex - Fixed DN16 x 1000	16	3/4" F	✓	1000	0.30	1	M46153.100S
Inoflex - Fixed DN20 x 300	20	1" F	✓	300	1.60	1	M46152.30S
Inoflex - Fixed DN20 x 500	20	1" F	✓	500	1.60	1	M46152.50S
Inoflex - Fixed DN20 x 700	20	1" F	✓	700	1.60	1	M46152.70S
Inoflex - Fixed DN20 x 1000	20	1" F	✓	1000	0.40	1	M46152.100S
Inoflex - Fixed DN25 x 300	25	1 1/4" F	✓	300	0.27	1	M46151.30S
Inoflex - Fixed DN25 x 500	25	1 1/4" F	✓	500	0.34	1	M46151.50S
Inoflex - Fixed DN25 x 700	25	1 1/4" F	✓	700	1.90	1	M46151.70S
Inoflex - Fixed DN25 x 1000	25	1 1/4" F	✓	1000	0.48	1	M46151.100S
Inoflex - Fixed DN32 x 300	32	1 1/2" F	✓	300	0.35	1	M46150.30S
Inoflex - Fixed DN32 x 500	32	1 1/2" F	✓	500	0.44	1	M46150.50S
Inoflex - Fixed DN32 x 700	32	1 1/2" F	✓	700	0.52	1	M46150.70S
Inoflex - Fixed DN32 x 1000	32	1 1/2" F	✓	1000	0.66	1	M46150.100S
Inoflex - Fixed DN12 x 300	12	1/2" F	-	300	0.08	1	M46154.30
Inoflex - Fixed DN12 x 500	12	1/2" F	-	500	0.10	1	M46154.50
Inoflex - Fixed DN12 x 700	12	1/2" F	-	700	0.12	1	M46154.70
Inoflex - Fixed DN12 x 1000	12	1/2" F	-	1000	0.14	1	M46154.100
Inoflex - Fixed DN16 x 300	16	3/4" F	-	300	0.12	1	M46153.30
Inoflex - Fixed DN16 x 500	16	3/4" F	-	500	0.15	1	M46153.50
Inoflex - Fixed DN16 x 700	16	3/4" F	-	700	1.60	1	M46153.70
Inoflex - Fixed DN16 x 1000	16	3/4" F	-	1000	1.60	1	M46153.100
Inoflex - Fixed DN20 x 300	20	1" F	-	300	0.17	1	M46152.30
Inoflex - Fixed DN20 x 500	20	1" F	-	500	0.22	1	M46152.50
Inoflex - Fixed DN20 x 700	20	1" F	-	700	1.60	1	M46152.70
Inoflex - Fixed DN20 x 1000	20	1" F	-	1000	0.30	1	M46152.100
Inoflex - Fixed DN25 x 300	25	1 1/4" F	-	300	0.24	1	M46151.30
Inoflex - Fixed DN25 x 500	25	1 1/4" F	-	500	1.90	1	M46151.50
Inoflex - Fixed DN25 x 700	25	1 1/4" F	-	700	0.35	1	M46151.70
Inoflex - Fixed DN25 x 1000	25	1 1/4" F	-	1000	1.90	1	M46151.100
Inoflex - Fixed DN32 x 300	32	1 1/2" F	-	300	0.29	1	M46150.30
Inoflex - Fixed DN32 x 500	32	1 1/2" F	-	500	0.38	1	M46150.50
Inoflex - Fixed DN32 x 700	32	1 1/2" F	-	700	2.50	1	M46150.70
Inoflex - Fixed DN32 x 1000	32	1 1/2" F	-	1000	0.54	1	M46150.100

* Other lengths available upon request.

inoflexi stainless steel stretch connection pipes




- Extendable to 100%.
- Flexible on several planes.
- Material no.: 1.4404 / 1.4305 in standard length (shrunk).
- Welded connections, conical (M) on one side and moving flat sealing union nut on the other, 1× seal.
- F × M standard length dimension.

Type	Connection [DN]	Connection ["]	Standard- length [mm]	Weight [kg]		Order Code
Inoflexi - Stretch DN 10 x 80	10	3/8" F x 3/8" M	80	0.05	1	M46001
Inoflexi - Stretch DN 10 x 105	10	3/8" F x 3/8" M	105	0.06	1	M46002
Inoflexi - Stretch DN 15 x 80	15	1/2" F x 1/2" M	80	0.08	1	M46003
Inoflexi - Stretch DN 15 x 105	15	1/2" F x 1/2" M	105	0.09	1	M46004
Inoflexi - Stretch DN 15 x 180	15	1/2" F x 1/2" M	180	0.11	1	M46005
Inoflexi - Stretch DN20 x 80	20	3/4" F x 3/4" M	80	0.13	1	M46009
Inoflexi - Stretch DN20 x 105	20	3/4" F x 3/4" M	105	0.15	1	M46010
Inoflexi - Stretch DN20 x 175	20	3/4" F x 3/4" M	175	0.21	1	M46011
Inoflexi - Stretch DN25 x 80	25	1" F x 1" M	80	0.20	1	M46012
Inoflexi - Stretch DN25 x 105	25	1" F x 1" M	105	0.22	1	M46013
Inoflexi - Stretch DN25 x 180	25	1" F x 1" M	180	0.28	1	M46014
Inoflexi - Stretch DN32 x 85	32	1 1/4" F x 1 1/4" M	85	0.32	1	M46015
Inoflexi - Stretch DN32 x 105	32	1 1/4" F x 1 1/4" M	105	0.36	1	M46016
Inoflexi - Stretch DN32 x 175	32	1 1/4" F x 1 1/4" M	175	0.44	1	M46017
Inoflexi - Stretch DN40 x 130	40	1 1/2" F x 1 1/2" M	130	0.47	1	M46018
Inoflexi - Stretch DN40 x 205	40	1 1/2" F x 1 1/2" M	205	0.59	1	M46019
Inoflexi - Stretch DN 50 x 120	50	2" F x 2" M	120	0.56	1	M46020
Inoflexi - Stretch DN 50 x 185	50	2" F x 2" M	185	0.71	1	M46021
Inoflexi - Stretch DN16 x 80	16	3/4" M x 1/2" F	80	0.12	1	M46006
Inoflexi - Stretch DN16 x 105	16	3/4" M x 1/2" F	105	0.14	1	M46007
Inoflexi - Stretch DN16 x 180	16	3/4" M x 1/2" F	180	0.18	1	M46008

inoflex stainless steel corrugated pipe - Rolled goods




Type	Connection [DN]	Length [m]	Weight [kg]		Order Code
Inoflex - Rolled goods DN12 x 6	12	6	0.94	1	M46125.1S
Inoflex - Rolled goods DN16 x 6	16	6	1.24	1	M46123.1S
Inoflex - Rolled goods DN20 x 6	20	6	1.47	1	M46122.1S
Inoflex - Rolled goods DN25 x 6	25	6	2.05	1	M46121.1S
Inoflex - Rolled goods DN32 x 6	32	6	2.84	1	M46120.1S
Inoflex - Rolled goods DN40 x 6	40	6	4.46	1	M46119.1S
Inoflex - Rolled goods DN12 x 80	12	80	8.70	1	M46125SW80
Inoflex - Rolled goods DN16 x 50	16	50	8.38	1	M46123SW50
Inoflex - Rolled goods DN20 x 30	20	30	6.58	1	M46122SW30
Inoflex - Rolled goods DN25 x 20	25	20	5.82	1	M46121SW20
Inoflex - Rolled goods DN32 x 20	32	20	7.63	1	M46120SW20
Inoflex - Rolled goods DN40 x 20	40	20	12.80	1	M46119SW20

STAINLESS STEEL CORRUGATED PIPE – SCREW FITTINGS

Connection fittings in MS 58


- Opposing threaded part F (flat sealing).



Type	Connection		Weight [kg]		Order Code
	[DN]	["]			
Connection fittings DN12	12	1/2" M x 3/8" F	0.04	10	M67550
Connection fittings DN16	16	3/4" M x 1/2" F	0.05	10	M90652.1
Connection fittings DN20	20	1" M x 3/4" F	0.07	10	M90652.2
Connection fittings DN25	25	1 1/4" M x 1" F	0.13	5	M90652.3
Connection fittings DN32	32	1 1/2" M x 1 1/4" F	0.12	3	M90652.4
Connection fittings DN40	40	2" M x 1 1/2" F	0.25	2	M90652.6

Nuts in MS 58




Type	Connection		Weight [kg]		Order Code
	[DN]	["]			
Nuts DN12	12	1/2" F	0.02	10	M46154.01
Nuts DN16	16	3/4" F	0.04	10	M43.520MS
Nuts DN20	20	1" F	0.05	10	M43.530MS
Nuts DN25	25	1 1/4" F	0.07	5	M43.540MS
Nuts DN32	32	1 1/2" F	0.09	3	M43.550MS
Nuts DN40	40	2" F	0.20	2	M43.560MS

Soldered union in MS 58

- Flat sealing.




Type	Connection			Weight [kg]		Order Code
	[DN]	["]	[mm]			
Soldered union DN16 x 18	16	3/4"	18	0.04	5	M62418.02

Opposing threaded part M in MS 58

- Flat sealing.




Type	Connection			Weight [kg]		Order Code
	[DN]	["]	[mm]			
Opposing threaded part DN16	16	3/4" M x 1/2" M		0.08	10	M90651.1
Opposing threaded part DN20	20	1" M x 3/4" M		0.12	10	M90651.2
Opposing threaded part DN25	25	1 1/4" M x 1" M		0.20	5	M90651.3
Opposing threaded part DN32	32	1 1/2" M x 1 1/4" M		0.25	3	M90651.4
Opposing threaded part DN40	40	2" M x 1 1/2" M		0.35	2	M90651.6

Double nipple in MS 58

- Flat sealing.



Type	Connection		Weight [kg]		Order Code
	[DN]	["]			
Double nipple DN20	20	1" M	0,14	10	M43.66125D
Double nipple DN12	12	1/2" M	0,04	10	M43.66123.1
Double nipple DN16	16	3/4" M	0,09	10	M43.66124D
Double nipple DN25	25	1 1/4" M	0,26	10	M43.66126D
Double nipple DN32	32	1 1/2" M	0,31	3	M43.66133D

FIXLOCK - STAINLESS STEEL CORRUGATED PIPE SCREW FITTINGS

FixLock - quick-fitting screw connection without the need for tools for Inflex stainless steel corrugated pipe for heating, solar and sanitary applications


- Operating temperature: 200 °C.
- Operating pressure: depending on dimension of corrugated pipe (up to DN25: 16 bar, DN32: 10 bar).
- DVGW-certified for the dimensions DN12 to DN20.
- Shaft-sealing (no seal necessary).

FixLock may only be used in conjunction with Inflex stainless steel corrugated pipe due to the required production tolerances. (Otherwise the warranty is invalidated).

FixLock set of threaded joints Mono




For connecting Inflex stainless steel corrugated pipe, comprising: Union nut, insert ring, opposing threaded part with moulded seal.

Type	Connection		Weight [kg]		Order Code
	[DN]	["]			
FixLock set Mono DN12 x 3/8 F	12	3/8" F	0.07	1	M46115FL
FixLock set Mono DN16 x 1/2 F	16	1/2" F	0.09	1	M46114FL
FixLock set Mono DN20 x 3/4 F	20	3/4" F	0.14	1	M46113FL
FixLock set Mono DN25 x 1 F	25	1" F	0.20	1	M46112FL
FixLock set Mono DN32 x 1 1/4 F	32	1 1/4" F	0.21	1	M46111FL
FixLock set Mono DN12 x 3/8 M	12	3/8" M	0.07	1	M46105FL
FixLock set Mono DN16 x 1/2 M	16	1/2" M	0.12	1	M46104FL
FixLock set Mono DN20 x 3/4 M	20	3/4" M	0.18	1	M46103FL
FixLock set Mono DN25 x 1 M	25	1" M	0.28	1	M46102FL
FixLock set Mono DN32 x 1 1/4 M	32	1 1/4" M	0.33	1	M46101FL

FixLock set of threaded joints Duo




For connecting Inflex stainless steel corrugated pipe, comprising: 4 union nuts, 4 insert rings, 2 double nipples with moulded seal.

Type	Connection		Weight [kg]		Order Code
	[DN]				
FixLock set Duo DN12	12		0.21	1	M46105.1FL
FixLock set Duo DN16	16		0.34	1	M46104.1FL
FixLock set Duo DN20	20		0.53	1	M46103.1FL
FixLock set Duo DN25	25		0.82	1	M46102.1FL

FixLock set of threaded joints with clamping ring screw union




FixLock set of threaded joints with union to clamping ring screw union (KLV) for the connection of Inflex stainless steel corrugated pipe, comprising: Union nut, insert ring, opposing threaded part with moulded seal.

Type	Connection		Weight [kg]		Order Code
	[DN]	[KLV]			
FixLock set KLV DN16	16	22	0.16	1	MG29611.11FL
FixLock set KLV DN20	20	22	0.21	1	MG29611.12FL

FixLock set of threaded joints with male thread union




FixLock set of threaded joints with union to self-sealing connection (M) for the connection of Inoflex stainless steel corrugated pipe, comprising: Union nut, insert ring, opposing threaded part with moulded seal, connection (M) with PTFE ring.

Type	Connection		Weight [kg]		Order Code
	[DN]	["]			
FixLock set S DN16 M	16	3/4" M	0.14	1	M43.66124FLP
FixLock set S DN20 M	20	1" M	0.21	1	M43.66125FLP

FixLock connection system with junction



FixLock set of threaded joints with T-piece junction for corrugated pipe connection without the need for tools with union (F) to any pipe system, scope of supply including 2 union nuts and 2 insert rings.

Type	Model [DN]	Connection			Weight [kg]		Order Code
		A ["]	B ["]	C ["]			
FixLock set T DN16	16	3/4" FL	1/2" F	3/4" FL	0.23	1	M90250.043FL
FixLock set T DN20	20	1" FL	1" FL	3/4" F	0.33	1	M90250.932FL

FLAT SEALING - STAINLESS STEEL CORRUGATED PIPE THREADED JOINTS AND ACCESSORIES


FixLock - quick-fitting screw connection without the need for tools for Inoflex stainless steel corrugated pipe for heating, solar and sanitary applications

Flange percussion set



Flat sealing threaded joints for Inoflex stainless steel corrugated pipe.


Tool set for the unproblematic creation of flanges on flexible Inoflex stainless steel corrugated pipes. The set comprises 1 striking tool, 1 flange rod and 1 set of clamping jaws. Also available as individual components upon request.

Type	Model [DN]	Weight [kg]		Order Code
Flange percussion set DN12	12	1.44	1	M46312
Flange percussion set DN16	16	1.44	1	M46316
Flange percussion set DN20	20	1.42	1	M46320
Flange percussion set DN25	25	1.54	1	M46325
Flange percussion set DN32	32	1.59	1	M46332
Flange percussion set DN40	40	2.15	1	M46340

Set of threaded joints DN12 - DN40




- 1 union nut, 1 insert ring, opposing threaded part F or M, seal.

Type	Model		Heating	Solar	Weight [kg]		Order Code
	[DN]	[""]					
Set of threaded joints F DN12	12	3/8" F	✓	✓	0.07	1	M46115
Set of threaded joints M DN12	12	3/8" M	✓	✓	0.07	1	M46105
Set of threaded joints F DN16	16	1/2" F	✓	✓	0.09	1	M46114
Set of threaded joints M DN16	16	1/2" M	✓	✓	0.12	1	M46104
Set of threaded joints F DN20	20	3/4" F	✓	✓	0.14	1	M46113
Set of threaded joints M DN20	20	3/4" M	✓	✓	0.18	1	M46103
Set of threaded joints F DN25	25	1" F	✓	-	0.21	1	M46112
Set of threaded joints M DN25	25	1" M	✓	-	0.29	1	M46102
Set of threaded joints F DN32	32	1 1/4" F	✓	-	0.22	1	M46111
Set of threaded joints M DN32	32	1 1/4" M	✓	-	0.35	1	M46101
Set of threaded joints F DN40	40	1 1/2" F	✓	-	0.47	1	M46110
Set of threaded joints M DN40	40	1 1/2" M	✓	-	0.58	1	M46100

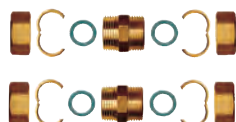
Extension kit



10 insert rings and 10 seals for corrugated pipe connections.


Type	Model [DN]	Weight [kg]		Order Code
Extension set DN12	12	0.02	1	M46205
Extension set DN16	16	0.04	1	M46204
Extension set DN20	20	0.05	1	M46203
Extension set DN25	25	0.10	1	M46202
Extension set DN32	32	0.10	1	M46201
Extension set DN40	40	0.24	1	M46200

Set of threaded joints DN12 - DN20



For the connection of inflex stainless steel corrugated pipe, comprising:
4 union nuts, 2 double nipples; 4 seals and 4 insert rings.

Also available as individual components upon request.

Type	Model [DN]	Weight [kg]		Order Code
Set of threaded joints DN12	12	0.20	1	M46105.1
Set of threaded joints DN16	16	0.34	1	M46104.1
Set of threaded joints DN20	20	0.52	1	M46103.1


MEIFLEX REINFORCED HOSES

Meiflex Reinforced hoses for heating F x M



Meiflex reinforced hoses for heating with galvanised braid and EPDM inliner.

- Flexible connections in certified quality.
- Prevents stresses and dispersion of structure-borne noise.
- Numerous connection types.
- Can be used for desalinated or demineralised water.
- Reinforced hoses with galvanised steel wire braid for heating systems.
- Internal hose made from ageing-resistant EPDM (not impermeable), resistant against water and glycol-based antifreeze (max. 50%).
- For temperatures from -5 to +110 °C.
- Operating pressures:
 - 16 bar (up to 100 °C, up to DN32).
 - 10 bar (up to 110 °C, up to DN32).
 - 6 bar (up to 110 °C, from DN40).
- Connections: Brass, copper elbows, with union nut and flat gasket.

Type	Connection ["]	Length * [mm]	Internal Ø [mm]	Weight [kg]		Order Code
Meiflex galv. 1/2 F/M x 300	1/2" F x 1/2" M	300	15	0.19	1	M4325.0121.30
Meiflex galv. 1/2 F/M x 500	1/2" F x 1/2" M	500	15	0.27	1	M4325.0121.50
Meiflex galv. 1/2 F/M x 700	1/2" F x 1/2" M	700	15	0.34	1	M4325.0121.70
Meiflex galv. 1/2 F/M x 1000	1/2" F x 1/2" M	1000	15	0.42	1	M4325.0121.100
Meiflex galv. 3/4 F/M x 300	3/4" F x 3/4" M	300	18	0.28	1	M4325.0127.30
Meiflex galv. 3/4 F/M x 500	3/4" F x 3/4" M	500	18	0.38	1	M4325.0127.50
Meiflex galv. 3/4 F/M x 700	3/4" F x 3/4" M	700	18	0.47	1	M4325.0127.70
Meiflex galv. 3/4 F/M x 1000	3/4" F x 3/4" M	1000	18	0.62	1	M4325.0127.100
Meiflex galv. 1 F/M x 300	1" F x 1" M	300	25	0.40	1	M4325.0134.30
Meiflex galv. 1 F/M x 500	1" F x 1" M	500	25	0.55	1	M4325.0134.50
Meiflex galv. 1 F/M x 700	1" F x 1" M	700	25	0.67	1	M4325.0134.70
Meiflex galv. 1 F/M x 1000	1" F x 1" M	1000	25	0.89	1	M4325.0134.100
Meiflex galv. 1 1/4 F/M x 300	1 1/4" F x 1 1/4" M	300	32	0.70	1	M4325.0142.30
Meiflex galv. 1 1/4 F/M x 500	1 1/4" F x 1 1/4" M	500	32	0.90	1	M4325.0142.50
Meiflex galv. 1 1/4 F/M x 700	1 1/4" F x 1 1/4" M	700	32	1.12	1	M4325.0142.70
Meiflex galv. 1 1/4 F/M x 1000	1 1/4" F x 1 1/4" M	1000	32	1.40	1	M4325.0142.100
Meiflex galv. 1 1/2 F/M x 300	1 1/2" F x 1 1/2" M	300	40	1.08	1	M4325.0148.30
Meiflex galv. 1 1/2 F/M x 500	1 1/2" F x 1 1/2" M	500	40	1.36	1	M4325.0148.50
Meiflex galv. 1 1/2 F/M x 700	1 1/2" F x 1 1/2" M	700	40	1.62	1	M4325.0148.70
Meiflex galv. 1 1/2 F/M x 1000	1 1/2" F x 1 1/2" M	1000	40	2.05	1	M4325.0148.100
Meiflex galv. 2 F/M x 500	2" F x 2" M	500	50	1.99	1	M4325.0160.50
Meiflex galv. 2 F/M x 700	2" F x 2" M	700	50	2.30	1	M4325.0160.70
Meiflex galv. 2 F/M x 1000	2" F x 2" M	1000	50	2.68	1	M4325.0160.100

* Other lengths available upon request. Warning! In the event of condensation forming (risk of corrosion!), use stainless steel reinforced hoses!

Meiflex Reinforced hoses for heating F x F

As with Meiflex reinforced hoses for heating, however, with F x F connection.



Type	Connection ["]	Length [mm]	Internal Ø [mm]	Weight [kg]		Order Code
Meiflex galv. 1/2 F/F x 300	1/2" F x 1/2" F	300	15	0.20	1	M4325.0221.30
Meiflex galv. 1/2 F/F x 500	1/2" F x 1/2" F	500	15	0.26	1	M4325.0221.50
Meiflex galv. 1/2 F/F x 700	1/2" F x 1/2" F	700	15	0.33	1	M4325.0221.70
Meiflex galv. 1/2 F/F x 1000	1/2" F x 1/2" F	1000	15	0.42	1	M4325.0221.100
Meiflex galv. 3/4 F/F x 300	3/4" F x 3/4" F	300	18	0.28	1	M4325.0227.30
Meiflex galv. 3/4 F/F x 500	3/4" F x 3/4" F	500	18	0.40	1	M4325.0227.50
Meiflex galv. 3/4 F/F x 700	3/4" F x 3/4" F	700	18	0.47	1	M4325.0227.70
Meiflex galv. 3/4 F/F x 1000	3/4" F x 3/4" F	1000	18	0.62	1	M4325.0227.100
Meiflex galv. 1 F/F x 300	1" F x 1" F	300	25	0.41	1	M4325.0234.30
Meiflex galv. 1 F/F x 500	1" F x 1" F	500	25	0.54	1	M4325.0234.50
Meiflex galv. 1 F/F x 700	1" F x 1" F	700	25	0.70	1	M4325.0234.70
Meiflex galv. 1 F/F x 1000	1" F x 1" F	1000	25	0.90	1	M43.250234.100
Meiflex galv. 1 1/4 F/F x 300	1 1/4" F x 1 1/4" F	300	32	0.71	1	M4325.0242.30
Meiflex galv. 1 1/4 F/F x 500	1 1/4" F x 1 1/4" F	500	32	0.92	1	M4325.0242.50
Meiflex galv. 1 1/4 F/F x 700	1 1/4" F x 1 1/4" F	700	32	1.13	1	M4325.0242.70
Meiflex galv. 1 1/4 F/F x 1000	1 1/4" F x 1 1/4" F	1000	32	1.47	1	M43.250242.100
Meiflex galv. 1 1/2 F/F x 300	1 1/2" F x 1 1/2" F	300	40	1.14	1	M4325.0248.30
Meiflex galv. 1 1/2 F/F x 500	1 1/2" F x 1 1/2" F	500	40	1.40	1	M4325.0248.50
Meiflex galv. 1 1/2 F/F x 700	1 1/2" F x 1 1/2" F	700	40	1.70	1	M4325.0248.70
Meiflex galv. 1 1/2 F/F x 1000	1 1/2" F x 1 1/2" F	1000	40	2.08	1	M4325.0248.100
Meiflex galv. 2 F/F x 500	2" F x 2" F	500	50	1.96	1	M4325.0260.50
Meiflex galv. 2 F/F x 700	2" F x 2" F	700	50	2.38	1	M4325.0260.70
Meiflex galv. 2 F/F x 1000	2" F x 2" F	1000	50	2.68	1	M43.250260.100

* Other lengths available upon request.

Meiflex Reinforced hoses for heating M x F with elbow

As with Meiflex reinforced hoses for heating, however, with M x F connection and elbow.




Type	Connection ["]	Length [mm]	Internal Ø [mm]	Weight [kg]		Order Code
Meiflex galv. 1/2 M/F elbow x 300	1/2" M x 1/2" F	300	15	0.16	1	M4327.0121.30
Meiflex galv. 1/2 M/F elbow x 500	1/2" M x 1/2" F	500	15	0.27	1	M4327.0121.50
Meiflex galv. 1/2 M/F elbow x 700	1/2" M x 1/2" F	700	15	0.38	1	M4327.0121.70
Meiflex galv. 1/2 M/F elbow x 1000	1/2" M x 1/2" F	1000	15	0.44	1	M4327.0121.100
Meiflex galv. 3/4 M/F elbow x 300	3/4" M x 3/4" F	300	18	0.29	1	M4327.0127.30
Meiflex galv. 3/4 M/F elbow x 500	3/4" M x 3/4" F	500	18	0.38	1	M4327.0127.50
Meiflex galv. 3/4 M/F elbow x 700	3/4" M x 3/4" F	700	18	0.49	1	M4327.0127.70
Meiflex galv. 3/4 M/F elbow x 1000	3/4" M x 3/4" F	1000	18	0.64	1	M4327.0127.100
Meiflex galv. 1 M/F elbow x 300	1" M x 1" F	300	25	0.40	1	M4327.0134.30
Meiflex galv. 1 M/F elbow x 500	1" M x 1" F	500	25	0.54	1	M4327.0134.50
Meiflex galv. 1 M/F elbow x 700	1" M x 1" F	700	25	0.67	1	M4327.0134.70
Meiflex galv. 1 M/F elbow x 1000	1" M x 1" F	1000	25	0.64	1	M4327.0134.100

* Other lengths available upon request.

Meiflex Reinforced hoses for heating F x F with elbow

As with Meiflex reinforced hoses for heating, however, with F x F connection and elbow.



Type	Connection [""]	Length [mm]	Inter- nal Ø [mm]	Weight [kg]		Order Code
Meiflex galv. 1/2 F/F elbow x 300	1/2" F x 1/2" F	300	15	0.20	1	M4327.0221.30
Meiflex galv. 1/2 F/F elbow x 500	1/2" F x 1/2" F	500	15	0.28	1	M4327.0221.50
Meiflex galv. 1/2 F/F elbow x 700	1/2" F x 1/2" F	700	15	0.36	1	M4327.0221.70
Meiflex galv. 1/2 F/F elbow x 1000	1/2" F x 1/2" F	1000	15	0.45	1	M4327.0221.100
Meiflex galv. 3/4 F/F elbow x 300	3/4" F x 3/4" F	300	18	0.29	1	M4327.0227.30
Meiflex galv. 3/4 F/F elbow x 500	3/4" F x 3/4" F	500	18	0.38	1	M4327.0227.50
Meiflex galv. 3/4 F/F elbow x 700	3/4" F x 3/4" F	700	18	0.48	1	M4327.0227.70
Meiflex galv. 3/4 F/F elbow x 1000	3/4" F x 3/4" F	1000	18	0.67	1	M4327.0227.100
Meiflex galv. 1 F/F elbow x 300	1" F x 1" F	300	25	0.44	1	M4327.0234.30
Meiflex galv. 1 F/F elbow x 500	1" F x 1" F	500	25	0.54	1	M4327.0234.50
Meiflex galv. 1 F/F elbow x 700	1" F x 1" F	700	25	0.85	1	M4327.0234.70
Meiflex galv. 1 F/F elbow x 1000	1" F x 1" F	1000	25	0.71	1	M4327.0234.100


* Other lengths available upon request.

Meiflex Reinforced hose wide variety of connections variants

Meiflex reinforced hoses are heat and pressure-resistant and remain consistent after years of use.

- For heating systems.
- Can be used for desalinated or demineralised water.
- With galvanised braiding.
- Operating pressure up to 10 bar (from 1 1/2" up to 6 bar).




Type	Connection [""]	Length [mm]	Inter- nal Ø [mm]	Weight [kg]		Order Code
Meiflex galv. 1 F/M x 750	1" F x 1" M	750	25	2.0	1	M4325.0134.75
Meiflex galv. 1 1/4 F/M x 370	1 1/4" F x 1 1/4" M	370	32	2.0	1	M4325.0142.S

Meiflex Reinforced hoses for heating / air-conditioning F x M



Meiflex reinforced hoses for heating /air-conditioning with stainless steel braid and EPDM inliner.


- Flexible connections in certified quality.
- Prevents stresses and dispersion of structure-borne noise.
- Numerous connection types.
- Can be used for desalinated or demineralised water.
- Reinforced hoses with stainless steel steel braid for heating and air-conditioning systems with red identification.
- Internal hose made from ageing-resistant EPDM (not impermeable), resistant against water and glycol-based antifreeze (max. 50%).
- For temperatures from -5 to +110 °C.
- Operating pressures:
16 bar (up to 100 °C, up to DN32).
10 bar (up to 110 °C, up to DN32).
6 bar (up to 110 °C, from DN40).
- Connections: Brass, copper elbows, with union nut and flat gasket.

Type	Connection ["]	Length [mm]	Inter- nal Ø [mm]	Weight [kg]		Order Code
Meiflex SST 1/2 x 3/8 F/M x 300	1/2" F x 3/8" M	300	10	0.10	1	M4315.0102.30
Meiflex SST 1/2 x 1/2 F/M x 300	1/2" F x 1/2" M	300	10	0.10	1	M4315.0104.30
Meiflex SST 1/2 x 1/2 F/M x 300	1/2" F x 1/2" M	300	13	0.14	1	M4315.1104.30
Meiflex SST 1/2 x 1/2 F/M x 500	1/2" F x 1/2" M	500	13	0.20	1	M4315.1104.50
Meiflex SST 1/2 x 1/2 F/M x 700	1/2" F x 1/2" M	700	13	0.25	1	M4315.1104.70
Meiflex SST 1/2 x 1/2 F/M x 1000	1/2" F x 1/2" M	1000	13	0.32	1	M4315.1104.100
Meiflex SST 3/4 x 1/2 F/M x 300	3/4" F x 1/2" M	300	13	0.16	1	M4315.1105.30
Meiflex SST 3/4 x 1/2 F/M x 500	3/4" F x 1/2" M	500	13	0.22	1	M4315.1105.50
Meiflex SST 1/2 x 3/4 F/M x 300	1/2" F x 3/4" M	300	13	0.16	1	M4315.1106.30
Meiflex SST 1/2 x 3/4 F/M x 500	1/2" F x 3/4" M	500	13	0.22	1	M4315.1106.50
Meiflex SST 3/4 x 3/4 F/M x 300	3/4" F x 3/4" M	300	13	0.18	1	M4315.1107.30
Meiflex SST 3/4 x 3/4 F/M x 500	3/4" F x 3/4" M	500	13	0.23	1	M4315.1107.50
Meiflex SST 3/4 x 3/4 F/M x 700	3/4" F x 3/4" M	700	13	0.28	1	M4315.1107.70
Meiflex SST 3/4 x 3/4 F/M x 1000	3/4" F x 3/4" M	1000	13	0.35	1	M4315.1107.100
Meiflex SST 1/2 x 1/2 F/M x 300	1/2" F x 1/2" M	300	15	0.18	1	M4325.1121.30
Meiflex SST 1/2 x 1/2 F/M x 500	1/2" F x 1/2" M	500	15	0.24	1	M4325.1121.50
Meiflex SST 1/2 x 1/2 F/M x 700	1/2" F x 1/2" M	700	15	0.28	1	M4325.1121.70
Meiflex SST 1/2 x 1/2 F/M x 1000	1/2" F x 1/2" M	1000	15	0.37	1	M4325.1121.100
Meiflex SST 3/4 x 3/4 F/M x 300	3/4" F x 3/4" M	300	18	0.24	1	M4325.1127.30
Meiflex SST 3/4 x 3/4 F/M x 500	3/4" F x 3/4" M	500	18	0.35	1	M4325.1127.50
Meiflex SST 3/4 x 3/4 F/M x 700	3/4" F x 3/4" M	700	18	0.42	1	M4325.1127.70
Meiflex SST 3/4 x 3/4 F/M x 1000	3/4" F x 3/4" M	1000	18	0.56	1	M4325.1127.100
Meiflex SST 1 x 1 F/M x 300	1" F x 1" M	300	25	0.38	1	M4325.1134.30
Meiflex SST 1 x 1 F/M x 500	1" F x 1" M	500	25	0.51	1	M4325.1134.50
Meiflex SST 1 x 1 F/M x 700	1" F x 1" M	700	25	0.62	1	M4325.1134.70
Meiflex SST 1 x 1 F/M x 1000	1" F x 1" M	1000	25	0.78	1	M4325.1134.100
Meiflex SST 1 1/4 x 1 1/4 F/M x 300	1 1/4" F x 1 1/4" M	300	32	0.68	1	M4325.1142.30
Meiflex SST 1 1/4 x 1 1/4 F/M x 500	1 1/4" F x 1 1/4" M	500	32	0.87	1	M4325.1142.50
Meiflex SST 1 1/4 x 1 1/4 F/M x 700	1 1/4" F x 1 1/4" M	700	32	1.03	1	M4325.1142.70
Meiflex SST 1 1/4 x 1 1/4 F/M x 1000	1 1/4" F x 1 1/4" M	1000	32	1.28	1	M4325.1142.100
Meiflex SST 1 1/2 x 1 1/2 F/M x 300	1 1/2" F x 1 1/2" M	300	40	1.08	1	M4325.1148.30
Meiflex SST 1 1/2 x 1 1/2 F/M x 500	1 1/2" F x 1 1/2" M	500	40	1.30	1	M4325.1148.50
Meiflex SST 1 1/2 x 1 1/2 F/M x 700	1 1/2" F x 1 1/2" M	700	40	1.63	1	M4325.1148.70
Meiflex SST 1 1/2 x 1 1/2 F/M x 1000	1 1/2" F x 1 1/2" M	1000	40	1.90	1	M4325.1148.100
Meiflex SST 2 x 2 F/M x 500	2" F x 2" M	500	50	1.90	1	M4325.1160.50
Meiflex SST 2 x 2 F/M x 700	2" F x 2" M	700	50	2.29	1	M4325.1160.70
Meiflex SST 2 x 2 F/M x 1000	2" F x 2" M	1000	50	2.84	1	M4325.1160.100

Meiflex Reinforced hoses for heating / air-conditioning F x F

As with Meiflex reinforced hoses for heating /air-conditioning, however, with F x F connection.




Type	Connection ["]	Length [mm]	Inter- nal Ø [mm]	Weight [kg]		Order Code
Meiflex SST 3/8" F/F x 300	3/8" F x 3/8" F	300	10	0.10	1	M4315.0201.30
Meiflex SST 1/2" F/F x 500	1/2" F x 1/2" F	500	10	0.14	1	M4315.0204.50
Meiflex SST 1/2" F/F x 300	1/2" F x 1/2" F	300	13	0.14	1	M4315.1204.30
Meiflex SST 1/2" F/F x 500	1/2" F x 1/2" F	500	13	0.20	1	M4315.1204.50
Meiflex SST 3/4" F/F x 300	3/4" F x 3/4" F	300	13	0.18	1	M4315.1207.30
Meiflex SST 3/4" F/F x 500	3/4" F x 3/4" F	500	13	0.22	1	M4315.1207.50
Meiflex SST 1/2" F/F x 300	1/2" F x 1/2" F	300	15	0.17	1	M4325.1221.30
Meiflex SST 1/2" F/F x 500	1/2" F x 1/2" F	500	15	0.24	1	M4325.1221.50
Meiflex SST 1/2" F/F x 700	1/2" F x 1/2" F	700	15	0.29	1	M4325.1221.70
Meiflex SST 1/2" F/F x 1000	1/2" F x 1/2" F	1000	15	0.38	1	M4325.1221.100
Meiflex SST 3/4" F/F x 300	3/4" F x 3/4" F	300	18	0.27	1	M4325.1227.30
Meiflex SST 3/4" F/F x 500	3/4" F x 3/4" F	500	18	0.35	1	M4325.1227.50
Meiflex SST 3/4" F/F x 700	3/4" F x 3/4" F	700	18	0.44	1	M4325.1227.70
Meiflex SST 3/4" F/F x 1000	3/4" F x 3/4" F	1000	18	0.58	1	M4325.1227.100
Meiflex SST 1" F/F x 300	1" F x 1" F	300	25	0.40	1	M4325.1234.30
Meiflex SST 1" F/F x 500	1" F x 1" F	500	25	0.50	1	M4325.1234.50
Meiflex SST 1" F/F x 700	1" F x 1" F	700	25	0.62	1	M4325.1234.70
Meiflex SST 1" F/F x 1000	1" F x 1" F	1000	25	0.90	1	M4325.1234.100
Meiflex SST 1 1/4" F/F x 300	1 1/4" F x 1 1/4" F	300	32	0.66	1	M4325.1242.30
Meiflex SST 1 1/4" F/F x 500	1 1/4" F x 1 1/4" F	500	32	0.84	1	M4325.1242.50
Meiflex SST 1 1/4" F/F x 700	1 1/4" F x 1 1/4" F	700	32	1.04	1	M4325.1242.70
Meiflex SST 1 1/4" F/F x 1000	1 1/4" F x 1 1/4" F	1000	32	1.32	1	M4325.1242.100
Meiflex SST 1 1/2" F/F x 500	1 1/2" F x 1 1/2" F	500	40		1	M4325.1248.50
Meiflex SST 2" F/F x 500	2" F x 2" F	500	50		1	M4325.1260.50

* Other lengths available upon request.

Meiflex Reinforced hoses for heating / air-conditioning M x F with elbow

As with Meiflex reinforced hoses for heating /air-conditioning, however, with M x F connection and elbow.




Type	Connection ["]	Length [mm]	Inter- nal Ø [mm]	Weight [kg]		Order Code
Meiflex SST 1/2" M/F elbow x 300	1/2" M x 1/2" F	300	15	0.20	1	M4327.1121.30
Meiflex SST 1/2" M/F elbow x 500	1/2" M x 1/2" F	500	15	0.25	1	M4327.1121.50
Meiflex SST 1/2" M/F elbow x 700	1/2" M x 1/2" F	700	15	0.32	1	M4327.1121.70
Meiflex SST 1/2" M/F elbow x 1000	1/2" M x 1/2" F	1000	15	0.46	1	M4327.1121.100
Meiflex SST 3/4" M/F elbow x 300	3/4" M x 3/4" F	300	18	0.26	1	M4327.1127.30
Meiflex SST 3/4" M/F elbow x 500	3/4" M x 3/4" F	500	18	0.34	1	M4327.1127.50
Meiflex SST 3/4" M/F elbow x 700	3/4" M x 3/4" F	700	18	0.48	1	M4327.1127.70
Meiflex SST 3/4" M/F elbow x 1000	3/4" M x 3/4" F	1000	18	0.66	1	M4327.1127.100
Meiflex SST 1" M/F elbow x 300	1" M x 1" F	300	25	0.38	1	M4327.1134.30
Meiflex SST 1" M/F elbow x 500	1" M x 1" F	500	25	0.57	1	M4327.1134.50
Meiflex SST 1" M/F elbow x 700	1" M x 1" F	700	25	0.71	1	M4327.1134.70
Meiflex SST 1" M/F elbow x 1000	1" M x 1" F	1000	25	0.81	1	M4327.1134.100

* Other lengths available upon request.

Meiflex Reinforced hoses for heating / air-conditioning F x F with elbow

As with Meiflex reinforced hoses for heating /air-conditioning, however, with F x F connection and elbow.



Type	Connection ["]	Length * [mm]	Internal Ø [mm]	Weight [kg]		Order Code
Meiflex SST 1/2 F/F elbow x 300	1/2" F x 1/2" F	300	15	0.20	1	M4327.1221.30
Meiflex SST 1/2 F/F elbow x 500	1/2" F x 1/2" F	500	15	0.23	1	M4327.1221.50
Meiflex SST 1/2 F/F elbow x 700	1/2" F x 1/2" F	700	15	0.32	1	M4327.1221.70
Meiflex SST 1/2 F/F elbow x 1000	1/2" F x 1/2" F	1000	15	0.40	1	M4327.1221.100
Meiflex SST 3/4 F/F elbow x 300	3/4" F x 3/4" F	300	18	0.28	1	M4327.1227.30
Meiflex SST 3/4 F/F elbow x 500	3/4" F x 3/4" F	500	18	0.34	1	M4327.1227.50
Meiflex SST 3/4 F/F elbow x 700	3/4" F x 3/4" F	700	18	0.43	1	M4327.1227.70
Meiflex SST 3/4 F/F elbow x 1000	3/4" F x 3/4" F	1000	18	0.66	1	M4327.1227.100
Meiflex SST 1 F/F elbow x 300	1" F x 1" F	300	25	0.45	1	M4327.1234.30
Meiflex SST 1 F/F elbow x 500	1" F x 1" F	500	25	0.52	1	M4327.1234.50
Meiflex SST 1 F/F elbow x 700	1" F x 1" F	700	25	0.64	1	M4327.1234.70
Meiflex SST 1 F/F elbow x 1000	1" F x 1" F	1000	25	0.93	1	M4327.1234.100


* Other lengths available upon request.

Meiflex Reinforced hoses for sanitary / heating / air-conditioning F x M



Meiflex reinforced hoses for sanitary / heating / air-conditioning with stainless steel braid and silicone inliner.


- Universally applicable for sanitary, heating and air-conditioning.
- Highly flexible connection in certified quality.
- Can be used for desalinated or demineralised water.
- Reinforced hoses with stainless steel braid for sanitary, heating and air-conditioning with red / red / blue identification.
- Internal hose made from hygienically safe silicone (odourless, hypo-allergenic, tasteless, not impermeable to oxygen in the air).
- For temperatures up to +110 °C (domestic water up to 90 °C).
- Operating pressures: 16 bar (up to 100 °C), 10 bar (up to 110 °C).
- Specified production tolerances max. +/- 2.5%.
- DVGW sanitary test, TÜV inspection for heating / air-conditioning.
- Article number, technical data and application on label, including seals.
- Further details can be obtained from the current technical information.

Type	Connection ["]	Length [mm]	Inter- nal Ø [mm]	Weight [kg]		Order Code
Meiflex Silicone 1/2 x 1/2 F/M x 300	1/2" F x 1/2" M	300	13	0.14	1	M5715.1104.30
Meiflex Silicone 1/2 x 1/2 F/M x 500	1/2" F x 1/2" M	500	13	0.20	1	M5715.1104.50
Meiflex Silicone 1/2 x 1/2 F/M x 700	1/2" F x 1/2" M	700	13	0.24	1	M5715.1104.70
Meiflex Silicone 1/2 x 1/2 F/M x 1000	1/2" F x 1/2" M	1000	13	0.33	1	M5715.1104.100
Meiflex Silicone 3/4 x 1/2 F/M x 300	3/4" F x 1/2" M	300	13	0.16	1	M5715.1105.30
Meiflex Silicone 3/4 x 1/2 F/M x 500	3/4" F x 1/2" M	500	13	0.22	1	M5715.1105.50
Meiflex Silicone 1/2 x 3/4 F/M x 300	1/2" F x 3/4" M	300	13	0.17	1	M5715.1106.30
Meiflex Silicone 1/2 x 3/4 F/M x 500	1/2" F x 3/4" M	300	13	0.22	1	M5715.1106.50
Meiflex Silicone 3/4 x 3/4 F/M x 300	3/4" F x 3/4" M	300	13	0.17	1	M5715.1107.30
Meiflex Silicone 3/4 x 3/4 F/M x 500	3/4" F x 3/4" M	500	13	0.22	1	M5715.1107.50
Meiflex Silicone 3/4 x 3/4 F/M x 700	3/4" F x 3/4" M	700	13	0.26	1	M5715.1107.70
Meiflex Silicone 3/4 x 3/4 F/M x 1000	3/4" F x 3/4" M	1000	13	0.34	1	M5715.1107.100
Meiflex Silicone 3/4 x 3/4 F/M x 300	3/4" F x 3/4" M	300	18	0.26	1	M5725.1127.30
Meiflex Silicone 3/4 x 3/4 F/M x 500	3/4" F x 3/4" M	500	18	0.34	1	M5725.1127.50
Meiflex Silicone 3/4 x 3/4 F/M x 700	3/4" F x 3/4" M	700	18	0.42	1	M5725.1127.70
Meiflex Silicone 3/4 x 3/4 F/M x 1000	3/4" F x 3/4" M	1000	18	0.56	1	M5725.1127.100
Meiflex Silicone 1 x 1 F/M x 300	1" F x 1" M	300	25	0.44	1	M5725.1134.30
Meiflex Silicone 1 x 1 F/M x 500	1" F x 1" M	500	25	0.54	1	M5725.1134.50
Meiflex Silicone 1 x 1 F/M x 700	1" F x 1" M	700	25	0.68	1	M5725.1134.70
Meiflex Silicone 1 x 1 F/M x 1000	1" F x 1" M	1000	25	0.82	1	M5725.1134.100
Meiflex Silicone 1 1/4 x 1 1/4 F/M x 300	1 1/4" F x 1 1/4" M	300	32	0.74	1	M5725.1142.30
Meiflex Silicone 1 1/4 x 1 1/4 F/M x 500	1 1/4" F x 1 1/4" M	500	32	0.90	1	M5725.1142.50
Meiflex Silicone 1 1/4 x 1 1/4 F/M x 700	1 1/4" F x 1 1/4" M	700	32	1.10	1	M5725.1142.70
Meiflex Silicone 1 1/4 x 1 1/4 F/M x 1000	1 1/4" F x 1 1/4" M	1000	32	1.32	1	M5725.1142.100

Meiflex Reinforced hoses for sanitary / heating / air-conditioning F x F



As with Meiflex reinforced hoses for sanitary / heating /air-conditioning, however, with F x F connection.


Type	Connection ["]	Length [mm]	Inter- nal Ø [mm]	Weight [kg]		Order Code
Meiflex Silicone 1/2 F/F x 300	1/2" F x 1/2" F	300	13	0.13	1	M5715.1204.30
Meiflex Silicone 1/2 F/F x 500	1/2" F x 1/2" F	500	13	0.18	1	M5715.1204.50
Meiflex Silicone 1/2 F/F x 700	1/2" F x 1/2" F	700	13	0.24	1	M5715.1204.70
Meiflex Silicone 1/2 F/F x 1000	1/2" F x 1/2" F	1000	13	0.31	1	M5715.1204.100
Meiflex Silicone 3/4 F/F x 300	3/4" F x 3/4" F	300	13	0.18	1	M5715.1207.30
Meiflex Silicone 3/4 F/F x 500	3/4" F x 3/4" F	500	13	0.22	1	M5715.1207.50
Meiflex Silicone 3/4 F/F x 300	3/4" F x 3/4" F	300	18	0.28	1	M5725.1227.30
Meiflex Silicone 3/4 F/F x 500	3/4" F x 3/4" F	500	18	0.36	1	M5725.1227.50
Meiflex Silicone 3/4 F/F x 700	3/4" F x 3/4" F	700	18	0.44	1	M5725.1227.70
Meiflex Silicone 3/4 F/F x 1000	3/4" F x 3/4" F	1000	18	0.58	1	M5725.1227.100
Meiflex Silicone 1 F/F x 300	1" F x 1" F	300	25	0.46	1	M5725.1234.30
Meiflex Silicone 1 F/F x 500	1" F x 1" F	500	25	0.56	1	M5725.1234.50
Meiflex Silicone 1 F/F x 700	1" F x 1" F	700	25	0.68	1	M5725.1234.70
Meiflex Silicone 1 F/F x 1000	1" F x 1" F	1000	25	0.84	1	M5725.1234.100
Meiflex Silicone 1 1/4 F/F x 300	1 1/4" F x 1 1/4" F	300	32	0.74	1	M5725.1242.30
Meiflex Silicone 1 1/4 F/F x 500	1 1/4" F x 1 1/4" F	500	32	0.90	1	M5725.1242.50
Meiflex Silicone 1 1/4 F/F x 700	1 1/4" F x 1 1/4" F	700	32	1.06	1	M5725.1242.70
Meiflex Silicone 1 1/4 F/F x 1000	1 1/4" F x 1 1/4" F	1000	32	1.34	1	M5725.1242.100

* Other lengths available upon request.

Meiflex Reinforced hoses for sanitary / heating / air-conditioning M x F with elbow



As with Meiflex reinforced hoses for sanitary / heating /air-conditioning, however, with M x F connection and elbow.


Type	Connection ["]	Length [mm]	Inter- nal Ø [mm]	Weight [kg]		Order Code
Meiflex Silicone 1/2 M/F elbow x 300	1/2" M x 1/2" F	300	13	0.16	1	M5715.1604.30
Meiflex Silicone 1/2 M/F elbow x 500	1/2" M x 1/2" F	500	13	0.20	1	M5715.1604.50
Meiflex Silicone 1/2 M/F elbow x 700	1/2" M x 1/2" F	700	13	0.26	1	M5715.1604.70
Meiflex Silicone 1/2 M/F elbow x 1000	1/2" M x 1/2" F	1000	13	0.33	1	M5715.1604.100
Meiflex Silicone 3/4 M/F elbow x 300	3/4" M x 3/4" F	300	18	0.30	1	M5727.1127.30
Meiflex Silicone 3/4 M/F elbow x 500	3/4" M x 3/4" F	500	18	0.40	1	M5727.1127.50
Meiflex Silicone 3/4 M/F elbow x 700	3/4" M x 3/4" F	700	18	0.40	1	M5727.1127.70
Meiflex Silicone 3/4 M/F elbow x 1000	3/4" M x 3/4" F	1000	18	0.60	1	M5727.1127.100
Meiflex Silicone 1 M/F elbow x 300	1" M x 1" F	300	25	0.54	1	M5727.1134.30
Meiflex Silicone 1 M/F elbow x 500	1" M x 1" F	500	25	0.62	1	M5727.1134.50
Meiflex Silicone 1 M/F elbow x 700	1" M x 1" F	700	25	0.76	1	M5727.1134.70
Meiflex Silicone 1 M/F elbow x 1000	1" M x 1" F	1000	25	0.95	1	M5727.1134.100

* Other lengths available upon request.

Meiflex Reinforced hoses for sanitary / heating / air-conditioning F x F with elbow

As with Meiflex reinforced hoses for sanitary / heating / air-conditioning, however, with F x F connection and elbow.



Type	Connection ["]	Length* [mm]	Internal Ø [mm]	Weight [kg]		Order Code
Meiflex Silicone 1/2 F/F elbow x 300	1/2" F x 1/2" F	300	13	0.15	1	M5715.1704.30
Meiflex Silicone 1/2 F/F elbow x 500	1/2" F x 1/2" F	500	13	0.20	1	M5715.1704.50
Meiflex Silicone 1/2 F/F elbow x 700	1/2" F x 1/2" F	700	13	0.24	1	M5715.1704.70
Meiflex Silicone 1/2 F/F elbow x 1000	1/2" F x 1/2" F	1000	13	0.32	1	M5715.1704.100
Meiflex Silicone 3/4 F/F elbow x 300	3/4" F x 3/4" F	300	18	0.28	1	M5727.1227.30
Meiflex Silicone 3/4 F/F elbow x 500	3/4" F x 3/4" F	500	18	0.36	1	M5727.1227.50
Meiflex Silicone 3/4 F/F elbow x 700	3/4" F x 3/4" F	700	18	0.44	1	M5727.1227.70
Meiflex Silicone 3/4 F/F elbow x 1000	3/4" F x 3/4" F	1000	18	0.61	1	M5727.1227.100
Meiflex Silicone 1 F/F elbow x 300	1" F x 1" F	300	25	0.46	1	M5727.1234.30
Meiflex Silicone 1 F/F elbow x 500	1" F x 1" F	500	25	0.56	1	M5727.1234.50
Meiflex Silicone 1 F/F elbow x 700	1" F x 1" F	700	25	0.68	1	M5727.1234.70
Meiflex Silicone 1 F/F elbow x 1000	1" F x 1" F	1000	25	0.84	1	M5727.1234.100


* Other lengths available upon request.

Meiflex Reinforced hoses for dishwashers and washing machines F x F with elbow

Meiflex reinforced hoses for dishwashers and washing machines with silicone inliner.

- Highly flexible connection in certified quality.
- Internal hose made from hygienically safe silicone (odourless, hypo-allergenic, tasteless, not impermeable to oxygen in the air).
- For temperatures up to +110 °C (domestic water up to 90 °C).
- Can be used for desalinated or demineralised water.
- Operating pressures: 16 bar (up to 100 °C), 10 bar (up to 110 °C).
- Specified production tolerances max. +/- 2.5%.
- DVGW sanitary test, TÜV inspection for heating / air-conditioning.
- Article number, technical data and application on label, including seals.
- Further details can be obtained from the current technical information.



Type	Connection ["]	Length* [mm]	Internal Ø [mm]	Weight [kg]		Order Code
Meiflex Silicone 3/4 F/F elbow x 1000	3/4" F x 3/4" F	1000	13	0.35	1	M5715.1707.100
Meiflex Silicone 3/4 F/F elbow x 2000	3/4" F x 3/4" F	2000	13	0.59	1	M5715.1707.200


* Other lengths available upon request.

Meiflex Reinforced hoses for sanitary F x M



Meiflex sanitary reinforced hoses for special domestic water installations with stainless steel braid and silicone inliner.

- Connection hoses for domestic water applications in accordance with DVGW, Group I.
- Stainless steel braid with red / red / blue identification.
- Internal hose made from hygienically safe silicone.
- Can be used for desalinated or demineralised water.
- Models from 3/8" and 8 mm internal diameter.
- For temperatures up to 110 °C for heating and up to 90 °C for water (in accordance with the Drinking Water Ordinance).
- Operating pressures: 16 bar (up to 100 °C), 10 bar (up to 110 °C).
- Specific production tolerances max. +/- 2.5%.
- DVGW sanitary test, TÜV inspection for heating / air-conditioning.


Type	Connection ["]	Length* [mm]	Inter- nal Ø [mm]	Weight [kg]		Order Code
Meiflex Sanitary 1/2 x 3/8 F/M x 300	1/2" F x 3/8" M	300	8	0.10	1	M5715.0102.30
Meiflex Sanitary 1/2 x 3/8 F/M x 500	1/2" F x 3/8" M	500	8	0.12	1	M5715.0102.50
Meiflex Sanitary 1/2 x 1/2 F/M x 300	1/2" F x 1/2" M	300	8	0.10	1	M5715.0104.30
Meiflex Sanitary 1/2 x 1/2 F/M x 500	1/2" F x 1/2" M	500	8	0.13	1	M5715.0104.50

* Other lengths available upon request.

Meiflex Reinforced hoses for sanitary F x F



As with Meiflex reinforced hoses for sanitary, however, with F x F connection.


Type	Connection ["]	Length* [mm]	Inter- nal Ø [mm]	Weight [kg]		Order Code
Meiflex Sanitary 3/8 x 3/8 F/F x 300	3/8" F x 3/8" F	300	8	0.08	1	M5715.0201.30
Meiflex Sanitary 3/8 x 3/8 F/F x 500	3/8" F x 3/8" F	500	8	0.12	1	M5715.0201.50
Meiflex Sanitary 1/2 x 3/8 F/F x 300	1/2" F x 3/8" F	300	8	0.10	1	M5715.0202.30
Meiflex Sanitary 1/2 x 3/8 F/F x 500	1/2" F x 3/8" F	500	8	0.13	1	M5715.0202.50
Meiflex Sanitary 1/2 x 1/2 F/F x 300	1/2" F x 1/2" F	300	8	0.12	1	M5715.0204.30
Meiflex Sanitary 1/2 x 1/2 F/F x 500	1/2" F x 1/2" F	500	8	0.14	1	M5715.0204.50

* Other lengths available upon request.

Meiflex Reinforced hoses for sanitary F x F with elbow



As with Meiflex reinforced hoses for sanitary, however, with F x F connection and elbow.

Type	Connection ["]	Length* [mm]	Inter- nal Ø [mm]	Weight [kg]		Order Code
Meiflex Sanitary 3/8 x 3/8 F/F elbowx300	3/8" F x 3/8" F	300	8	0.08	1	M5717.0201.30
Meiflex Sanitary 3/8 x 3/8 F/F elbowx500	3/8" F x 3/8" F	500	8	0.12	1	M5717.0201.50


* Other lengths available upon request.

Meiflex Reinforced hoses for sanitary compression fitting x pipe end



As with Meiflex reinforced hoses for sanitary, however, with compression fitting / pipe end connection.



Type	Connection [mm]	Length* [mm]	Internal Ø [mm]	Weight [kg]		Order Code
Meiflex Sanitary 10 x 10 KVL/Rohr x 300	10 x 10	300	8	0.10	1	M5715.5310.30
Meiflex Sanitary 10 x 10 KVL/Rohr x 500	10 x 10	500	8	0.12	1	M5715.5310.50


* Other lengths available upon request.

Meiflex Reinforced hoses for sanitary F x compression fitting



As with Meiflex reinforced hoses for sanitary, however, with F x compression fitting connection.



Type	Connection [""]	[mm]	Length* [mm]	Internal Ø [mm]	Weight [kg]		Order Code
Meiflex Sanitary 3/8" x 10 F/KVL x 300	3/8" F	10	300	8	0.10	1	M5715.2210.30
Meiflex Sanitary 3/8" x 10 F/KVL x 500	3/8" F	10	500	8	0.12	1	M5715.2210.50
Meiflex Sanitary 1/2" x 10 F/KVL x 300	1/2" F	10	300	8	0.12	1	M5715.2212.30
Meiflex Sanitary 1/2" x 10 F/KVL x 500	1/2" F	10	500	8	0.14	1	M5715.2212.50


* Other lengths available upon request.

Meiflex Reinforced hoses for sanitary F x pipe end



As with Meiflex reinforced hoses for sanitary, however, with F x pipe end connection.



Type	Connection [""]	[mm]	Length* [mm]	Internal Ø [mm]	Weight [kg]		Order Code
Meiflex Sanitary 3/8" x 10 F/Rohr x 300	3/8" F	10	300	8	0.08	1	M5715.5210.30
Meiflex Sanitary 3/8" x 10 F/Rohr x 500	3/8" F	10	500	8	0.10	1	M5715.5210.50
Meiflex Sanitary 1/2" x 10 F/Rohr x 300	1/2" F	10	300	8	0.08	1	M5715.5212.30
Meiflex Sanitary 1/2" x 10 F/Rohr x 500	1/2" F	10	500	8	0.12	1	M5715.5212.50


* Other lengths available upon request.

MEIFLEX ACCESSORIES

Double nipple MS




- Flat sealing.

Type	Connection		Weight [kg]		Order Code
	[DN]	["]			
Double nipple DN10	10	3/8" M	0.02	10	M43.66122MS
Double nipple DN12	12	1/2" M	0.04	10	M43.66123MS
Double nipple DN16	16	3/4" M	0.09	10	M43.66124D
Double nipple DN20	20	1" M	0.09	5	M43.66125MS
Double nipple DN32	32	1 1/2" M	0.31	3	M43.66133D

Nipple MS




- Flat sealing.

Type	Model ["]	Weight [kg]		Order Code
Nipple MS 3/8 F/M	3/8" F x 3/8" M	0.03	10	M43.66132MS
Nipple MS 1/2 F/M	1/2" F x 1/2" M	0.06	10	M43.66131MS
Nipple MS 3/4 F/M	3/4" F x 3/4" M	0.07	10	M43.66127MS
Nipple MS 1 F/M	1" F x 1" M	0.12	5	M43.66128MS
Nipple MS 1 1/4 F/M	1 1/4" F x 1 1/4" M	0.21	3	M43.66129MS
Nipple MS 1 1/2 F/M	1 1/2" F x 1 1/2" M	0.19	2	M43.66135MS
Nipple MS 2 F/M	2" F x 2" M	0.36	1	M43.66136MS

Angle MS




- Connection M: flat sealing.

Type	Model ["]	Weight [kg]		Order Code
Angle MS 3/8 F/M	3/8" F x 3/8" M	0.07	5	M43.66141MS
Angle MS 1/2 F/M	1/2" F x 1/2" M	0.08	5	M43.66142MS
Angle MS 3/4 F/M	3/4" F x 3/4" M	0.14	5	M43.66143MS
Angle MS 1 F/M	1" F x 1" M	0.22	5	M43.66144MS
Angle MS 1 1/4 F/M	1 1/4" F x 1 1/4" M	0.34	3	M43.66145MS
Angle MS 1 1/2 F/M	1 1/2" F x 1 1/2" M	0.47	2	M43.66137MS
Angle MS 2 F/M	2" F x 2" M	0.74	1	M43.66138MS

Seal



- Asbestos-free.

Type	Model ["]	Weight [kg]		Order Code
Seal 3/8	3/8"	0.01	100	M43.66151
Seal 1/2	1/2"	0.01	100	M43.66152
Seal 3/4	3/4"	0.01	100	M43.66153
Seal 1	1"	0.08	100	M43.66154
Seal 1 1/4	1 1/4"	0.03	100	M43.66155
Seal 1 1/2	1 1/2"	0.03	100	M43.66156
Seal 2	2"	0.04	100	M43.66157


REINFORCED HOSES FOR GAS

Reinforced hoses for gas



Reinforced hoses for gas with stainless steel braid and stainless steel corrugated pipe as inliner.

- Flexible connections in certified quality.
- Prevents stresses and dispersion of structure-borne noise.
- Gas pressure hoses for use specifically as gas lines and heating systems with a max. operating pressure of 4 bar.
- Braid made of stainless steel (material no. 1.4301) (DVGW-approved).
- Internal hose made from stainless steel corrugated pipe (material no. 1.4404), with malleable cast iron screw fitting with female thread and conical seal on one end and malleable cast iron hexagonal nipple with male thread on the other.
- Operating pressure for gas: 4 bar.
- Operating data for heating:
 - 25 bar at 20 °C.
 - 20 bar at 100 °C.
 - 17 bar at 200 °C.
 - 15 bar at 300 °C.

Type	Connection *		Length [mm]	Weight [kg]		Order Code
	["]	[DN]				
Meiflex Gas 1/2 F/M x 300	1/2" F x 1/2" M	12	300	0.36	1	M46163.30
Meiflex Gas 1/2 F/M x 500	1/2" F x 1/2" M	12	500	0.42	1	M46163.50
Meiflex Gas 1/2 F/M x 800	1/2" F x 1/2" M	12	800	0.50	1	M46163.80
Meiflex Gas 1/2 F/M x 1000	1/2" F x 1/2" M	12	1000	0.56	1	M46163.100
Meiflex Gas 3/4 F/M x 300	3/4" F x 3/4" M	20	300	0.56	1	M46162.30
Meiflex Gas 3/4 F/M x 500	3/4" F x 3/4" M	20	500	0.64	1	M46162.50
Meiflex Gas 3/4 F/M x 800	3/4" F x 3/4" M	20	800	0.80	1	M46162.80
Meiflex Gas 3/4 F/M x 1000	3/4" F x 3/4" M	20	1000	0.90	1	M46162.100
Meiflex Gas 1 F/M x 300	1" F x 1" M	25	300	0.79	1	M46161.30
Meiflex Gas 1 F/M x 500	1" F x 1" M	25	500	0.94	1	M46161.50
Meiflex Gas 1 F/M x 800	1" F x 1" M	25	800	1.17	1	M46161.80
Meiflex Gas 1 F/M x 1000	1" F x 1" M	25	1000	1.36	1	M46161.100

* Other sizes and connections available upon request.

NexusValve Flowmeter BC3



P. 514

Static Circuit Control Valves



P. 515

Dynamic Circuit Control Valves



P. 518

Differential Pressure Regulators



P. 525

Shut-off Ball Valves



P. 528

Six-way Control Valve



P. 529

NexusValve TW for Domestic Water



P. 531



The complete range of NexusValve includes all types of static and dynamic balancing valves, differential pressure regulators and pre-adjustable lockable ball valves from DN15 to > DN300. The innovative NexusValve technology makes efficient installation and easy hydraulic balancing possible. Optimized valve construction and coordinated partner valves ensure perfect interaction and simplification of maintenance and service in the installation system. Manual pre-setting is possible due to the effective measurement and flow rate adjustment of the compact NexusValve measuring computer.

NEXUSVALVE FLOWMETER BC3

NexusValve Flowmeter BC3

The NexusValve BC3 instrument is designed for hydraulic balancing of heating and cooling systems. It allows measuring static pressure, differential pressures and flow in the said systems. Using the differential pressure measured by the measuring component (balancing valve or measuring orifice). The application corrects the calculated flow also for anti-freeze mixes in cooling systems. The flow can be measured in all branches of the whole hydraulic system and the whole system can be balanced.

The NexusValve BC3 App is available for Android and iOS.


- Ergonomic, user-friendly measuring device.
- Fully differential pressure sensor with the 24-bit pressure processing.
- Digital compensation of temperature effects and the pressure sensor nonlinearity.
- User application for mobile devices running the Android operation system (7.0 +) / iOS.
- Wireless data transfer.
- Correction of flow calculation based on antifreeze liquid characteristics.
- Easy balancing valve selection from a photographic menu.
- Projects records with the capacity of up to 2000 recordings.
- Nominal pressure range: 10 bar or 20 bar.
- Max. overpressure: 120% of nominal pressure.
- Linearity and hysteresis error: 0,15% from nominal pressure range.
- Temperature error: 0,25% from nominal pressure range.
- Medium temperature/ Ambient temperature*: -50 to 90°C / -5 to 50°C.
- Power Supply: Rechargeable AAA batteries.
- Consumption: 20mA via Bluetooth.
- Operating time: Max. 45H.
- Zeroing of pressure measurement: Mechanical with hydraulic bypass at input valves.
- Recording capacity: Max. 2000 recordings.
- Cover: IP65.
- Calibration validity: 12 months.



Android



iOS

Type	Dimensions [mm]			Weight [kg]		Article no.
	Width	Length	Height			
NexusValve Flowmeter BC3	180	80	52	0.42	1	MN80597.2

*Measured at the end of measuring hoses, length 1,5 m. Maximum duration of zeroing valve opening when temperature of the medium exceeds 50°C is 10 seconds.




STATIC CIRCUIT CONTROL VALVE

NexusValve Fluctus




The NexusValve Fluctus (Fixed Orificed Regulation Valve (FODRV)) is a combined static circuit control valve and shut-off valve for hot and cold circuits. Measurements are performed via Venturi nozzle with fixed Kv value. Installation without stabilising sections; flow rate measurement without entering the pre-setting; shut-off with ball valve. Material: Housing, Venturi spindle, measuring connections: dezincification resistant brass CW602N; ball / adjusting screw: dezincification resistant brass CW602N, chrome-plated.

- Measuring accuracy: +/- 3%.
- Operating temperature: -20 °C to 120 °C.
- Actuation: Handle.
- Pressure rating: PN 25.
- Connection: Female thread.
- Nominal width: DN 15 - DN 50.

Type	Nominal width [DN]	Con- nection (F x F)	Kvs [m³/h]	Flow- range [l/h]	Kvm [m³/h]		Order Code
Fluctus Rp DN 15 UL	15	Rp 1/2"	0.23	27 - 125	0.163	1	MN80597.400
Fluctus Rp DN 15 L	15	Rp 1/2"	0.63	62 - 226	0.359	1	MN80597.401
Fluctus Rp DN 15 S	15	Rp 1/2"	1.62	130 - 530	0.746	1	MN80597.402
Fluctus Rp DN 15 H	15	Rp 1/2"	2.49	267 - 1170	1.560	1	MN80597.403
Fluctus Rp DN 20 L	20	Rp 3/4"	1.43	130 - 530	0.746	1	MN80597.404
Fluctus Rp DN 20 S	20	Rp 3/4"	2.82	267 - 1170	1.560	1	MN80597.405
Fluctus Rp DN 20 H	20	Rp 3/4"	5.75	511 - 2170	2.950	1	MN80597.406
Fluctus Rp DN 25 S	25	Rp 1"	7.54	511 - 2170	2.950	1	MN80597.407
Fluctus Rp DN 25 H	25	Rp 1"	12.10	1044 - 4500	6.010	1	MN80597.408
Fluctus Rp DN 32 H	32	Rp 1 1/4"	13.20	1044 - 4500	6.010	1	MN80597.409
Fluctus Rp DN 40 H	40	Rp 1 1/2"	22.00	1580 - 6760	9.200	1	MN80597.410
Fluctus Rp DN 50 H	50	Rp 2"	36.00	2950 - 12630	17.100	1	MN80597.411

NexusValve Fluctus insulation

Temperature protection prevents the valve from becoming dirty or damaged, thus extending its service life.


Type	Dimension [DN]		Order Code
NexusValve Fluctus insulation DN 15	15	1	MN80597.4007
NexusValve Fluctus insulation DN 20	20	1	MN80597.4008
NexusValve Fluctus insulation DN 25	25	1	MN80597.4009
NexusValve Fluctus insulation DN 32	32	1	MN80597.4010
NexusValve Fluctus insulation DN 40	40	1	MN80597.4017
NexusValve Fluctus insulation DN 50	50	1	MN80597.4018

NexusValve Fluctus with fill and drain ball valve / connection for NexusValve Passim

As with NexusValve Fluctus, however, with fill and drain ball valve.

- Connection for NexusValve Passim (Differential Pressure Control Valve (DPCV)).




Type	Nominal width [DN]	Con- nection (F x F)	Kvs [m³/h]	Flow- range [l/h]		Order Code
Fluctus KFE Rp DN 15 UL	15	Rp 1/2"	0.23	27 - 126	1	MN80597.530
Fluctus KFE Rp DN 15 L	15	Rp 1/2"	0.63	62 - 226	1	MN80597.531
Fluctus KFE Rp DN 15 S	15	Rp 1/2"	1.62	130 - 530	1	MN80597.532
Fluctus KFE Rp DN 15 H	15	Rp 1/2"	2.49	267 - 1170	1	MN80597.533
Fluctus KFE Rp DN 20 L	20	Rp 3/4"	1.43	130 - 530	1	MN80597.534
Fluctus KFE Rp DN 20 S	20	Rp 3/4"	2.82	267 - 1170	1	MN80597.535
Fluctus KFE Rp DN 20 H	20	Rp 3/4"	5.75	511 - 2170	1	MN80597.536
Fluctus KFE Rp DN 25 S	25	Rp 1"	7.54	511 - 2170	1	MN80597.537
Fluctus KFE Rp DN 25 H	25	Rp 1"	12.10	1044 - 4500	1	MN80597.538
Fluctus KFE Rp DN 32 H	32	Rp 1 1/4"	13.20	1044 - 4500	1	MN80597.539
Fluctus KFE Rp DN 40 H	40	Rp 1 1/2"	22.00	1580 - 6760	1	MN80597.540
Fluctus KFE Rp DN 50 H	50	Rp 2"	36.00	2950 - 12630	1	MN80597.541

NexusValve Fluctus with flange connection and manual gear

NexusValve Fluctus with flange connection and manual gear is a combined static circuit control valve and shut-off valve for hot and cold circuits. Measurement in Venturi nozzle with fixed Kv value. Flow rate measurement without specifying the pre-adjustment. Venturi measuring tube ST 37.0, surface-treated. Flange-mounted butterfly valve control with manual gear and MemoryStop. Measuring boss brass dezincification resistant.

- Measuring accuracy: +/- 3%.
- Max. Operating temperature: 120 °C.
- Actuation: Hand wheel.
- Pressure rating: PN 16.
- Connection: Flange PN16 DIN2501.
- Nominal width: DN 65 - DN 300 (Models up to DN 600 are available on request).




Type	Nominal width		Kvs [m³/h]	Flow- range [m³/h]		Order Code
	[DN]	["]				
Fluctus FI/HL DN 65	65	2 1/2"	78.2	6.48 - 25.2	1	MN80597.471
Fluctus FI/HL DN 80	80	3"	169	12.60 - 54.0	1	MN80597.472
Fluctus FI/HL DN 100	100	4"	360	22.30 - 93.6	1	MN80597.473
Fluctus FI/HL DN 125	125	5"	502	32.40 - 144.0	1	MN80597.474
Fluctus FI/HL DN 150	150	6"	1010	60.50 - 205.0	1	MN80597.475
Fluctus FI/HL DN 200	200	8"	1910	101.00 - 360.0	1	MN80597.476
Fluctus FI/HL DN 250	250	10"	2540	148.00 - 565.0	1	MN80597.477
Fluctus FI/HL DN 300	300	12"	4850	259.00 - 814.0	1	MN80597.478

NexusValve Vertex



NexusValve Vertex (Variable Orifice Regulation Valve (VODRV)) is a combined circuit control valve and shut-off valve for hot and cold circuits. Measurement in continuously adjustable opening with variable Kv value. No specified direction of flow, measurement / adjustment / shut-off possible in both directions. Housing of dezincification resistant brass CW602N. Ball / adjusting screw: dezincification resistant brass CW602N chrome-plated, shut-off with ball valve, measuring connections: dezincification resistant brass CW602N, O-ring EPDM.

- Operating temperature: -20 °C to 120 °C.
- Pressure rating: PN 25.
- Connection: Female thread.
- Nominal width: DN 10 - DN 50.


Type	Nominal width [DN]	Connection	Kvs [m³/h]	Flow-range [l/h]		Order Code
Vertex Rp DN 10	10	Rp 3/8"	0.67	11 - 270	1	MN80597.699
Vertex Rp DN 15	15	Rp 1/2"	1.71	19 - 530	1	MN80597.700
Vertex Rp DN 20	20	Rp 3/4"	4.40	55 - 1170	1	MN80597.701
Vertex Rp DN 25	25	Rp 1"	7.46	84 - 2170	1	MN80597.702
Vertex Rp DN 32	32	Rp 1 1/4"	13.50	310 - 4500	1	MN80597.703
Vertex Rp DN 40	40	Rp 1 1/2"	23.70	450 - 6770	1	MN80597.704
Vertex Rp DN 50	50	Rp 2"	34.50	960 - 12640	1	MN80597.705

NexusValve Vertex with fill and drain ball valve / connection for NexusValve Passim




NexusValve Vertex (Variable Orifice Regulation Valve (VODRV)) is a combined circuit control valve and shut-off valve for hot and cold circuits. Measurement in continuously adjustable opening with variable Kv value. No specified direction of flow, measurement / adjustment / shut-off possible in both directions. Housing of dezincification resistant brass CW602N. Ball / adjusting screw: dezincification resistant brass CW602N chrome-plated, shut-off with ball valve, measuring connections: dezincification resistant brass CW602N, O-ring EPDM.

- Operating temperature: -20 °C to 120 °C.
- Pressure rating: PN 25.
- Connection: Female thread.
- Nominal width: DN 10 - DN 50.

Type	Nominal width [DN]	Connection	Kvs [m³/h]	Flow-range [l/h]		Order Code
Vertex / KFE Rp DN 10	10	Rp 3/8"	0.67	11 - 270	1	MN80597.712
Vertex / KFE Rp DN 15	15	Rp 1/2"	1.71	19 - 530	1	MN80597.706
Vertex / KFE Rp DN 20	20	Rp 3/4"	4.40	55 - 1170	1	MN80597.707
Vertex / KFE Rp DN 25	25	Rp 1"	7.46	84 - 2170	1	MN80597.708
Vertex / KFE Rp DN 32	32	Rp 1 1/4"	13.50	310 - 4500	1	MN80597.709
Vertex / KFE Rp DN 40	40	Rp 1 1/2"	23.70	450 - 6770	1	MN80597.710
Vertex / KFE Rp DN 50	50	Rp 2"	34.50	960 - 12640	1	MN80597.711

NexusValve Vertex / Relax insulation

Temperature protection prevents the valve from becoming dirty or damaged, thus extending its service life.

Type	Dimension [DN]		Order Code
NexusValve Vertex / Relax insulation DN 15	15	1	MN80597.7000
NexusValve Vertex / Relax insulation DN 20	20	1	MN80597.7010
NexusValve Vertex / Relax insulation DN 25	25	1	MN80597.7020
NexusValve Vertex / Relax insulation DN 32	32	1	MN80597.7030
NexusValve Vertex / Relax insulation DN 40	40	1	MN80597.7040
NexusValve Vertex / Relax insulation DN 50	50	1	MN80597.7050


DYNAMIC CIRCUIT CONTROL VALVES

NexusValve Vivax automatic flow rate controller

Automatic volumetric flow limiter (Pressure Independent Control Valve (PICV)) for hot and cold circuits. Volumetric flow measurement in Venturi nozzle without stabilising sections. Direct flow rate measurement without entering the pre-settings. Housing of dezincification resistant brass CW602N. Measurement connections: dezincification resistant brass CW602N.

- Measuring accuracy: +/- 3%.
- Operating temperature: -20 °C to 120 °C.
- Operating pressure: max 400 kPa.
- Pressure rating: PN 25.
- Connection: Female thread.
- Nominal width: DN 15 - DN 50.




Type	Nominal width [DN]	Connection	Flow- range [l/h]	Colour code		Order Code
Vivax DN 15 L	15	G 1/2" F	36 - 118	White	1	MN80597.001
Vivax DN 15 S	15	G 1/2" F	90 - 450	Red	1	MN80597.002
Vivax DN 15 H	15	G 1/2" F	300 - 1400	Black	1	MN80597.003
Vivax DN 20 S	20	G 3/4" F	320 - 882	White	1	MN80597.004
Vivax DN 20 H	20	G 3/4" F	835 - 2221	Black	1	MN80597.005
Vivax DN 25 S	25	G 1" F	865 - 2340	White	1	MN80597.006
Vivax DN 25 H	25	G 1" F	1750 - 3330	Black	1	MN80597.007
Vivax DN 32 H	32	G 1 1/4" F	1910 - 4400	Black	1	MN80597.008
Vivax DN 40 S	40	G 1 1/2" F	3670 - 7560	Black	1	MN80597.010
Vivax DN 50 H	50	G 2" F	5180 - 12600	Black	1	MN80597.013

NexusValve Vivax insulation


Temperature protection prevents the valve from becoming dirty or damaged, thus extending its service life.



Type	Dimension [DN]		Order Code
NexusValve Vivax insulation DN 15	15	1	MN80597.0010
NexusValve Vivax insulation DN 20	20	1	MN80597.0040
NexusValve Vivax insulation DN 25	25	1	MN80597.0060
NexusValve Vivax insulation DN 32	32	1	MN80597.0080
NexusValve Vivax insulation DN 40	40	1	MN80597.0100
NexusValve Vivax insulation DN 50	50	1	MN80597.0130


Thermoelectric actuator for NexusValve Vivax DN 15 - DN 25



Type	Model	Suitable for NexusValve Vivax		Order Code
Thermoelectric actuator 24 VAC 0-10V	Modulating actuator 24 VAC, 0 - 10 V control voltage	DN 15 - DN 25	1	MN80597.0023
Thermoelectric actuator 230V / 50 Hz	230V / 50 Hz OPEN / CLOSED	DN 15 - DN 25	1	MN80597.0021
Thermoelectric actuator 24 VAC	24 VAC OPEN / CLOSED	DN 15 - DN 25	1	MN80597.0022


Electromotive actuator for NexusValve Vivax DN 15 - DN 32



Type	Model	Suitable for NexusValve Vivax		Order Code
Electromotive actuator 24 VAC 0-10V	Modulating actuator 24 VAC, 0 - 10 V control voltage	DN 15 - DN 32	1	MN80597.0027
Electromotive actuator 230V / 50 Hz	230V / 50 Hz OPEN / CLOSED	DN 15 - DN 32	1	MN80597.0029
Electromotive actuator 24 VAC	24 VAC OPEN / CLOSED	DN 15 - DN 32	1	MN80597.0028
Electromotive actuator 24V NC 0-10V	Modulating actuator 24V NC, 0 - 10 V control voltage	DN 15 - DN 32	1	MN80597.0037

Actuator for NexusValve Vivax DN 40 - DN 50




Type	Model	Suitable for NexusValve Vivax		Order Code
Actuator 24 VAC 0-10V	Modulating actuator 24 VAC 0 - 10 V control voltage	DN 40 - DN 50	1	MN80597.0113
3-point actuator 24 VAC	3-point actuator 24 VAC	DN 40 - DN 50	1	MN80597.0114
3-point actuator 230 VAC	3-point actuator 230 VAC	DN 40 - DN 50	1	MN80597.0115

NexusValve Vivax with flange connection

Automatic volume flow limiter (pressure-independent control valve (PICV)) for cooling and heating circuits. Precise control and easy valve selection. No elaborate Kv calculation to determine the correct valve. Direct adjustment of the volume flow at the valve. Flange connection PN16. Ductile iron housing EN-GJS-450, bronze control unit, EPDM membrane.

- Including actuator.
- Operating temperature: 5 °C to 120 °C.
- Pressure rating: PN 16.
- Nominal width: DN 65 - DN 250.
- Drive working voltage 24V AC / DC.
- Different control and feedback signals.
- Control curve adjustable Linear / EQM.



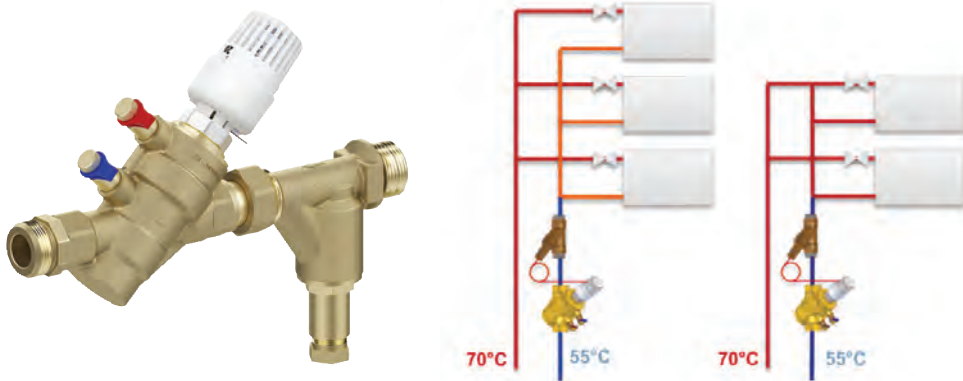
Type	Size [mm]	Control Range [m ³ /h]		Control Range [kPa]		Order Code
		Min.	Max.			
Vivax Fl DN 65LF	65LF	3	20	30 - 400	1	MN80597.040
Vivax Fl DN 65	65	5	30	30 - 400	1	MN80597.041
Vivax Fl DN 80	80	5	30	30 - 400	1	MN80597.042
Vivax Fl DN 100	100	15	55	30 - 400	1	MN80597.043
Vivax Fl DN 125	125	15	90	30 - 400	1	MN80597.044
Vivax Fl DN 125HF	125HF	15	120	60 - 400	1	MN80597.045
Vivax Fl DN 150	150	15	90	30 - 400	1	MN80597.046
Vivax Fl DN 150HF	150HF	15	150	60 - 400	1	MN80597.047
Vivax Fl DN 200A	200A	50	200	30 - 400	1	MN80597.048
Vivax Fl DN 200HF	200HF	100	300	60 - 400	1	MN80597.049
Vivax Fl DN 250A	250A	100	300	30 - 400	1	MN80597.050
Vivax Fl DN 250HF	250HF	150	500	60 - 400	1	MN80597.051


NexusValve Vivax T with temperature limiter / immersion sensor

Automatic flow rate controller and temperature limiter (Pressure Independent Control Valve (PICV)) for hot circuits for hydraulic balancing of the lines or consumer in 1- and 2-pipe heating systems and optimisation of the useful heat efficiency by limiting the return temperature.

As with the NexusValve Vivax, the maximum flow rate is set via pre-adjustment to ensure correct supply to all lines or consumers. The NexusValve Vivax T is also fitted with a thermostatic actuator, including immersion sensor. This makes it possible to limit the temperature as well as the flow rate. The return line temperature is limited to the set value. The valve is only opened by the thermostatic head when the temperature drops below the set value. This significantly increases the useful heat efficiency.

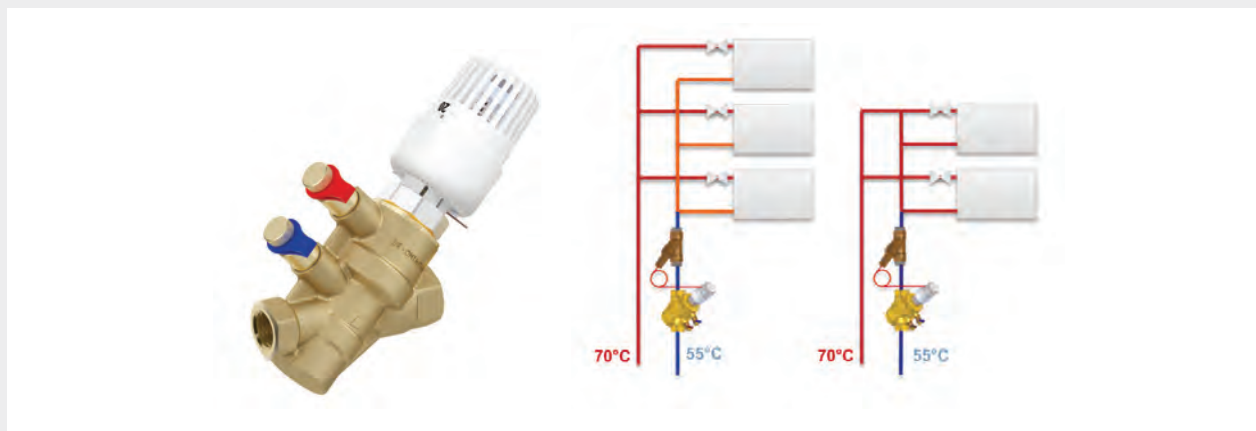
- Flow rate measuring accuracy: +/- 3%.
- Temperature control range: -20 °C to 65 °C.
- Operating temperature: -20 °C to 120 °C.
- Operating pressure: max 400 kPa.
- Pressure rating: PN 25.
- Connection: Female thread.
- Nominal width: DN 15 - DN 25.




Type	Nominal width [DN]	Connection	Flow-range [l/h]	Colour code		Order Code
Vivax T - TF DN 15 L	15	G 1/2" F	36 - 118	White	1	MN80597.121
Vivax T - TF DN 15 S	15	G 1/2" F	90 - 450	Red	1	MN80597.122
Vivax T - TF DN 15 H	15	G 1/2" F	300 - 1400	Black	1	MN80597.123
Vivax T - TF DN 20 S	20	G 3/4" F	320 - 882	White	1	MN80597.124
Vivax T - TF DN 20 H	20	G 3/4" F	835 - 2221	Black	1	MN80597.125
Vivax TF - T DN 25 S	25	G 1" F	865 - 2340	White	1	MN80597.126
Vivax T - TF DN 25 H	25	G 1" F	1750 - 3330	Black	1	MN80597.127

NexusValve Vivax T with contact sensor

The NexusValve Vivax T is also fitted with a thermostatic actuator, including immersion sensor.



Type	Nominal width [DN]	Connection	Flow- range [l/h]	Colour code		Order Code
Vivax T - AF DN 15 L	15	G 1/2" F	36 - 118	White	1	MN80597.1210
Vivax T - AF DN 15 S	15	G 1/2" F	90 - 450	Red	1	MN80597.1220
Vivax T - AF DN 15 H	15	G 1/2" F	300 - 1400	Black	1	MN80597.1230
Vivax T - AF DN 20 S	20	G 3/4" F	320 - 882	White	1	MN80597.1240
Vivax T - AF DN 20 H	20	G 3/4" F	835 - 2221	Black	1	MN80597.1250
Vivax T - AF DN 25 S	25	G 1" F	865 - 2340	White	1	MN80597.1260
Vivax T - AF DN 25 H	25	G 1" F	1750 - 3330	Black	1	MN80597.1270

NexusValve Vivax Plus with flange connection

The NexusValve Vivax Plus valve is a pressure independent dynamic control valve, which automatically keeps a constant differential pressure across the internal controlling orifice of the valve. NexusValve Vivax Plus setting will limit flow to design flow at full load, and the NexusValve Vivax Plus actuator with choosable linear or EQM will precisely and with full authority limit the flow requirement at any partial load.

- Operating temperature: -20 °C to 120 °C.
- Pressure rating: PN 10/15/25/40 (multi flange; PN depends on DN).
- Connection: Multi Flange PN 10/15/25/40 (multi flange; PN depends on DN).
- Nominal width: DN65-250.
- Automatic balancing.
- Perfect flow control - 100% valve authority.
- No overflows - no unnecessary energy consumption.
- Optional fail safe function.
- Better thermal comfort.
- High flow control accuracy: from +/- 2% to +/-5%.
- Commissioning not needed.
- Easy valve selection.
- Low installation costs because of two in one construction - motorized valve and automatic flow limiter.
- Precise pump tuning when verifying differential pressure on measuring points for energy saving.
- System extension or repair possible without upsetting flow in the operating terminal units.



Type	Nominal width		Kvs	Flow range	Pressure rating		Order Code
	[DN]	["]	[m³/h]	[l/h]	[kPa]		
Vivax FI DN 65/80 L	65 / 80 L	2" / 2 1/2"	24.0	5310 - 15000	30-800	1	MN80597.030
Vivax FI DN 65/80 S	65 / 80 S	2" / 2 1/2"	39.5	9240 - 25700	30-800	1	MN80597.031
Vivax FI DN 65/80 H	65 / 80 H	2" / 2 1/2"	39.5	12800 - 35600	35-800	1	MN80597.032
Vivax FI DN 80/100 L	80 / 100 L	3" / 4"	58.3	12600 - 33800	30-800	1	MN80597.033
Vivax FI DN 80/100 S	80 / 100 S	3" / 4"	58.3	17000 - 51000	35-800	1	MN80597.034
Vivax FI DN 80/100 H	80 / 100 H	3" / 4"	89.0	13300 - 72700	50-800	1	MN80597.035
Vivax FI DN 125/150 S	125 / 150 S	5" / 6"	132.3	23400 - 83800	30-800	1	MN80597.036
Vivax FI DN 125/150 H	125 / 150 H	5" / 6"	132.3	25600 - 106000	35-800	1	MN80597.037
Vivax FI DN 200/250	200 / 250	8" / 10"	33.1 - 277	33100 - 277000	35-800	1	MN80597.038

Press Connections

Press connections with M-contour as a set (2 pieces). Self-sealing with O-ring.



Type	Model	DN		Order Code
Press connection G 1/2"	G 1/2" M x 15 mm	15	1	MN80597.0001
Press connection G 1/2"	G 1/2" M x 18 mm	15	1	MN80597.0002
Press connection G 3/4"	G 3/4" M x 15 mm	20	1	MN80597.0003
Press connection G 3/4"	G 3/4" M x 18 mm	20	1	MN80597.0004
Press connection G 3/4"	G 3/4" M x 22 mm	20	1	MN80597.0005
Press connection G 1"	G 1" M x 28 mm	25	1	MN80597.0006
Press connection G 1 1/4"	G 1 1/4" M x 35 mm	32	1	MN80597.0007
Press connection G 1 1/2"	G 1 1/2" M x 42 mm	40	1	MN80597.0008
Press connection G 2"	G 2" M x 54 mm	50	1	MN80597.0009


DIFFERENTIAL PRESSURE REGULATORS

NexusValve Passim - without fill and drain ball valve

Automatic differential pressure regulator (Differential Pressure Control Valve (DPCV)) with adjustable differential pressure for heating and cooling systems. Shut-off without making changes to the pre-adjusted settings. Differential pressure can be adjusted using pre-adjustment. Mounting in the return line, without stabilising sections. Including 1 m capillary tube with 1/2" to the flow line. Housing, base, cone, mechanical parts: dezincification resistant brass CW602N, stainless steel spring, seal and diaphragm EPDM, shut-off PPS.

- Operating temperature: -20 °C to 120 °C (short periods 135 °C).
- Pressure rating: PN 25.
- Nominal width: DN 15 - DN 32.




Type	Nominal width [DN]	Connection	Max. differential pressure [bar]	Kvs [m³/h]	Flow-range [kPa]		Order Code
Passim M DN 15	15	G 1/2" M	4.5	1.6	5 - 25	1	MN80597.550
Passim M DN 15	15	G 1/2" M	4.5	1.6	20 - 40	1	MN80597.551
Passim F DN 20	20	G 3/4" F	4.5	2.5	5 - 25	1	MN80597.591
Passim F DN 20	20	G 3/4" F	4.5	2.5	20 - 40	1	MN80597.592
Passim F DN 20	20	G 3/4" F	4.5	2.5	20 - 65	1	MN80597.593
Passim F DN 15	15	G 1/2" F	2.5	1.6	5 - 25	1	MN80597.560
Passim F DN 15	15	G 1/2" F	2.5	1.6	20 - 40	1	MN80597.561
Passim F DN 20	20	G 3/4" F	2.5	2.5	5 - 25	1	MN80597.562
Passim F DN 20	20	G 3/4" F	2.5	2.5	20 - 40	1	MN80597.563
Passim F DN 25	25	G 1" F	2.5	4.0	5 - 25	1	MN80597.564
Passim F DN 25	25	G 1" F	2.5	4.0	20 - 40	1	MN80597.565
Passim F DN 32	32	G 1 1/4" F	2.5	6.3	5 - 25	1	MN80597.566
Passim F DN 32	32	G 1 1/4" F	2.5	6.3	20 - 40	1	MN80597.567

NexusValve Passim - with fill and drain ball valve

As with NexusValve Passim, however, with KFE.

- Housing DN 15-32 and DN 40: dezincification resistant brass CW602N, DN 50: EN-GJL-250 (GG25).
- Max. Differential pressure: 2.5 bar.



Type	Nominal width [DN]	Connection	Max. differential pressure [bar]	Kvs [m ³ /h]	Flow- range [kPa]		Order Code
Passim / KFE F DN 15	15	G 1/2" F	2.5	1.6	5 - 25	1	MN80597.521
Passim / KFE F DN 15	15	G 1/2" F	2.5	1.6	20 - 40	1	MN80597.522
Passim / KFE F DN 15	15	G 1/2" F	2.5	1.6	20 - 65	1	MN80597.5222
Passim / KFE F DN 20	20	G 3/4" F	2.5	2.5	5 - 25	1	MN80597.523
Passim / KFE F DN 20	20	G 3/4" F	2.5	2.5	20 - 40	1	MN80597.524
Passim / KFE F DN 20	20	G 3/4" F	2.5	2.5	20 - 65	1	MN80597.5242
Passim / KFE F DN 25	25	G 1" F	2.5	4.0	5 - 25	1	MN80597.525
Passim / KFE F DN 25	25	G 1" F	2.5	4.0	20 - 40	1	MN80597.526
Passim / KFE F DN 25	25	G 1" F	2.5	4.0	20 - 65	1	MN80597.5262
Passim / KFE F DN 32	32	G 1 1/4" F	2.5	6.3	5 - 25	1	MN80597.527
Passim / KFE F DN 32	32	G 1 1/4" F	2.5	6.3	20 - 40	1	MN80597.528
Passim / KFE F DN 32	32	G 1 1/4" F	2.5	6.3	20 - 65	1	MN80597.5282
Passim / KFE F DN 40	40	G 1 1/2" F	2.5	10	5 - 25	1	MN80597.570
Passim / KFE F DN 40	40	G 1 1/2" F	2.5	10	20 - 40	1	MN80597.571
Passim / KFE F DN 40	40	G 1 1/2" F	2.5	10	35 - 75	1	MN80597.572
Passim / KFE F DN 50	50	G 2" F	2.5	20	5 - 25	1	MN80597.580
Passim / KFE F DN 50	50	G 2" F	2.5	20	20 - 40	1	MN80597.581
Passim / KFE F DN 50	50	G 2" F	2.5	20	35 - 75	1	MN80597.582
Passim / KFE F DN 50	50	G 2" F	2.5	20	60 - 100	1	MN80597.583

Max. differential pressure 4 bar on request!


NexusValve Passim DN 65 - DN 80

Automatic differential pressure regulator (differential pressure control valve (DPCV)) with continuously adjustable differential pressure for heating and cooling systems.

Differential pressure adjustable via presetting, installation in flow or return, delivery with 2 capillary lines, connection flange PN16, housing nodular cast iron EN-GJS-400-15, seat, cone and spindle and spring stainless steel, seals and membrane EPDM.


- Operating temperature: -20 °C to 120 °C (150 °C).
- Pressure rating: PN 16.
- Nominal width: DN 65 - DN 80.




Type	Nominal width [DN]	Differential pressure [kPa]	Kvs [m³/h]		Order Code
Passim FI DN 65	65	20 - 80	58	1	MN80597.602
Passim FI DN 65	65	70 - 130	58	1	MN80597.604
Passim FI DN 80	80	20 - 80	80	1	MN80597.605
Passim FI DN 80	80	70 - 130	80	1	MN80597.603

NexusValve Passim insulation



Type	Dimension [DN]		Order Code
NexusValve Passim insulation DN 15	15	1	MN80597.5210
NexusValve Passim insulation DN 20	20	1	MN80597.5230
NexusValve Passim insulation DN 25	25	1	MN80597.5250
NexusValve Passim insulation DN 32	32	1	MN80597.5270
NexusValve Passim insulation DN 40	40	1	MN80597.5680
NexusValve Passim insulation DN 50	50	1	MN80597.5710

Set for differential pressure control

NexusValve Passim with fill [DN]	NexusValve Vertex [DN]		Order Code
DN 15	DN 15	1	MN80597.521.706
DN 20	DN 20	1	MN80597.523.707
DN 25	DN 25	1	MN80597.525.708
DN 32	DN 32	1	MN80597.527.709
DN 40	DN 40	1	MN80597.570.710
DN 50	DN 50	1	MN80597.580.711


SHUT-OFF BALL VALVES

NexusValve Relax



NexusValve Relax is a shut-off ball valve for hot and cold circuits. Suitable as shut-off for NexusValve circuit control valves. No specified direction of flow, shut-off possible in both directions. Material: Housing: dezincification resistant brass CW602N, spindle: dezincification brass CW602N.

- Operating temperature: -20 °C to 120 °C.
- Pressure rating: PN 25.
- Connection: Female thread.
- Nominal width: DN 15 - DN 50.


Type	Nominal width [DN]	Connection	Kvs [m³/h]		Order Code
Relax Rp DN 15	15	Rp 1/2"	1.80	1	MN80597.720
Relax Rp DN 20	20	Rp 3/4"	4.65	1	MN80597.721
Relax Rp DN 25	25	Rp 1"	7.40	1	MN80597.722
Relax Rp DN 32	32	Rp 1 1/4"	15.50	1	MN80597.723
Relax Rp DN 40	40	Rp 1 1/2"	25.70	1	MN80597.724
Relax Rp DN 50	50	Rp 2"	44.00	1	MN80597.725

NexusValve Relax with flange connection and manual gear



NexusValve Relax with flange connection is a shut off valve for heating and cooling circuits. Regulation with manual gear and MemoryStop. No predefined flow and shut off direction. Stainless steel shaft and plate, EPDM seal.

- Operating temperature: -20 °C to 120 °C.
- Actuation: Manual gear.
- Pressure rating: PN 16.
- Connection: Flange.
- Flange housing.
- Nominal width: DN 65 - DN 300 (larger DN upon request).


Type	Nominal width [DN]	Kvs [m³/h]		Order Code
Relax A/A DN 65	65	148	1	MN80597.4710
Relax A/A DN 80	80	237	1	MN80597.4720
Relax A/A DN 100	100	603	1	MN80597.4730
Relax A/A DN 125	125	888	1	MN80597.4740
Relax A/A DN 150	150	2340	1	MN80597.4750
Relax A/A DN 200	200	2850	1	MN80597.4760
Relax A/A DN 250	250	4550	1	MN80597.4770
Relax A/A DN 300	300	7760	1	MN80597.4780

NexusValve Relax with KFE / connection for NexusValve Passim



NexusValve Relax is a shut-off ball valve for hot and cold circuits. With drain valve / connection for capillary line. Suitable as shut-off for NexusValve circuit regulators, partner for Passim (Differential Pressure Control Valve (DPCV)). No specified direction of flow, shut-off possible in both directions. Material: Housing: dezincification resistant brass CW602N, spindle: dezincification brass CW602N.

- Operating temperature: -20 °C to 120 °C.
- Pressure rating: PN 25.
- Connection: Female thread.
- Nominal width: DN 15 - DN 50.

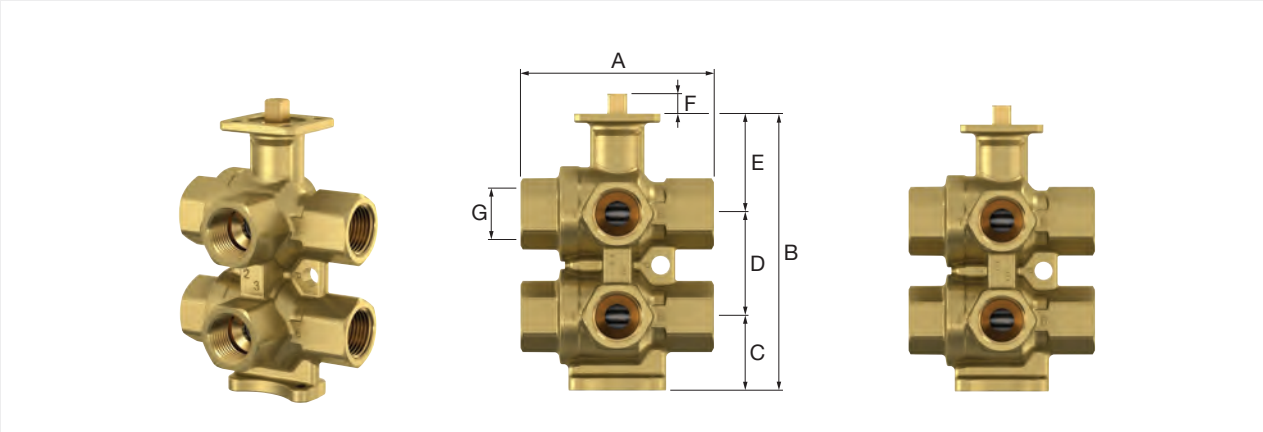
Type	Nominal width [DN]	Connection	Kvs [m³/h]		Order Code
Relax / KFE Rp DN 15	15	Rp 1/2"	1.80	1	MN80597.726
Relax / KFE Rp DN 20	20	Rp 3/4"	4.65	1	MN80597.727
Relax / KFE Rp DN 25	25	Rp 1"	7.40	1	MN80597.728
Relax / KFE Rp DN 32	32	Rp 1 1/4"	15.50	1	MN80597.729
Relax / KFE Rp DN 40	40	Rp 1 1/2"	25.70	1	MN80597.730
Relax / KFE Rp DN 50	50	Rp 2"	44.00	1	MN80597.731


SIX WAY CONTROL VALVE

NexusValve Tribus Six Way Valve

NexusValve Tribus is a special 6-way ball valve to be installed in 4 pipes systems to exchange the supplied water temperature at the devices to handle with cooling and heating in buildings. One NexusValve Tribus valve replaces 4 valves with actuators, saving your money and time. Due to construction advantages you don't have to worry about any possible leakage in your system, mixtures of temperatures or pressure overflow between cooling and heating circuits anymore. The unique compact feature of the Tribus 6-way valve reduces installation cost, lessens power consumption, and is ideal for chilled beams and radiant ceiling applications.

- Only one control valve and one actuator for the terminal changeover.
- Fast and easy installation and commissioning, including BMS connectivity.
- Simple and flexible valve's selection due to several inserts with different Kv values.
- Built-in pressure compensation function.
- For antifreeze (glycol) to a maximum of 50%.
- Max. working pressure: 16.5 bar.
- Min./Max. working temperature: -40 °C...+130 °C.
- Leakage rate: A.
- Linear actuator: 24VAC, 0-10V, 10 Hm, IP54.
- Body: DZR brass CW602N.
- Ball valve: CW614N chrome plated.
- Kv and Cv disks: Stainless Steel.



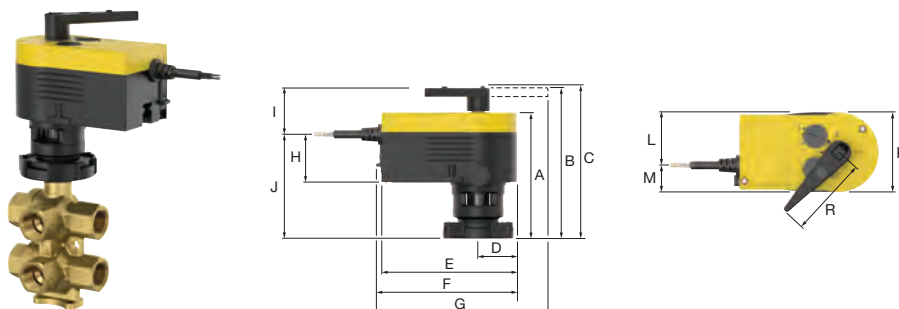
Type	Connection (G)	Dimensions [mm]							Order Code
		A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]		
NexusValve Tribus Six Way Valve	Rp 1/2"	85.09	121.41	32.51	44.96	43.94	8.89	1	MN80597.940




NexusValve Tribus Six Way Valve Actuator

For controlling the Nexus Valve Tribus Six Way Valve.

- Power Supply: 24VAC or 24 VDC.
- Control: 0-10V, 10-0V.
- Angle of rotation: 0 - 90°.
- Run time: 35s / 60s / 120s.
- Protection: IP 54.
- Ambient temperature: -10-55 °C.
- Torque: 7Nm/5.16 ft lbs.



Type	Dimensions [mm]															Order Code
	A	B	C	D	E	F	G	H	I	J	K	L	M	R		
NexusValve Tribus Six Way Valve Actuator	113.5	133.5	137.5	35	122	126.7	161.7	43	63	51	70	46.5	23.5	70	1	MN80597.0039

NEXUSVALVE TW FOR DOMESTIC WATER

Thermal control valve (ZIV) for domestic water
for use in circulation piping in accordance with DVGW Worksheet W551 and W553

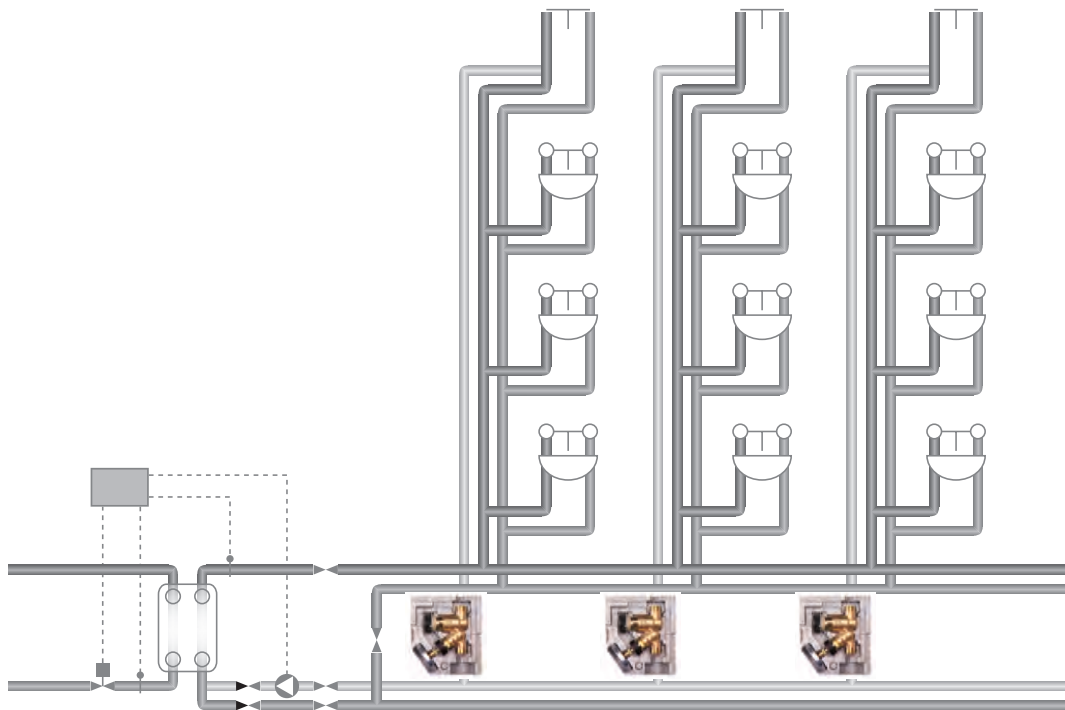
The product

- Thermal controller in the range 50 – 60 °C with a control accuracy of ± 2 K
- Automatic thermal disinfection in the temperature range $T > 65$ °C
- Flow rate manually adjustable corresponding to diagram
- Fittings DIN-DVGW tested

The advantages

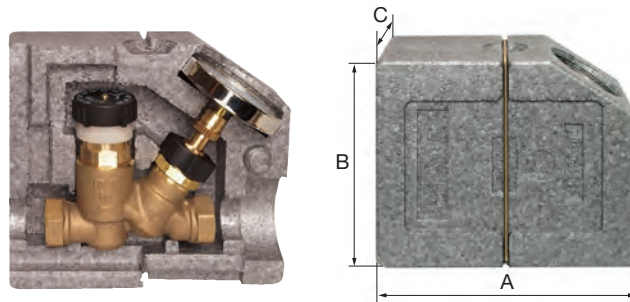
- Parts in contact with the medium made of corrosion resistant red brass
- Only two operating levels: Drainage device and thermometer mounting combined
- Including thermometer and insulation (optionally without)
- Pre-set, control, shut-off with fittings
- Permitted operating pressure: PB 10 bar
- Permitted operating temperature: TB 90 °C


Installation example



NexusValve TW - Domestic water circulation valves with insulation and female thread

50 - 60 °C according to DIN-DVGW, insulation and thermometer are included in the scope of supply.

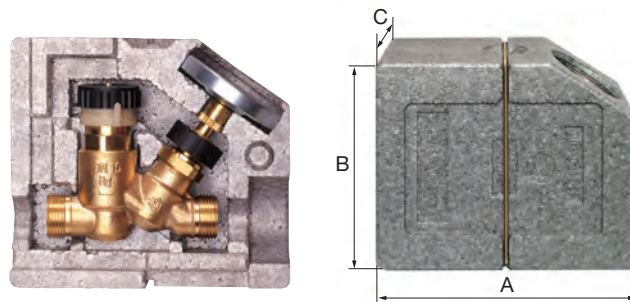



Type	Connection	Nominal width	Installed length of valve [mm]	Dimension insulation [mm]				Order Code
				A	B	C		
TW (ZIV) F DN15 with insulation	Rp 1/2"	DN 15	98	143	162	82	10	M1206320
TW (ZIV) F DN20 with insulation	Rp 3/4"	DN 20	125	143	162	90	10	M1206360
TW (ZIV) F DN25 with insulation	Rp 1"	DN 25	136	157	162	110	5	M1206400



NexusValve TW - Domestic water circulation valves with insulation and male thread

For metal pipe threaded joints, 50 - 60 °C according to DIN-DVGW, insulation and thermometer are included in the scope of supply.




Type	Connection	Nominal width	Installed length of valve [mm]	Dimension insulation [mm]				Order Code
				A	B	C		
TW (ZIV) M DN15 with insulation	Rp 3/4"	DN 15	98	143	162	82	10	M1206340
TW (ZIV) M DN20 with insulation	Rp 1"	DN 20	103	143	162	90	10	M1206380
TW (ZIV) M DN25 with insulation	Rp 1 1/2"	DN 25	113	157	162	110	5	M1206420



NexusValve TW - Domestic water circulation valves female thread



50 - 60 °C according to DIN-DVGW


Type	Connection	Nominal width	Installed length of valve [mm]		Order Code
TW (ZIV) F DN15	Rp 1/2"	DN 15	98	10	M1206325
TW (ZIV) F DN20	Rp 3/4"	DN 20	125	10	M1206365
TW (ZIV) F DN25	Rp 1"	DN 25	136	5	M1206405



NexusValve TW - Domestic water circulation valves male thread



For metal pipe threaded joints, 50 - 60 °C according to DIN-DVGW.

Type	Connection	Nominal width	Installed length of valve [mm]		Order Code
TW (ZIV) M DN15	G 3/4"	DN 15	98	10	M1206345
TW (ZIV) M DN20	G 1"	DN 20	103	10	M1206385
TW (ZIV) M DN25	G 1 1/4"	DN 25	113	5	M1206425



System Monitoring



S. 536

Consumption Metering -
Heating and Cooling



S. 539

Consumption Metering - Potable Water



S. 553



We offer a complete range for consumption registration and transmission of consumption data for heat or cold energy and water quantities. These include MID approved energy meters available as mechanical or ultrasonic devices, as well as hot and cold water meters with optional wireless modules. All products can be ideally combined with the Logotherm home stations. Electronic heat cost allocators complete the range. With the gateways, it is possible to send consumption data to the portal, where it can be directly retrieved or distributed.

FLEXCON PA

Flexcon PA AutoFill pressurisation assistant

The Flamco Flexcon PA AutoFill pressurisation assistant is used to monitor heating systems and to assist the installer and end-user with pressure maintenance. The Flexcon PA AutoFill logs and alerts when pressurisation problems occur and assists in (or control) topping-up the heating system to the correct working pressure. It can also advise on expansion vessel life expectancy without disconnecting the vessel and you can configure monitoring on maintenance intervals for third party components. The Flexcon PA AutoFill comes with a smartphone/tablet application for advanced and complete delivery of system status, guided maintenance advice and an automatic filling device for complete automation of topping-up and leak detection of heating systems.

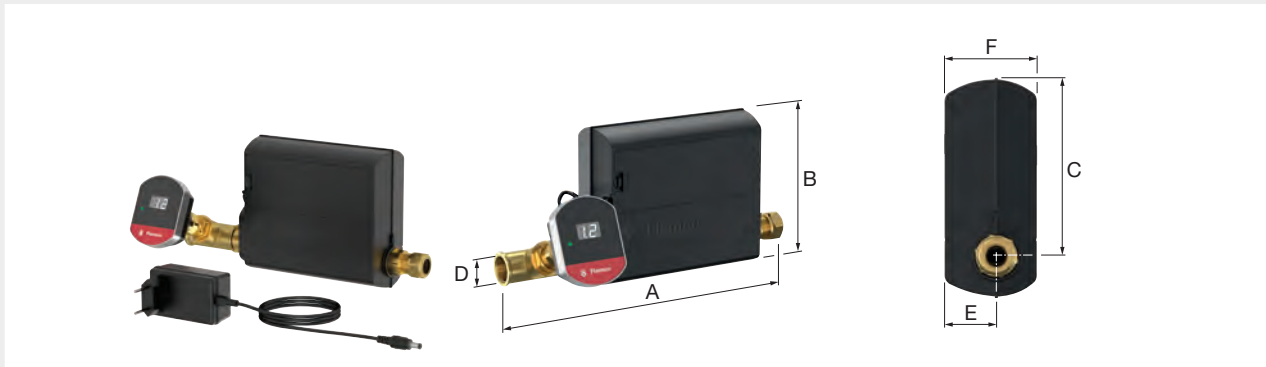
Advantages:


- Eliminates unscheduled service call-outs for nuisance failures caused by pressure loss in the system, increasing comfort for end customers.
- Monitoring of fill pressure, safety valve discharges, expansion vessel end of life span and scheduled maintenance intervals of any components.
- The Flexcon PA AutoFill set includes automatic topping-up and leak detection functionality.
- The mobile app enables end customers to share event logs with their installer for remote support.
- The Flexcon PA AutoFill gives the installer eyes on site to see how the installation's pressurisation is functioning.

Specifications:

- Suitable for heating systems with expansion vessels with a system volume up to 40,000 l and for addition of glycol-based anti-freeze up to 50%.
- Can be combined with Flamconnect Remote Service.
- Power supply: 12V AC/DC adapter.
- Working system temperature: 0 °C / 90 °C.
- Working ambient temperature: 0 °C / 40 °C.
- Working system pressure up to 3.5 bar.
- Flow rate (filling): 0.7 m³ / hour.
- Design pressure: PN 6.

The Flexcon PA AutoFill set includes: Flexcon PA (G ¼" M), AutoFill unit (G ½" M), t-piece (G ½" F), straight coupling (G ½" F), shut-off valve (¼" x ½"), 2x compression nut/ring (15 mm).



Type	Connection (D)	Dimensions						Order Code
		A [mm]	B [mm]	C [mm]	E [mm]	F [mm]		
Flexcon PA AutoFill	G ½" - 15 mm (2x)	263	136	109.5	32	57	1	23761



Flexcon PA pressurisation assistant

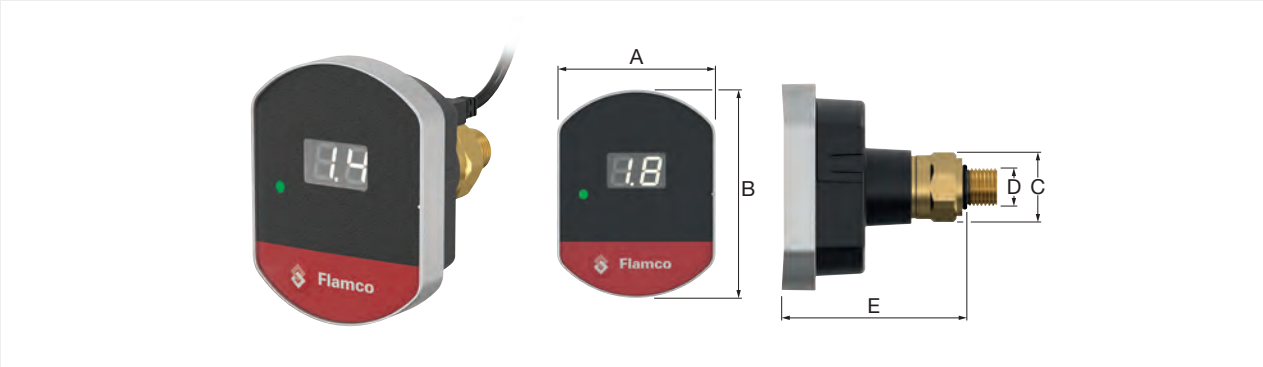
The Flamco Flexcon PA pressurisation assistant is used to monitor heating systems and to assist the installer and end-user with pressure maintenance. The Flexcon PA logs and alerts when pressurisation problems occur and assists in (or control) topping-up the heating system to the correct working pressure. It can also advise on expansion vessel life expectancy without disconnecting the vessel and you can configure monitoring on maintenance intervals for third party components. The Flexcon PA comes with a smartphone/tablet application for advanced and complete delivery of system status and guided maintenance advice.


Advantages:

- Eliminates unscheduled service call-outs for nuisance failures caused by pressure loss in the system, increasing comfort for end customers.
- Monitoring of fill pressure, safety valve discharges, expansion vessel end of life span and scheduled maintenance intervals of any components.
- The mobile app enables end customers to share event logs with their installer for remote support.
- The Flexcon PA gives the installer eyes on site to see how the installation's pressurisation is functioning.

Specifications:

- Suitable for heating systems up to 40,000 l and for addition of glycol-based anti-freeze up to 50%.
- Power supply: 5V AC/DC adapter.
- Working system temperature: 0 °C / 90 °C.
- Working ambient temperature: 0 °C / 40 °C.
- Working system pressure up to 3.5 bar.
- Flow rate (filling): 0.7 m³ / hour.
- Design pressure: PN 6.



Type	Connection (D)	Dimensions					Order Code
		A [mm]	B [mm]	C [mm]	E [mm]		
Flexcon PA	G 1/4"	54	71	22	63	1	23760



WMS LOW WATER LEVEL PROTECTION DEVICES

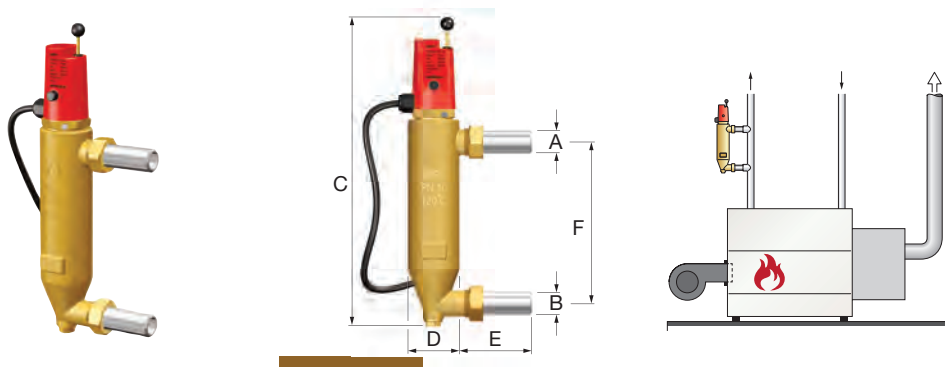
WMS Low Water Level Protection Device


Mechanical low water level protection device.

A mechanical boiler water low level alarm with a float system. If the water level in the boiler drops below a minimum level a float activates a switch. This switch interrupts the power supply to the boiler burner. A locking mechanism prevents the burner from restarting automatically. The test button allows the float to be lowered to simulate a low water alarm condition. The WMS 800 is suitable for continuous operation.

According to EN 12828, system with more than 300 kW must be equipped with water level limiters. However, the installation of such units is recommended for all systems, especially when the heat source is at the top of the system.

- Maximum working pressure: 10 bar.



Type	Connection *		Dimensions					Order Code
	A	B	C [mm]	D [mm]	E [mm]	F [mm]		
WMS 800	DN 20 / G 1" M	DN 20 / G 1" M	358	62	85	195	1	27455

* compression/welding connection.

LOGOPLUS COMPACT COLD / HEAT METER

Fully electronic, compact heat meter or compact cold and heat meter with impeller scanning to record the energy and volume data. Measuring of all invoicing-related data for a heating circuit or for a heat or cold cycle with maximum accuracy and a medium temperature of 5 °C up to 90 °C.

Characteristics

- Electronic sensor control to record the flow rate.
- Standard optical interface as prescribed by ZVEI.
- Adjustable qualifying date for invoicing.
- Rotatable measuring case (display).
- Reliable measuring process and visualisation with single-row of 7-digit at the display.


Technical data

- Accuracy class: 2.
- Pressure rating: PN 16.
- LCD display: no permanent display.
- Approval: MID.
- Power supply: 3.0 V DC battery, service life 12 years.
- No removable measuring case (display).
- Temperature sensor type (pair):
 - Standard: PT500 / 0.40m fitted/ 1.5m free --> non-symmetrical temp. measuring; (min. DT = 8K with qp 0.6 and 6K with qp 1.5 & 2.5)
 - Option: Pt 500 / 1.5 m cable --> symmetrical temp. measuring (min. DT = 3K with qp 0.6 & 1.5 & 2.5)
- Ø Temperature sensor: 5.2 mm.
- Temperature sensor installation: 1 sensor installed directly in the flow sensor (equates to non-symmetrical temp. measuring).
- Energy unit: kWh.
- Measuring cycle: V: 2s; T: 32S; (if T: 8s, then service life 8.78a).

LogoPlus

Without communication.




Type	With cold tariff	Installation location	Qp [m³/h]	Nominal width [DN]	Connection ["]	Overall length [mm]	Communication		Order Code
LogoPlus 0,6 FI	-	Flow	0.6	DN 15	G 3/4" B	110	-	1	M1289411.0001
LogoPlus 1,5 FI	-	Flow	1.5	DN 15	G 3/4" B	110	-	1	M1289412.0001
LogoPlus 2,5 FI	-	Flow	2.5	DN 20	G 1"	130	-	1	M1289413.0001
LogoPlus 0,6 Re	-	Return	0.6	DN 15	G 3/4" B	110	-	1	M1289111.0001
LogoPlus 1,5 Re	-	Return	1.5	DN 15	G 3/4" B	110	-	1	M1289112.0001
LogoPlus 2,5 Re	-	Return	2.5	DN 20	G 1"	130	-	1	M1289113.0001
LogoPlus 0,6 FI C	✓	Flow	0.6	DN 15	G 3/4" B	110	-	1	M1289511.0001
LogoPlus 1,5 FI C	✓	Flow	1.5	DN 15	G 3/4" B	110	-	1	M1289512.0001
LogoPlus 2,5 FI C	✓	Flow	2.5	DN 20	G 1"	130	-	1	M1289513.0001
LogoPlus 0,6 Re C	✓	Return	0.6	DN 15	G 3/4" B	110	-	1	M1289211.0001
LogoPlus 1,5 Re C	✓	Return	1.5	DN 15	G 3/4" B	110	-	1	M1289212.0001
LogoPlus 2,5 Re C	✓	Return	2.5	DN 20	G 1"	130	-	1	M1289213.0001
LogoPlus MK KOAX 0,6 Re	-	Return	0.6	DN 15	-	-	-	1	M1289311.0001
LogoPlus MK KOAX 1,5 Re	-	Return	1.5	DN 15	-	-	-	1	M1289312.0001
LogoPlus MK KOAX 2,5 Re	-	Return	2.5	DN 20	-	-	-	1	M1289313.0001

LogoPlus M-Bus

With M-Bus communication.



Type	With cold tariff	Installation location	Qp [m³/h]	Nominal width [DN]	Connection ["]	Overall length [mm]	Communication		Order Code
LogoPlus M-Bus 0,6 Fl	-	Flow	0.6	DN 15	G 3/4" B	110	M-Bus	1	M1289421.0001
LogoPlus M-Bus 1,5 Fl	-	Flow	1.5	DN 15	G 3/4" B	110	M-Bus	1	M1289422.0001
LogoPlus M-Bus 2,5 Fl	-	Flow	2.5	DN 20	G 1"	130	M-Bus	1	M1289423.0001
LogoPlus M-Bus 0,6 Re	-	Return	0.6	DN 15	G 3/4" B	110	M-Bus	1	M1289121.0001
LogoPlus M-Bus 1,5 Re	-	Return	1.5	DN 15	G 3/4" B	110	M-Bus	1	M1289122.0001
LogoPlus M-Bus 2,5 Re	-	Return	2.5	DN 20	G 1"	130	M-Bus	1	M1289123.0001
LogoPlus M-Bus 0,6 Fl C	✓	Flow	0.6	DN 15	G 3/4" B	110	M-Bus	1	M1289521.0001
LogoPlus M-Bus 1,5 Fl C	✓	Flow	1.5	DN 15	G 3/4" B	110	M-Bus	1	M1289522.0001
LogoPlus M-Bus 2,5 Fl C	✓	Flow	2.5	DN 20	G 1"	130	M-Bus	1	M1289523.0001
LogoPlus M-Bus 0,6 Re C	✓	Return	0.6	DN 15	G 3/4" B	110	M-Bus	1	M1289221.0001
LogoPlus M-Bus 1,5 Re C	✓	Return	1.5	DN 15	G 3/4" B	110	M-Bus	1	M1289222.0001
LogoPlus M-Bus 2,5 Re C	✓	Return	2.5	DN 20	G 1"	130	M-Bus	1	M1289223.0001
LogoPlus MK KOAX M-Bus 0,6 Re	-	Return	0.6	DN 15	-	-	M-Bus	1	M1289321.0001
LogoPlus MK KOAX M-Bus 1,5 Re	-	Return	1.5	DN 15	-	-	M-Bus	1	M1289322.0001
LogoPlus MK KOAX M-Bus 2,5 Re	-	Return	2.5	DN 20	-	-	M-Bus	1	M1289323.0001




LogoPlus Radio

With wM-Bus wireless communication.

- Radio transmission interval: 900 s.
- OMS standard.



Type	With cold tariff	Installation location	Qp [m³/h]	Nominal width [DN]	Connection ["]	Overall length [mm]	Communication		Order Code
LogoPlus Radio 0,6 Fl	-	Flow	0.6	DN 15	G 3/4" B	110	868 MHz wM-Bus	1	M1289441.0001
LogoPlus Radio 1,5 Fl	-	Flow	1.5	DN 15	G 3/4" B	110	868 MHz wM-Bus	1	M1289442.0001
LogoPlus Radio 2,5 Fl	-	Flow	2.5	DN 20	G 1"	130	868 MHz wM-Bus	1	M1289443.0001
LogoPlus Radio 0,6 Re	-	Return	0.6	DN 15	G 3/4" B	110	868 MHz wM-Bus	1	M1289141.0001
LogoPlus Radio 1,5 Re	-	Return	1.5	DN 15	G 3/4" B	110	868 MHz wM-Bus	1	M1289142.0001
LogoPlus Radio 2,5 Re	-	Return	2.5	DN 20	G 1"	130	868 MHz wM-Bus	1	M1289143.0001
LogoPlus Radio 0,6 Fl C	✓	Flow	0.6	DN 15	G 3/4" B	110	868 MHz wM-Bus	1	M1289541.0001
LogoPlus Radio 1,5 Fl C	✓	Flow	1.5	DN 15	G 3/4" B	110	868 MHz wM-Bus	1	M1289542.0001
LogoPlus Radio 2,5 Fl C	✓	Flow	2.5	DN 20	G 1"	130	868 MHz wM-Bus	1	M1289543.0001
LogoPlus Radio 0,6 Re C	✓	Return	0.6	DN 15	G 3/4" B	110	868 MHz wM-Bus	1	M1289241.0001
LogoPlus Radio 1,5 Re C	✓	Return	1.5	DN 15	G 3/4" B	110	868 MHz wM-Bus	1	M1289242.0001
LogoPlus Radio 2,5 Re C	✓	Return	2.5	DN 20	G 1"	130	868 MHz wM-Bus	1	M1289243.0001
LogoPlus MK KOAX Radio 0,6 Re	-	Return	0.6	DN 15	-	-	868 MHz wM-Bus	1	M1289341.0001
LogoPlus MK KOAX Radio 1,5 Re	-	Return	1.5	DN 15	-	-	868 MHz wM-Bus	1	M1289342.0001
LogoPlus MK KOAX Radio 2,5 Re	-	Return	2.5	DN 20	-	-	868 MHz wM-Bus	1	M1289343.0001



LOGOSONIC - ULTRASONIC-COMPACT HEAT/COLD METER


Technical data

- Accuracy class: 2
- Pressure rating: PN 16.
- LCD display: no permanent display.
- Approval: MID
- Power supply: Battery 3.6 V DC (2xAA batteries), Service life 12 years.
- Cable: 1.5 m between counter and flow meter
- Temperature sensor type (pair): PT500 / 2.0 m cable.
- Ø Temperature sensor: 5.2 mm
- Temperature sensor installation: 1 sensor installed directly in the flow meter (corresponds with asymmetric temp. measurement).
- Energy unit: kWh (without decimal places).
- Measurement cycle:
 - V: 2s
 - T: 16s
 - E: 2s
- Telegram configuration: Meibes standard M-Bus log definition.
- Operating key: black (RAL 9005).

LogoSonic ultrasound-compact heat/cold meter M-Bus

With M-Bus communication.



Type	With cold tariff	Installation location	Qp [m³/h]	Nominal width [DN]	Connection ["]	Overall length [mm]	Communication		Order Code
Logosonic M-Bus 0,6 Fl	-	Flow	0.6	DN 15	G 3/4" B	110	M-Bus	1	M1288211.0001
Logosonic M-Bus 1,5 Fl	-	Flow	1.5	DN 15	G 3/4" B	110	M-Bus	1	M1288213.0001
Logosonic M-Bus 2,5 Fl	-	Flow	2.5	DN 20	G 1" B	130	M-Bus	1	M1288214.0001
Logosonic M-Bus 0,6 Re	-	Return	0.6	DN 15	G 3/4" B	110	M-Bus	1	M1288221.0001
Logosonic M-Bus 1,5 Re	-	Return	1.5	DN 15	G 3/4" B	110	M-Bus	1	M1288223.0001
Logosonic M-Bus 2,5 Re	-	Return	2.5	DN 20	G 1" B	130	M-Bus	1	M1288224.0001
Logosonic M-Bus 0,6	-	optional	0.6	DN 15	G 3/4" B	110	M-Bus	1	M1288231.0001
Logosonic M-Bus 1,5	-	optional	1.5	DN 15	G 3/4" B	110	M-Bus	1	M1288233.0001
Logosonic M-Bus 2,5	-	optional	2.5	DN 20	G 1" B	130	M-Bus	1	M1288234.0001
Logosonic M-Bus 0,6 Fl C	✓	Flow	0.6	DN 15	G 3/4" B	110	M-Bus	1	M1288241.0001
Logosonic M-Bus 1,5 Fl C	✓	Flow	1.5	DN 15	G 3/4" B	110	M-Bus	1	M1288243.0001
Logosonic M-Bus 2,5 Fl C	✓	Flow	2.5	DN 20	G 1" B	130	M-Bus	1	M1288244.0001
Logosonic M-Bus 0,6 Re C	✓	Return	0.6	DN 15	G 3/4" B	110	M-Bus	1	M1288251.0001
Logosonic M-Bus 1,5 Re C	✓	Return	1.5	DN 15	G 3/4" B	110	M-Bus	1	M1288253.0001
Logosonic M-Bus 2,5 Re C	✓	Return	2.5	DN 20	G 1" B	130	M-Bus	1	M1288254.0001
Logosonic M-Bus 0,6 C	✓	optional	0.6	DN 15	G 3/4" B	110	M-Bus	1	M1288261.0001
Logosonic M-Bus 1,5 C	✓	optional	1.5	DN 15	G 3/4" B	110	M-Bus	1	M1288263.0001
Logosonic M-Bus 2,5 C	✓	optional	2.5	DN 20	G 1" B	130	M-Bus	1	M1288264.0001




LogoSonic ultrasound-compact heat/cold meter radio (wireless)

With wM-Bus communication (wireless).

- Wireless transmission interval: 900 sec.
- OMS standard: 3.0.



Type	With cold tariff	Installation location	Qp [m³/h]	Nominal width [DN]	Connection ["]	Overall length [mm]	Communication		Order Code
Logosonic Radio 0,6 Re	-	Return	0.6	DN 15	G 3/4" B	110	868 MHz wM-Bus	1	M1288121.0001
Logosonic Radio 1,5 Re	-	Return	1.5	DN 15	G 3/4" B	110	868 MHz wM-Bus	1	M1288123.0001
Logosonic Radio 2,5 Re	-	Return	2.5	DN 20	G 1"	130	868 MHz wM-Bus	1	M1288124.0001
Logosonic Radio 0,6	-	optional	0.6	DN 15	G 3/4" B	110	868 MHz wM-Bus	1	M1288131.0001
Logosonic Radio 1,5	-	optional	1.5	DN 15	G 3/4" B	110	868 MHz wM-Bus	1	M1288133.0001
Logosonic Radio 2,5	-	optional	2.5	DN 20	G 1"	130	868 MHz wM-Bus	1	M1288134.0001
Logosonic Radio 0,6 Fl	-	Flow	0.6	DN 15	G 3/4" B	110	868 MHz wM-Bus	1	M1288111.0001
Logosonic Radio 1,5 Fl	-	Flow	1.5	DN 15	G 3/4" B	110	868 MHz wM-Bus	1	M1288113.0001
Logosonic Radio 2,5 Fl	-	Flow	2.5	DN 20	G 1"	130	868 MHz wM-Bus	1	M1288114.0001
Logosonic Radio 0,6 Re C	✓	Return	0.6	DN 15	G 3/4" B	110	868 MHz wM-Bus	1	M1288151.0001
Logosonic Radio 1,5 Re C	✓	Return	1.5	DN 15	G 3/4" B	110	868 MHz wM-Bus	1	M1288153.0001
Logosonic Radio 2,5 Re C	✓	Return	2.5	DN 20	G 1"	130	868 MHz wM-Bus	1	M1288154.0001
Logosonic Radio 0,6 C	✓	optional	0.6	DN 15	G 3/4" B	110	868 MHz wM-Bus	1	M1288161.0001
Logosonic Radio 1,5 C	✓	optional	1.5	DN 15	G 3/4" B	110	868 MHz wM-Bus	1	M1288163.0001
Logosonic Radio 2,5 C	✓	optional	2.5	DN 20	G 1"	130	868 MHz wM-Bus	1	M1288164.0001
Logosonic Radio 0,6 Fl C	✓	Flow	0.6	DN 15	G 3/4" B	110	868 MHz wM-Bus	1	M1288141.0001
Logosonic Radio 1,5 Fl C	✓	Flow	1.5	DN 15	G 3/4" B	110	868 MHz wM-Bus	1	M1288143.0001
Logosonic Radio 2,5 Fl C	✓	Flow	2.5	DN 20	G 1"	130	868 MHz wM-Bus	1	M1288144.0001



HEATSONIC - ULTRASONIC COMPACT HEAT FLOW METER

- Application: Heat flow meter
- Installation site: Return line
- Calibration: Approval according to MID 2)
- Cable: 1.5 m between counter and flow meter
- Power supply: Battery 3.6 VDC (D cell) 11 years battery life (replaceable)
- Energy unit: kWh (without decimal places) for Qp 0.6-6.0 m³/h, MWh (to 2 decimal places) for Qp 10.0-60.0 m³/h
- Temperature sensor type (pair): Pt 500 / 2 m cable
- Ø temperature sensor: 5.2 mm
- Temperature sensor installation: 1 sensor installed directly in flow meter, Qp 0.6-2.5 m³/h, 2 free sensors for Qp ≥ 3.5 m³/h
- Measurement cycle: 4 sec.


Other models available with respect to: size; models with cold meter, heat flow meter with cold tariff or solar; communication; sensor variants upon request; request specification sheet.

Please note: Pricing information for heat flow meter without calibration fee / fee for conformity assessment!

HeatSonic - Ultrasonic compact heat flow meter M-Bus

Interface module: M-Bus




Type	Flow Qp [m ³ /h]	Nominal width	Overall length [mm]	Connection	Pressure rating		Order Code
HeatSonic M-Bus 0,6	0.6	DN15	110	G 3/4" B	PN 16	1	M1282002V0015
HeatSonic M-Bus 1,5	1.5	DN15	110	G 3/4" B	PN 16	1	M1282012V0024
HeatSonic M-Bus 2,5	2.5	DN20	130	G 1" B	PN 16	1	M1282022V0013
HeatSonic M-Bus 3,5	3.5	DN25	260	G 1 1/4" B	PN 16	1	M1282032V0014
HeatSonic M-Bus 3,5	3.5	DN25	260	Flange	PN 25	1	M1282042V0004
HeatSonic M-Bus 6	6.0	DN25	260	G 1 1/4" B	PN 16	1	M1282052V0014
HeatSonic M-Bus 6	6.0	DN25	260	Flange	PN 25	1	M1282062V0006
HeatSonic M-Bus 10	10.0	DN40	300	G 2" B	PN 16	1	M1282072V0011
HeatSonic M-Bus 10	10.0	DN40	300	Flange	PN 25	1	M1282082V0006
HeatSonic M-Bus 15	15.0	DN50	270	Flange	PN 25	1	M1282092V0012
HeatSonic M-Bus 25	25.0	DN65	300	Flange	PN 25	1	M1282102V0014
HeatSonic M-Bus 40	40.0	DN80	300	Flange	PN 25	1	M1282112V0008
HeatSonic M-Bus 60	60.0	DN100	360	Flange	PN 25	1	M1282122V0006



HeatSonic - Ultrasonic compact heat flow meter Radio

Interface module: Radio (868 MHz OMS); no further interface modules



Type	Flow Qp [m³/h]	Nominal width	Overall length [mm]	Connection	Pressure rating		Order Code
HeatSonic Radio 0,6	0.6	DN15	110	G 3/4" B	PN 16	1	M1282001V0007
HeatSonic Radio 1,5	1.5	DN15	110	G 3/4" B	PN 16	1	M1282011V0008
HeatSonic Radio 2,5	2.5	DN20	130	G 1" B	PN 16	1	M1282021V0005
HeatSonic Radio 3,5	3.5	DN25	260	G 1 1/4" B	PN 16	1	M1282031V0004
HeatSonic Radio 3,5	3.5	DN25	260	Flange	PN 25	1	M1282041V0003
HeatSonic Radio 6	6.0	DN25	260	G 1 1/4" B	PN 16	1	M1282051V0007
HeatSonic Radio 6	6.0	DN25	260	Flange	PN 25	1	M1282061V0004
HeatSonic Radio 10	10.0	DN40	300	G 2" B	PN 16	1	M1282071V0004
HeatSonic Radio 10	10.0	DN40	300	Flange	PN 25	1	M1282081V0002
HeatSonic Radio 15	15.0	DN50	270	Flange	PN 25	1	M1282091V0003
HeatSonic Radio 25	25.0	DN65	300	Flange	PN 25	1	M1282101V0002
HeatSonic Radio 40	40.0	DN80	300	Flange	PN 25	1	M1282111V0002
HeatSonic Radio 60	60.0	DN100	360	Flange	PN 25	1	M1282121V0002

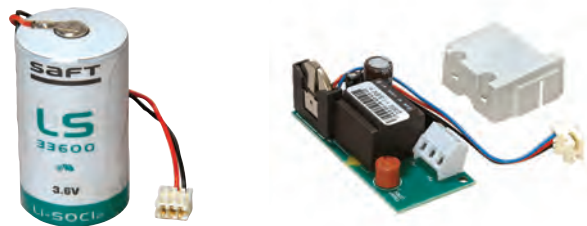



HEATSONIC ACCESSORIES

The »heatsonic« energy meter features two slots for expansion modules and thus supports two communication channels by means of the same or different interfaces.

The log differs for both channels and is pre-set at the factory. This protocol can be configured according to customer requirements. The meter can be configured for a fee prior to delivery from the factory, or using the appropriate hardware and software (please see below for order details) by the customer themselves. Each channel has its own primary address. However, there is only one secondary address which corresponds with the serial number assigned at the factory. The meter has an automatic Baud rate detection function.


Power supply



Type	Model		Order Code
HeatSonic battery	3.6 VDC (D-cell)	1	M1282400
HeatSonic power supply unit 230	230 VAC	1	M1282401
HeatSonic power supply unit 24	24 VAC	1	M1282402

Interface modules



Type	Designation	Model		Order Code
HeatSonic pulse-A	Pulse output module	2 outputs	1	M1282404
HeatSonic pulse-E	Pulse input module	2 inputs	1	M1282405

Overview of the possible combinations of modules in slots 1 and 2

Slot 1	Slot 2					
	No module	M-Bus	RS232	RS485	Pulse input	L-Bus*
No module	✓					
M-Bus	✓	✓	✓	✓		✓
RS232	✓					
RS485	✓					
Pulse input	✓	✓	✓	✓		✓
Pulse output	✓	✓	✓	✓	✓	✓
Pulse input / output	✓	✓	✓	✓		✓
Analog output 4 ... 20 mA	✓					
L-Bus*	✓					

* For external wireless

For configuring all necessary items




Type	Designation		Order Code
HeatSonic Dongle	Activation dongle (including software)	1	M1279631

ACCESSORIES FOR HEAT AND COOLING METERS

Stainless steel immersion sleeve set




For heat flow meter Qp 3.5 – 60.0 m³ / h.
Comprising: 2 stainless steel immersion sleeves, sensor diameter: 5.2 mm.

Type	Connection	Length [mm]		Order Code
Immersion sleeves stainless steel 120	G 1/2"	120	1	M1279502
Immersion sleeves stainless steel 155	G 1/2"	155	1	M1279503

Brass immersion sleeve set




For heat flow meter Qp 3.5 – 60.0 m³ / h.
Comprising: 2 brass immersion sleeves.

Type	Connection	Length [mm]		Order Code
Immersion sleeves brass 52	G 1/2"	52	1	M1279511
Immersion sleeves brass 85	G 1/2"	85	1	M1279512
Immersion sleeves brass 120	G 1/2"	120	1	M1279513

T-piece with immersion sleeve for M 10 x 1 - indirectly immersed



Type	Nominal width	Connection	Model		Order Code
T-piece with immersion sleeve DN15	DN 15	Rp 1/2"	Nickel-plated	1	M1278731
T-piece with immersion sleeve DN20	DN 20	Rp 3/4"	Nickel-plated	1	M1278741
T-piece with immersion sleeve DN25	DN 25	Rp 1"	Nickel-plated	1	M1278751

Immersion sleeve - indirectly immersed




Sensor diameter 5.2 mm

Type	Connection	Model		Order Code
Immersion sleeve G 1/2	G 1/2" M 10 x 1	Uncoated	1	M1278690

Sensor adaptor for immersion sleeve M 10 x 1 - indirectly immersed




Type	Connection	Model		Order Code
Sensor adapter G 3/8	G 3/8" M 10 x 1	Nickel-plated	1	M1394001
Sensor adapter G 1/4	G 1/4" M 10 x 1	Nickel-plated	1	M1394021
Sensor adapter G 1/2	G 1/2" M 10 x 1	Nickel-plated	1	M1394011

Special ball valve with coupling - coupling sensor connection



M 10 x 1 - directly immersed


- Components made from brass

Type	Nominal width	Connection	Model		Order Code
Special ball valve M-M DN15	DN 15	G 1/2"	Nickel-plated	5	M1280912
Special ball valve M-M DN20	DN 20	G 3/4"	Nickel-plated	5	M1280913
Special ball valve M-M DN25	DN 25	G 1"	Nickel-plated	5	M1280914

Shut-off ball valve




- Components made from brass

Type	Nominal width	Connection	Model		Order Code
Shut-off ball valve DN15	DN 15	G 1/2" G 3/4"	Nickel-plated	10	M1610120
Shut off ball valve DN20	DN 20	G 3/4" G 1"	Nickel-plated	10	M1610121
Shut off ball valve DN25	DN 25	G 1" G 1 1/4"	Nickel-plated	10	M1278630

Sensor screw connection – directly immersed



- Components made from brass

Type	Connection	Model		Order Code
Sensor screw connection	M 10 x 1 M 10 x 1	Uncoated	1	M1394030

Sensor adapter M 10 x 1 – directly immersed



- Components made from brass

Type	Connection		Model		Order Code
Sensor adapter G ½" x 5,2 – M10x1	G ½"	M 10 x 1	Uncoated	1	M1394040

Set of threaded joints



2 x each, including seal

- Components made from brass

Type	Nominal width	Model		Order Code
Set of threaded joints DN15	DN 15	Uncoated	30	M1270090
Set of threaded joints DN20	DN 20	Uncoated	20	M1270100
Set of threaded joints DN25	DN 25	Uncoated	1	M1270110
Set of threaded joints DN40	DN 40	Uncoated	1	M1270120

Threaded connection piece



Including seal

- Components made from brass

Type	Nominal width	Connection		Model		Order Code
Threaded connection piece	DN 20	G ¾" F	G 1" M	Uncoated	20	M1270370

Spool piece



- Components made from galvanised steel (please observe the installation guidelines applicable for the respective country of use!)

Type	Nominal width	Overall length [mm]	Connection		Order Code
Spool piece DN15	DN 15	110	G ¾"	5	M1270510
Spool piece DN20	DN 20	130	G 1"	5	M1270530

Accessories pack



Type		Order Code
Accessories pack 3	1	M1285220

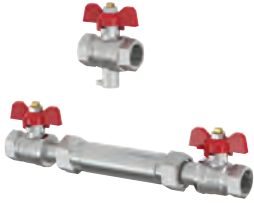
Sealing kit




Type		Order Code
Sealing kit 1	1	M1276310

BALL VALVE INSTALLATION SET (ORIGINAL EQUIPMENT SUPPLIER INSTALLATION SET)

Ball valve installation kit for heating/cooling meter measurement capsule




Temperature sensor direct in medium, Scope of supply: 1 x special ball valve (flow line), 1 x spacer (return line), 2 x shut-off ball valves with integrated union nut including seals (return line).

Type	Flow Qp [m ³ /h]	Nominal width	Length (l) [mm]		Order Code
Installation set for heat and cooling meters DN15	0.6 / 1.5	DN 15	110	1	M1278601
Installation set for heat and cooling meters DN 20	2.5	DN 20	130	1	M1278611
Installation set for heat and cooling meters DN 25	2.5	DN 25	130	1	M1278621

Ball valve installation kit for heating/cooling meter measurement capsule



Temperature sensor direct in medium, scope of supply: 1 x special ball valve (flow line), 1 x spacer (return line), 1 x special ball valve with integrated union nut including seal (return line), 1 x shut-off ball valve with integrated union nut including seal (return line).

Type	Flow Qp [m ³ /h]	Nominal width	Length (l) [mm]		Order Code
Installation set for heat and cooling meters DN 25	3.5 / 6.0	DN 25	260	1	M1278632


DATA EXTRACTION UNIT

M-bus Data Extraction Unit

Data Extraction Unit for M-Bus metering systems. It is designed for installation as a single, easily mountable and standalone unit. It contains all the components to extract data from M-Bus networks and transmit this data via email using LAN (M687462) or ADSL (M687461) broadband - without the need for any computer equipment on-site.

- Ability to consolidate data from up to 700 meters/devices. One device covers the majority of your needs.
- Fully flexible, allowing data extraction to be directly or remotely configured, reprogrammed, updated or interrogated.
- Flexible programming gives the ability for reading intervals to be defined for each meter/device.
- Collected data is sent automatically (to a defined schedule) via email as an XML-file (to one or more email addresses).
- Integrated web-server to display a customised internet website with all meter readings.
- SD-card slot for SD or MMC cards (up to 32GB) providing expandable secure storage of meter reading if no ADSL line is available (e.g. temporary solution for the building period).
- Remote access via internet and a pre-configured, industrial router (firewall).
- Mounting: Surface mounted.
- Size: 400 x 200 x 500mm (W x D x H).
- Conforms to the protection requirements of EC DIRECTIVE 2004/108/EEC on Electromagnetic
- Compatibility (EMC) and meets the principle elements of the safety objectives for the Low Voltage Directive EC DIRECTIVE 2006/95/EEC.
- The following harmonised standards as published in the 'Official Journal' of the European Union have been applied:
Emissions EMC BS EN 55022: 2010.
Immunity EMC BS EN 55024: 2010.
Low Voltage BS EN 60950-1 : 2006+A2 2013.



Type		Order Code
M-bus - ADSL	1	M687461
M-bus - LAN	1	M687462

M-bus Data Extraction Unit - Performance

		Data Extraction Unit
Description	Temperature	0 °C / 50 °C
	Humidity	5 °C / 95 °C relative humidity
	Protection	IP65
M-bus	Numbers of meters	up to 700 M-Bus meters (depending on cable length and system design)
	Cable length	up to 5000 m (split and switched)
	Voltage	< 42V DC (two wire)
Connections: external	LED	Power, High Current, TX, RX
	Power Supply	230V~ (50Hz), hard-wired into 5A fuse box
Connections: internal	ADSL/LAN	RJ45 socket
	M-bus cable	6 terminal pairs (4 mm) to connect the M-Bus core cables, switched
	M-bus cable	One terminal pair (4 mm) to connect one M-Bus core cable during installation / testing, unswitched
	Ethernet (LAN)	5x LAN (RJ45) sockets provided by the router fitted (white socket is pre-configured and allocated to TIXI modem)
	RS232	2x RS232 (COM1, COM2)
	SD-card slot	1x SD-card slot (SD or MMC) to store/log data

HEATCOUNT 2 – ELECTRONIC HEAT COST ALLOCATOR

Heatcount 2 – Electronic heat cost allocator



Electronic device for recording the heat dissipation of radiators for heat cost allocation.

- Surface insensitive to dirt.
- No keys – automatic menu run-through.
- OMS compatible wireless 868 MHz or with LoRa communication.
- For use with panel radiators, sectional radiators and tubular radiators.
- Compatible with EHCA heatcount mounting accessories.
- Scrolling display.
- Suitable for product and unit scale.
- Available as 2-sensor, 1-sensor and remote sensor variants.
- Certified according to DIN EN 834 12-2013.
- With radiator and room temperature sensor.
- Scope of supply: EHCA, heat conductor, sealing plug.

Type		Order Code
Heatcount 2 – standard configuration with radio communication (LoRa)	200	M1261200B502

SMART NODE 2




Smart Node 2

The product range of Smart Node 2 are open metering gateways and collect metering data and sensor protocols. All data is stored in encrypted form in the integrated data logger and forwarded to a server, so in the case of mobile network failure the data is not lost. The Smart Node 2 can be installed, under consideration of the protection class, at any location. Two (optional) relays can be used to switch third party devices.

- Sizes: 245 x 185 x 48 mm
- Ambient temperature: -20°C - 50°C
- Protection Class: IP65
- Mounting type: wall mounted
- Bluetooth: integrated
- GSM: internal antenna



Type	230V	Battery	Battery Pack	SIM	OMS	M-Bus	LAN	Wlan	Multi I/O	Repeater	Gateway		Article number
Smart Node 2	✓	-	-	✓	✓	-	-	-	-	✓	✓	1	M1260700B501
Smart Node 2W	✓	-	-	✓	✓	-	-	✓	-	✓	✓	1	M1260710B501
Smart Node 2WU	✓	-	-	✓	✓	-	-	✓	✓	✓	✓	1	M1260720B501
Smart Node 2WMU	✓	-	-	✓	✓	✓	-	✓	✓	✓	✓	1	M1260750B501
Smart Node 2R	✓	-	-	✓	✓	-	-	-	-	✓	-	1	M1260760B501
Smart Node 2B	-	✓	-	✓	✓	-	-	-	-	✓	✓	1	M1260730B501
Smart Node 2WB	-	✓	-	✓	✓	-	-	✓	-	✓	✓	1	M1260740B501
Smart Node 2RB	-	✓	-	✓	✓	-	-	-	-	✓	-	1	M1260770B501
Smart Node 2A	-	-	✓	✓	✓	-	-	-	-	✓	✓	1	M1260780B501

DOMESTIC APARTMENT WATER METER MODULARIS MTK-OZX / MTW-OZX (MULTI-JET, DRY-RUNNING) IN FLUSH-MOUNTED DESIGN

- Model: Housing made from nickel-plated hot-pressed brass
- Permissible operating pressure: 16 bar
- Permissible operating temperature: Cold water +30 °C, hot water +90 °C
- Medium: Domestic water
- Approval: according to MID
- Metrological class: R80H / R40V

Note: All measuring cartridges can be retrofitted with the Modularis modules. Except MTK-OZX WEI.

Scope of supply: Measuring cartridge, sealing ring, profile gasket for housing, adaption ring and O-ring (type mm), spacer for rosette.

Please note: Pricing information for water meter without calibration fee / fee for conformity assessment!

Modularis MTK-OZX / MTW-OZX IST

Measuring cartridges suitable for housing: ROSSWEINER, ista, Siemens.



Type	Model	Con- nection	Max. external-Ø [mm]	Height [mm]		Order Code
Modularis MTK-OZX IST	Cold water	G 2" B	75	60	1	M1274802B3
Modularis MTW-OZX IST	Hot water	G 2" B	75	60	1	M1274812B3

Housing kit (Modularis IST)



Mono-tube connector for flush-mounted meter, MODULAR IST (Coax 2"), including blind cover, seal, mounting aid.

EAS housing kit for flush-mounted domestic apartment water meter (for multi-jet, dry-running, COAX 2" system).

- Permissible operating pressure: 16 bar
- Permissible operating temperature: 90 °C
- Medium: Domestic water

Type	No- minal width	Con- nection	Solder con- nection [mm]	Overall length [mm]	Type		Order Code
Housing kit MS Rp 3/4	DN 15	Rp 3/4"	-	110	hot-pressed brass	1	M1276530
Housing kit MS 15 mm	DN 15	G 1/2" M	15	110	hot-pressed brass	1	M1276540
Housing kit MS 18 mm	DN 15	G 3/4" M	18	110	hot-pressed brass	1	M1276520
Housing kit MS 22 mm	DN 15	-	22	110	hot-pressed brass	1	M1276550
Housing kit RG Rp 3/4	DN 15	Rp 3/4"	-	110	red brass	1	M1276730
Housing kit RG 15 mm	DN 15	G 1/2" M	15	110	red brass	1	M1276740
Housing kit RG 18 mm	DN 15	G 3/4" M	18	110	red brass	1	M1276720
Housing kit RG 22 mm	DN 15	-	22	110	red brass	1	M1276750


Extension for flush mounted meter Modularis IST (Coax 2")



Type	Dimension [mm]		Order Code
Extension 20	20	1	M1276560
Extension 40	40	1	M1276570

Flow direction detector for flush mounted meter Modularis IST (Coax 2")




Type		Order Code
Flow direction detector	1	M1276580

Modularis MTK-OZX / MTW-OZX MOE/C

Measuring cartridge suitable for housing: ABB meter module (MO-E and MO-C),




Type	Model	Con- nection	Max. external- Ø [mm]	Height [mm]	Q ₃ [m³/h]		Order Code
Modularis MTK-OZX MOE	Cold water	M 65 x 2	87	60	2.5	1	M1274820B3
Modularis MTW-OZX MOE	Hot water	M 65 x 2	87	60	2.5	1	M1274830B3

Modularis MTK-OZX / MTW-OZX MET

Measuring cartridges suitable for housing: Metrona-Brunata HT3.




Type	Model	Con- nection	Max. external- Ø [mm]	Height [mm]	Q ₃ [m³/h]		Order Code
Modularis MTK-OZX MET	Cold water	M 64 x 2	75	34.6	2.5	1	M1274840B3
Modularis MTW-OZX MET	Hot water	M 64 x 2	75	34.6	2.5	1	M1274850B3

Modularis MTK-OZX / MTW-OZX MUK

Measuring cartridges suitable for housing: SPX PolluMuk.




Type	Model	Con- nection	Max. external- Ø [mm]	Height [mm]	Q ₃ [m³/h]		Order Code
Modularis MTK-OZX MUK	Cold water	G 2 1/4"	75	34.7	2.5	1	M1274860B3
Modularis MTW-OZX MUK	Hot water	G 2 1/4"	75	34.7	2.5	1	M1274870B3

Modularis MTK-OZX / MTW-OZX A34

Measuring cartridges suitable for housing: Allmess UP 6000.




Type	Model	Con- nection	Max. external- Ø [mm]	Height [mm]	Q ₃ [m³/h]		Order Code
Modularis MTK-OZX A34	Cold water	M 77 x 1,5	75	62	2.5	1	M1274880B3
Modularis MTW-OZX A34	Hot water	M 77 x 1,5	75	62	2.5	1	M1274890B3

Modularis MTK-OZX WEI / MTW-OZX WEI


Measuring cartridges suitable for housing: Rossweiner single-jet flush-mounted meter, Zenner Neptun. Alternative to previous Art.: 1780550 (cold) and 1780555 (hot).



Type	Model	Max. external diameter [mm]	Q ₃ [m³/h]		Order Code
Modularis MTK-OZX WEI	Cold water	75	2.5	1	M1274910
Modularis MTW-OZX WEI	Hot water	75	2.5	1	M1274920

Wireless attachment module for Modularis water meters, OMS wireless 868 MHz




Type	Model		Order Code
Modularis Wireless module	868 MHz	1	M1275030B501

ACCESSORIES FOR FLUSH-MOUNTED DOMESTIC APARTMENT WATER METER


Rosette, round (2-piece)



Type	Diameter [mm]			Order Code
	Internal	External		
Short protective sleeve	65	-	1	M1780570
Rosette, round	65	140	1	M1780561

Push-on rosette (1-piece)




Type	Diameter [mm]			Order Code
	Internal	External		
Push-on rosette	65	140	1	M1276652

Adjustment rosette (3-piece)




If meter is too far in front of the wall.

Type	Internal diameter [mm]		Order Code
Adjustment rosette	65	1	M1278682

Blind cap (1-part)




For flush-mounted rosette

Type	External diameter [mm]		Order Code
Blind cap	65	1	M1780562

Installation tool



Type	Model		Order Code
For single-jet, dry-running	Metal	1	M1780544
For multi-jet, dry-running	Metal	1	M1780546

DOMESTIC APARTMENT WATER METER MODULARIS ETK-EAX / ETW-EAX (SINGLE-JET, DRY-RUNNING) IN WALL-MOUNTED DESIGN


- Model: Housing made from nickel-plated hot-pressed brass
- Permissible operating pressure: 16 bar
- Permissible operating temperature: Cold water +30 °C, hot water +90 °C
- Medium: Domestic water
- Approval: according to MID
- Metrological class: R80H / R50V

Please note: Pricing information for water meter without calibration fee / fee for conformity assessment!

Domestic water meter (apartment application) ETK-EAX / ETW-EAX

For the realisation of data transfer of measured volumes only Rossweiner Modularis modules can be used.
Please contact our Technical Service for use with other modules.



Type	Model	Surface	Nominal width	Connection	Overall length [mm]	Q ₃ [m ³ /h]		Order Code
Modularis ETK-EAX 80 Ni	Cold	Nickel-plated	DN 15	G 3/4" M	80	2.5	30	M1274501B3
Modularis ETW-EAX 80 Ni	Hot	Nickel-plated	DN 15	G 3/4" M	80	2.5	30	M1274511B3
Modularis ETK-EAX 80	Cold	Uncoated	DN 15	G 3/4" M	80	2.5	30	M1274500B3
Modularis ETW-EAX 80	Hot	Uncoated	DN 15	G 3/4" M	80	2.5	30	M1274510B3
Modularis ETK-EAX 110 Ni	Cold	Nickel-plated	DN 15	G 3/4" M	110	2.5	30	M1274601B3
Modularis ETW-EAX 110 Ni	Hot	Nickel-plated	DN 15	G 3/4" M	110	2.5	30	M1274611B3
Modularis ETK-EAX 110	Cold	Uncoated	DN 15	G 3/4" M	110	2.5	30	M1274600B3
Modularis ETW-EAX 110	Hot	Uncoated	DN 15	G 3/4" M	110	2.5	30	M1274610B3
Modularis ETK-EAX 130 Ni	Cold	Nickel-plated	DN 20	G 1" M	130	4.0	20	M1274701B3
Modularis ETW-EAX 130 Ni	Hot	Nickel-plated	DN 20	G 1" M	130	4.0	20	M1274711B3
Modularis ETK-EAX 130	Cold	Uncoated	DN 20	G 1" M	130	4.0	20	M1274700B3




Modularis SO pulse generator



Only in combination with Modularis meters! With flow pattern detection.

Can only be used in combination with Rossweiner M-Bus masters. Please contact the Service Department for use with other M-Bus masters. The M-Bus module can be configured for a fee prior to delivery from the factory, or using the appropriate hardware and software (on request) by the customer themselves.


Type	Model [l/pulse]	Pulse [ms]		Order Code
Modularis SO 1	1	50	1	M1275020
Modularis SO 10	10	50	1	M1275021
Modularis SO 100	100	50	1	M1275022

Modularis M-Bus module



Only in combination with Modularis meters! Configurable, with flow pattern detection.

Can only be used in combination with Rossweiner M-Bus masters. Please contact the Service Department for use with other M-Bus masters. The M-Bus module can be configured for a fee prior to delivery from the factory, or using the appropriate hardware and software (on request) by the customer themselves.

Type	Model		Order Code
Modularis M-Bus	M-Bus module	1	M1275002


DOMESTIC APARTMENT WATER METER TYPE ETK-EAV/ETW-EAV (SINGLE-JET, DRY-RUNNING) FOR HORIZONTAL OR VERTICAL INSTALLATION

- Model: Housing made from hot-pressed brass
- Permissible operating pressure: 16 bar
- Permissible operating temperature: Cold water +30 °C, hot water +90 °C
- Medium: Domestic water
- Approval: according to MID
- Metrological class: R80H / R50V

Please note: Pricing information for water meter without calibration fee / fee for conformity assessment!

Domestic water meter (apartment application) ETK-EAV / ETW-EAV




Type	Model	Surface	Connection	Overall length [mm]	Q ₃ [m ³ /h]		Order Code
ETK-EAV 80	Cold	Uncoated	G 3/4" M	80	2.5	30	M1270600B3
ETW-EAV 80	Hot	Uncoated	G 3/4" M	80	2.5	30	M1270610B3
ETK-EAV 80 Ni	Cold	Nickel-plated	G 3/4" M	80	2.5	30	M1270601B3
ETW-EAV 80 Ni	Hot	Nickel-plated	G 3/4" M	80	2.5	30	M1270611B3
ETK-EAV 110	Cold	Uncoated	G 3/4" M	110	2.5	30	M1270060B3
ETW-EAV 110	Hot	Uncoated	G 3/4" M	110	2.5	30	M1270050B3
ETK-EAV 110 Ni	Cold	Nickel-plated	G 3/4" M	110	2.5	30	M1270061B3
ETW-EAV 110 Ni	Hot	Nickel-plated	G 3/4" M	110	2.5	30	M1270051B3
ETK-EAV 130	Cold	Uncoated	G 1" M	130	4.0	20	M1270910B3
ETW-EAV 130	Hot	Uncoated	G 1" M	130	4.0	20	M1270920B3
ETK-EAV 130 Ni	Cold	Nickel-plated	G 1" M	130	4.0	20	M1270911B3
ETW-EAV 130 Ni	Hot	Nickel-plated	G 1" M	130	4.0	20	M1270921B3

Water meter connector set Q₃ 2.5 m³ / h



Comprising: Surface-mounted water meter Q₃ 2.5 m³/h; 110 mm, cold, screw connection for tap G 3/4" M × G 3/4" M, protective cap for water meter, hose coupling G 1/2" × G 3/4", sealing kit, seals.

Type	Model		Order Code
WZ-connector set cold	Water meter cold	30	M1271260

DOMESTIC APARTMENT WATER METER TYPE ETK-EAK/ETW-EAK (SINGLE-JET, DRY-RUNNING) FOR HORIZONTAL OR VERTICAL INSTALLATION WITH PULSE OUTPUT


- Model: Housing made from hot-pressed brass
- Permissible operating pressure: 16 bar
- Permissible operating temperature: Cold water +30 °C, hot water +90 °C
- Medium: Domestic water
- Approval: according to MID
- Metrological class: R80H / R50V

Please note: Pricing information for water meter without calibration fee / fee for conformity assessment!

Domestic water meter (apartment application) ETK-EAK / ETW-EAK

Pulse generator (reed contact) optionally with 10 litres or 100 litres per pulse!
A shielding cap is required for models with 10 litres per pulse.



Type	Model	Surface	Con- nection	Nominal width	Pulse- sequence [l/pulse]	Overall- length [mm]	Q ₃ [m ³ /h]		Order Code
ETK-EAK 80/10	Cold	Uncoated	G 3/4" M	DN 15	10	80	2.5	30	M1275660B3
ETK-EAK 80/100	Cold	Uncoated	G 3/4" M	DN 15	100	80	2.5	30	M1275620B3
ETK-EAK 80/10 Ni	Cold	Nickel-plated	G 3/4" M	DN 15	10	80	2.5	30	M1275661B3
ETK-EAK 80/100 Ni	Cold	Nickel-plated	G 3/4" M	DN 15	100	80	2.5	30	M1275621B3
ETW-EAK 80/10	Hot	Uncoated	G 3/4" M	DN 15	10	80	2.5	30	M1275670B3
ETW-EAK 80/100	Hot	Uncoated	G 3/4" M	DN 15	100	80	2.5	30	M1275630B3
ETW-EAK 80/10 Ni	Hot	Nickel-plated	G 3/4" M	DN 15	10	80	2.5	30	M1275671B3
ETW-EAK 80/100 Ni	Hot	Nickel-plated	G 3/4" M	DN 15	100	80	2.5	30	M1275631B3
ETK-EAK 110/10	Cold	Uncoated	G 3/4" M	DN 15	10	110	2.5	30	M1275080B3
ETK-EAK 110/100	Cold	Uncoated	G 3/4" M	DN 15	100	110	2.5	30	M1275100B3
ETK-EAK 110/10 Ni	Cold	Nickel-plated	G 3/4" M	DN 15	10	110	2.5	30	M1275081B3
ETK-EAK 110/100 Ni	Cold	Nickel-plated	G 3/4" M	DN 15	100	110	2.5	30	M1275101B3
ETW-EAK 110/10	Hot	Uncoated	G 3/4" M	DN 15	10	110	2.5	30	M1275070B3
ETW-EAK 110/100	Hot	Uncoated	G 3/4" M	DN 15	100	110	2.5	30	M1275110B3
ETW-EAK 110/10 Ni	Hot	Nickel-plated	G 3/4" M	DN 15	10	110	2.5	30	M1275071B3
ETW-EAK 110/100 Ni	Hot	Nickel-plated	G 3/4" M	DN 15	100	110	2.5	30	M1275111B3
ETK-EAK 130/10	Cold	Uncoated	G 1" M	DN 20	10	130	4.0	20	M1275830B3
ETK-EAK 130/100	Cold	Uncoated	G 1" M	DN 20	100	130	4.0	20	M1275810B3
ETK-EAK 130/10 Ni	Cold	Nickel-plated	G 1" M	DN 20	10	130	4.0	20	M1275831B3
ETK-EAK 130/100 Ni	Cold	Nickel-plated	G 1" M	DN 20	100	130	4.0	20	M1275811B3
ETW-EAK 130/10	Hot	Uncoated	G 1" M	DN 20	10	130	4.0	20	M1275820B3
ETW-EAK 130/10 Ni	Hot	Nickel-plated	G 1" M	DN 20	10	130	4.0	20	M1275821B3
ETW-EAK 130/100 Ni	Hot	Nickelplated	G 1" M	DN 20	100	130	4.0	20	M1275801B3



DOMESTIC PROPERTY WATER METER MODULARIS TYPE MTK-SWX / MTW-SWX (MULTI-JET, DRY-RUNNING) - RISER PIPE


- Model: Brass-coated housing
- Permissible operating pressure: 16 bar
- Permissible operating temperature: Cold water +30 °C, hot water +90 °C
- Medium: Domestic water
- Approval: according to MID
- Metrological class: R80H / R50V

Please note: Pricing information for water meter without calibration fee / fee for conformity assessment!

Type MTK-SWX / MTW-SWX

For vertical installation.



Type	Model	Nominal-size MID	Connection nominal width	Meter thread	Dimensions [mm]					Order Code
					Length (l)	Height (H)	Width (W)	A		
Modularis MTK-SWX MID 4,0	Cold	4.0	DN 20 / 3/4"	G 1" B	105	150	96	82	1	M1272654
Modularis MTK-SWX MID 6,3	Cold	6.3	DN 25 / 1"	G 1 1/4" B	150	170	100	95	1	M1272664
Modularis MTK-SWX MID 10,0	Cold	10.0	DN 25 / 1"	G 1 1/4" B	150	170	100	120	1	M1272674
Modularis MTK-SWX MID 16,0	Cold	16.0	DN 40 / 1 1/2"	G 2" B	150	215	131	120	1	M1272684
Modularis MTW-SWX MID 4,0	Hot	4.0	DN 20 / 3/4"	G 1" B	105	150	96	82	1	M1272650
Modularis MTW-SWX MID 6,3	Hot	6.3	DN 25 / 1"	G 1 1/4" B	150	170	100	95	1	M1272660
Modularis MTW-SWX MID 10,0	Hot	10.0	DN 25 / 1"	G 1 1/4" B	150	170	100	120	1	M1272670
Modularis MTW-SWX MID 16,0	Hot	16.0	DN 40 / 1 1/2"	G 2" B	150	215	131	120	1	M1272680

The matching MODULARIS add-on modules for impulse M-Bus or radio version can be found in chapter Consumption Metering - Heating and Cooling.

FLUSH-MOUNTED FITTING COMBINATION, WATER METER SHUT-OFF VALVE


- Model: Red brass or brass
- Permissible operating pressure: 16 bar
- Permissible operating temperature: + 90 °C

Flush-mounted fitting combination - 1-way



With insulation and integrated mounting aid, comprising:

- Flush-mounted valve DN 20
- Flush-mounted mono-tube connector for MTK / MTW-NG (Coax 2")
- 2 x sound-insulated bracket
- Two-part insulation with integrated mounting aid

Type	Model		Order Code
Flush-mounted fittings 1-f red brass	Red brass	1	M1276770
Flush-mounted fittings 1-f brass	Brass	1	M1276775

Flush-mounted fitting combination - 1-way with mounting rail



With insulation and integrated mounting aid, pre-assembled with mounting rail, comprising:

- Flush-mounted valve DN 20
- Flush-mounted mono-tube connector for MTK / MTW-NG (Coax 2")
- 2 x sound-insulated bracket
- Two-part insulation with integrated mounting aid
- 2 mounting rails

Type	Model		Order Code
Flush-mounted fittings 1-f mount. Red brass	Red brass	1	M1276800
Flush-mounted fittings 1-f mount. Brass	Brass	1	M1276805

Flush-mounted fitting combination - 2-way with mounting rail



With insulation for cold and hot water, pre-assembled with mounting rail, comprising:

- 2 flush-mounted valves DN 20
- 2 flush-mounted mono-tube connector for MTK / MTW-NG (Coax 2")
- 4 x sound-insulated bracket
- 2 two-part insulations with integrated mounting aid
- 2 mounting rails


Type	Model		Order Code
Flush-mounted fittings 2-f mount. Red brass	Red brass	1	M1276780
Flush-mounted fittings 2-f mount. Brass	Brass	1	M1276785

Flush-mounted fitting combination with extension for angle valve – 1-way



With insulation for cold and hot water, comprising:

- Flush-mounted valve DN 20
- Flush-mounted mono-tube connector for MTK / MTW-NG (Coax 2")
- 2 x sound-insulated bracket
- Two-part insulation with integrated mounting aid

Type	Model		Order Code
Flush-mounted fittings 1-f ext.	Red brass	1	M1276810


CONNECTORS AND ACCESSORIES

- Model: Hot-pressed brass
- Permissible operating pressure: 16 bar
- Permissible operating temperature: + 90 °C

Garden water meter connector set




Comprising: Screw connection for tap G 3/4" × G 3/4", protective cap for water meter, hose fitting G 1/2" × G 3/4", sealing kit, seals.

Type	Nominal width		Order Code
GWZ-connector set	DN 15	20	M1271060

Socket threaded union, 681.2




With union nut, seal and sealing option.

Type	Nominal width	Connection		Overall length [mm]		Order Code
		Union nut	d2			
Socket threaded union DN15	DN 15	G 3/4"	1/2"	39,5	30	M1270070
Socket threaded union DN20	DN 15	G 1"	3/4"	50,0	20	M1270670
Socket threaded union DN25	DN 25	G 1 1/4"	1"	58,5	25	M1270680
Socket threaded union DN32	DN 32	G 1 1/2"	1 1/4"	60,0	1	M1270190
Socket threaded union DN40	DN 40	G 2"	1 1/2"	70,0	1	M1270200

Set of threaded joints




With union nut, seal and sealing option (2 of each).

Type	Nominal width	Connection			Order Code
		Union nut	d2		
Set of threaded joints DN15	DN 15	G 3/4"	1/2"	1	M9020032
Set of threaded joints DN20	DN 20	G 1"	3/4"	1	M9020033

Connection socket, 681.3




With 2 union nuts, seals and sealing option.

Type	Nominal width	Connection		Overall length [mm]		Order Code
		Union nut	d2			
Connection socket DN15	DN 15	G 3/4"	G 3/4"	30	30	M1270080

Threaded connection piece, 681.4




With female thread and male thread and seal.

Type	Nominal width	Connection		Overall length [mm]		Order Code
		Union nut	d2			
Threaded connection piece DN15	DN 15	G 3/4" F	G 1" M	15	20	M1270370

Screw fitting 3/4 × 3/4




Union nut thread size 32, moveable with sealing option G 3/4".

Type	Nominal width	Connection		Overall length [mm]		Order Code
		Union nut	Hose nozzle (Ø)			
Screw fitting 3/4x3/4	DN 20	G 3/4"	R 3/4"	39.5	10	M1394100

Connection socket, 682.3




With union nuts and sealing option.
For combination with domestic apartment water meter for "Spider" manifold Art.-No. 682.

Type	Connection		Overall length [mm]		Order Code
Connection socket	G 1"	G 3/4"	35.5	30	M1270300

Protective cover




Suitable for all water meters with Article Numbers 68 – 683 with 13 mm wide lock ring.

Type	Model		Order Code
Protective cover	Plastic, blue	30	M1785030

Connection lock




Type	Model		Order Code
Connection lock DN15	1/2" / DN 15 for union nut G 3/4"	10	M1276313
Connection lock DN20	3/4" / DN 20 for union nut G 1"	10	M1276314

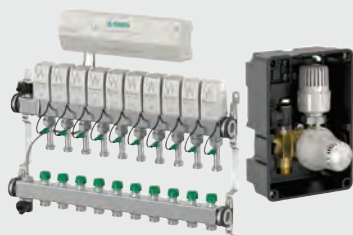
3/4" valve water meter fitting (without water meter) for water meter 681 or 683



Installed length: 110 mm, connection thread: G 3/4 installation space: 100x120x260.

Type	Nominal width	Con- nection	Overall length [mm]	Installation space [mm]		Order Code
Valve water meter fittings for water meter 681	DN 15	G 3/4"	110	100 x 120 x 260	1	M1270870
Valve water meter fittings for water meter 683	DN 15	G 3/4"	80	100 x 120 x 230	1	M1270880

Surface Heating



P. 566

Ball & KFE Valves



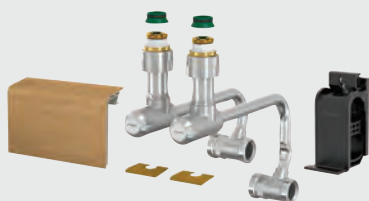
P. 599

Thermostatic Heads and Radiator Valves



P. 608

Baseboard Systems



P. 681

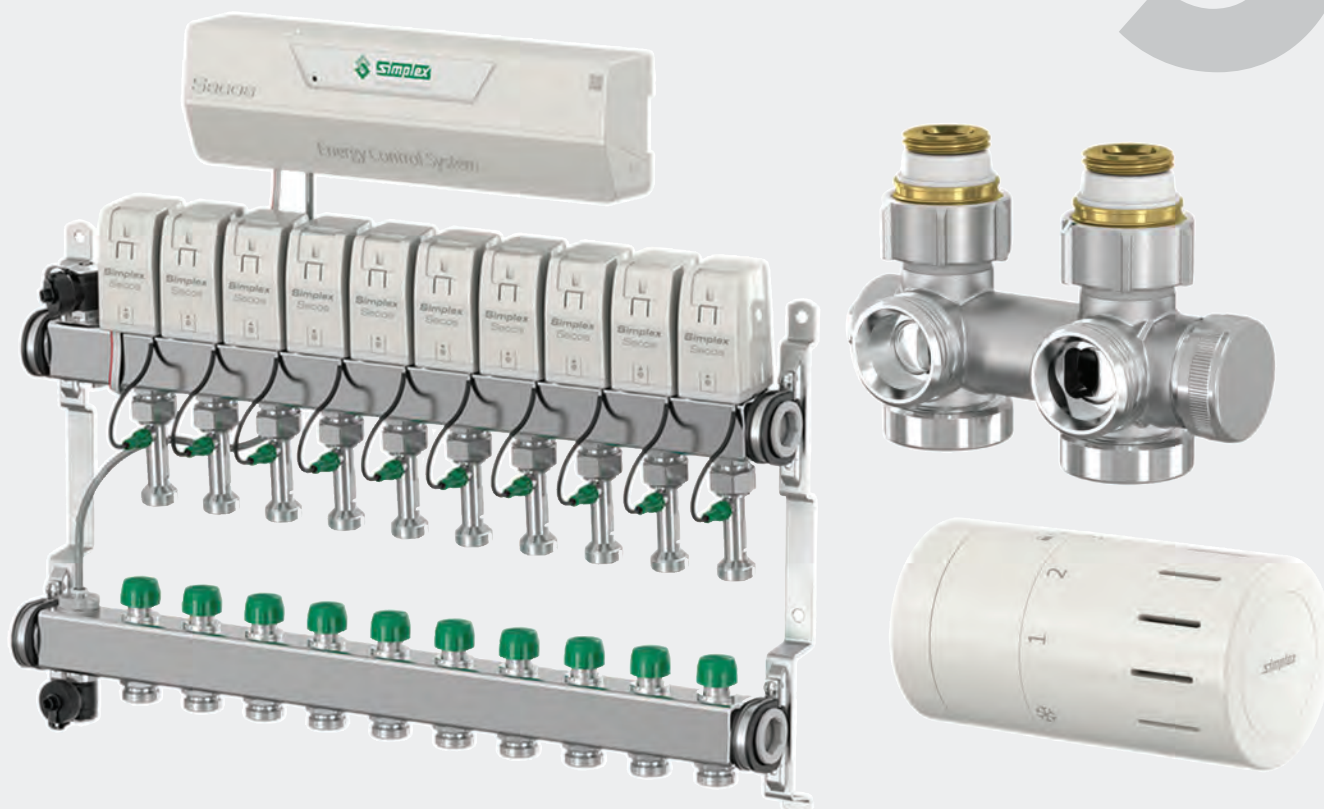
Design Covers and Rosettes



P. 718

Emitter Technology

9



Through our high-quality products we offer living comfort, providing warmth throughout your building. Our products offer safe and fast assembly, ease of use, and efficient heat dissipation. We also provide optimum solutions for renovation challenges. The range includes fittings for refrigeration and de-ware treatment, thermostatic control systems for heating and cooling systems, as well as a baseboard system for complete installation programs. The range is complemented by suitable connection techniques and heating accessories such as label holders, rosettes and mounting aids.

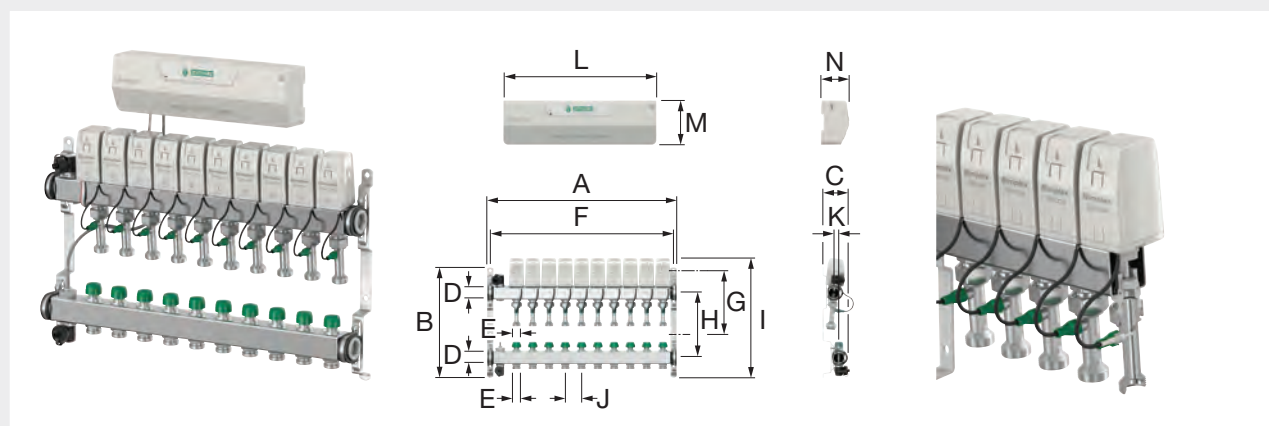
HEATING MANIFOLDS


Secos - Simplex Energy Control System

Energy efficient, fully automatic energy control system for surface heating in heating and cooling operation. Stainless steel Secos system manifold with ceramic Secos disc valves and Secos multi sensors for recording the flow rate and the media return temperature, optimal control quality, including supply line temperature sensor, factory-mounted on soundproof manifold holders, plug-ready pre-wired snap on base plate for Secos actuators and multi sensors, only one plug connection between Secos actuators and Secos energy saving control required, ceramic shut-off units in the supply line, including fill and drain plugs in the supply and return line for filling, draining, flushing and venting, tool-free installation of the Secos actuator on the return line disc valve using plug-in technology, the immediate electrical and mechanical connection to the base plate occurs when connecting the actuator, energy saving control for recording and processing all system data for automatic hydraulic balancing, uniform, needs-based heat supply to avoid unwanted oversupply. This results in the highest possible energy efficiency. The energy saving control includes: Fully automatic hydraulic balancing of the connected heating circuits, heating and cooling function, full pump control, interface to GLT systems, App control for settings, commissioning protocol function, automatic flushing function, heating protocol function, periodic valve protection, periodic pump protection, status and error messages.

Set comprises:

- 1 x stainless steel system manifold
- je 4-14 x disc valves in both the supply and return line bar
- 4-14 x Secos multi sensor
- 4-14 x Secos actuator
- 1 x Secos energy saving control
- 1 x Secos flow temperature sensor supply line
- Manifold made of stainless steel
- Max. operating temperature: 75 °C (the maximum permitted supply flow temperature of the surface heating must be noted)
- Max. operating pressure: 10 bar



Type	Number heating circuits	Connection			Article code
		D	E (EC)		
VT FH Secos - 4	4	G 1" F	G 3/4" M	1	F18804
VT FH Secos - 5	5	G 1" F	G 3/4" M	1	F18805
VT FH Secos - 6	6	G 1" F	G 3/4" M	1	F18806
VT FH Secos - 7	7	G 1" F	G 3/4" M	1	F18807
VT FH Secos - 8	8	G 1" F	G 3/4" M	1	F18808
VT FH Secos - 9	9	G 1" F	G 3/4" M	1	F18809
VT FH Secos - 10	10	G 1" F	G 3/4" M	1	F18810
VT FH Secos - 11	11	G 1" F	G 3/4" M	1	F18811
VT FH Secos - 12	12	G 1" F	G 3/4" M	1	F18812
VT FH Secos - 13	13	G 1" F	G 3/4" M	1	F18813
VT FH Secos - 14	14	G 1" F	G 3/4" M	1	F18814



Dimensions

Type	Dimensions [mm]											
	A	B	C	F	G	H	I	J	K	L	M	N
VT FH Secos - 4	284	340	76	264	197	200	365	50	14.5	327.5	95	60
VT FH Secos - 5	334	340	76	314	197	200	365	50	14.5	327.5	95	60
VT FH Secos - 6	384	340	76	364	197	200	365	50	14.5	327.5	95	60
VT FH Secos - 7	434	340	76	414	197	200	365	50	14.5	327.5	95	60
VT FH Secos - 8	484	340	76	464	197	200	365	50	14.5	327.5	95	60
VT FH Secos - 9	534	340	76	514	197	200	365	50	14.5	327.5	95	60
VT FH Secos - 10	584	340	76	564	197	200	365	50	14.5	327.5	95	60
VT FH Secos - 11	634	340	76	614	197	200	365	50	14.5	327.5	95	60
VT FH Secos - 12	684	340	76	664	197	200	365	50	14.5	327.5	95	60
VT FH Secos - 13	734	340	76	714	197	200	365	50	14.5	327.5	95	60
VT FH Secos - 14	784	340	76	764	197	200	365	50	14.5	327.5	95	60

Accessories for Secos




Secos Systembus Extension

Extension for Systembus connection cable of the actuators and multisensors. Length 2 m, prewired ready to plug-in.

Secos External Condensation Monitor

Condensation monitor for the decentralised monitoring of the dew point. For connecting the energy-saving control. Several condensation monitors can be connected in series to the Secos energy-saving control.

Type			Article code
Systembus Extension	for connection cable of the actuators, 2 m	1	F18854
Ext. Condensation Monitor	for decentralised application	1	F18855

Spare Parts for Secos



Secos Energy-saving Control

The headquarters of the Secos Energy Control System. Can be used as a single controller for up to 8 connectable room thermostats. The energy-saving control system is used to record and process all the system data required for automatic hydraulic balancing and for the uniform, demand-oriented supply of heat and flow. Heating and cooling function, full pump actuation, interface to BMS systems via Modbus RTU, automatic flushing function, valve and pump protection function. The energy saving control is conveniently operated via tablet or smartphone which is connected to the energy saving control via Bluetooth. The energy saving control is suitable for mounting on top hat rail or on the wall.

Dimensions: 328 x 97 x 61 mm, supply voltage: 230V AC, change over: potential-free input.

Secos Actuator


Actuator for plugging onto the snap-on board of the system manifold. When the drive unit is plugged on, the mechanical and electrical connection is made simultaneously with just one click for error-free and time-saving installation. Motorised actuator for continuous adjustment and precise position control. The actuators are assigned to the room thermostats conveniently at the touch of a button using the Flamconnect operating app.

Secos Multi Sensor

Multi sensor for recording temperature and volume flow sensor in conjunction with the energy-saving control. For installation in the system manifold, including plug-in connection cable and union nut.

Secos Flow Temperature Sensor Supply

For installation in the Secos system manifold, including connection cable 1 m.

Type			Article code
Energy-saving Control	for max. 8 room thermostats	1	F18840
Actuator	suitable for Secos system manifold	1	F18841
Multi Sensor	with connection cable, ready to plug-in	1	F18850
Flow Temp. Sensor Supply	suitable for Secos system manifold	1	F18852

Heating Manifold with Flowmeter for Surface Heating

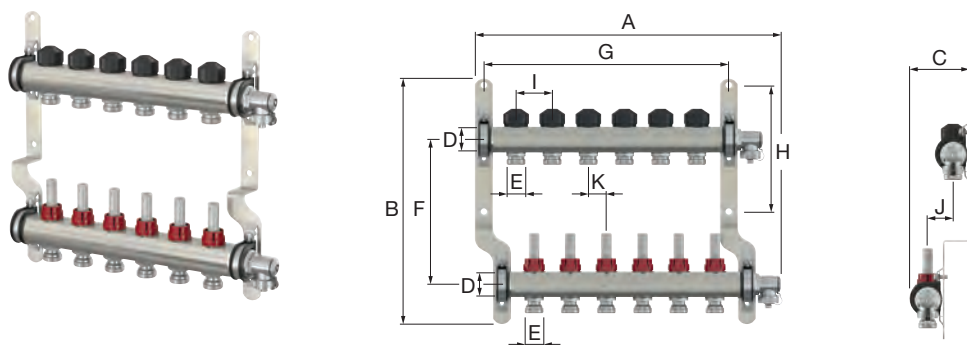
Manifold consisting of supply manifold and return manifold made of stainless steel profile and s-shaped wall bracket with sound-proofing insert in accordance with DIN 4109.


Supply manifold includes 2 - 12 pcs. integrated flowmeters, 0 - 5 l/m, return manifold includes 2 - 12 pcs. integrated thermostatic valve inserts (can be retrofitted with actuators, M 30 x 1.5), valve stroke 2.9 mm.

Supply and return manifold each with: 2 - 12 pcs. nickel-plated nipples with G 3/4" M (Euro taper), 1 pc. drain plug with G 3/4" M (Euro taper) rotatable, nickel-plated, for draining, venting and filling, 1 pc. female thread G 1" primary side, thread DIN EN ISO 228-2.

The manifold cabinet selection depends on the accessories e.g. heat meter.

- Manifold made of stainless steel
- Max. primary operating temp.: 80 °C permanent temp., 95 °C short-term (the max. permissible supply flow temp. of the surface heating must be respected)
- Max. operating pressure: 6 bar



Type	Number heating circuits	Connection			Article no.
		D	D (EC)		
VT FH Flowmeter - 2	2	G 1" F	G 3/4" M	1	F18511
VT FH Flowmeter - 3	3	G 1" F	G 3/4" M	1	F18512
VT FH Flowmeter - 4	4	G 1" F	G 3/4" M	1	F18513
VT FH Flowmeter - 5	5	G 1" F	G 3/4" M	1	F18514
VT FH Flowmeter - 6	6	G 1" F	G 3/4" M	1	F18515
VT FH Flowmeter - 7	7	G 1" F	G 3/4" M	1	F18516
VT FH Flowmeter - 8	8	G 1" F	G 3/4" M	1	F18517
VT FH Flowmeter - 9	9	G 1" F	G 3/4" M	1	F18518
VT FH Flowmeter - 10	10	G 1" F	G 3/4" M	1	F18519
VT FH Flowmeter - 11	11	G 1" F	G 3/4" M	1	F18520
VT FH Flowmeter - 12	12	G 1" F	G 3/4" M	1	F18521



Dimensions

Type	Dimensions [mm]								
	A	B	C	F	G	H	I	J	K
VT FH Flowmeter - 2	222	340	84	200	135	175	50	35	25
VT FH Flowmeter - 3	272	340	84	200	185	175	50	35	25
VT FH Flowmeter - 4	322	340	84	200	235	175	50	35	25
VT FH Flowmeter - 5	372	340	84	200	285	175	50	35	25
VT FH Flowmeter - 6	422	340	84	200	335	175	50	35	25
VT FH Flowmeter - 7	472	340	84	200	385	175	50	35	25
VT FH Flowmeter - 8	522	340	84	200	435	175	50	35	25
VT FH Flowmeter - 9	572	340	84	200	485	175	50	35	25
VT FH Flowmeter - 10	622	340	84	200	535	175	50	35	25
VT FH Flowmeter - 11	672	340	84	200	585	175	50	35	25
VT FH Flowmeter - 12	722	340	84	200	635	175	50	35	25

Heating Manifold for Surface Heating

Manifold consisting of supply manifold and return manifold made of stainless steel profile and s-shaped wall bracket with soundproofing insert in accordance with DIN 4109.

Supply and return manifold each with: 2 - 12 pcs. nickel-plated nipples with G 3/4" M (Euro taper),

1 pc. blind plug with G 1",

1 pc. air vent plug with G 1/2", rotatable,

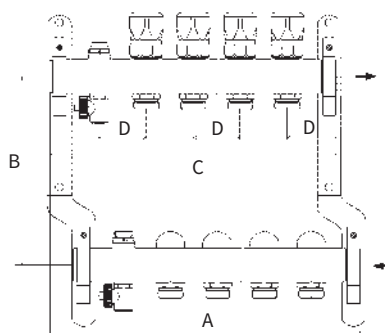
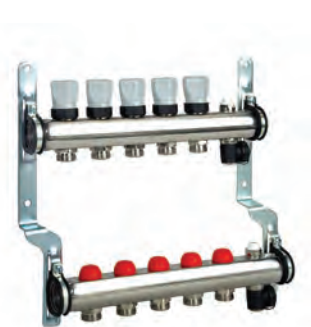
1 pc. fill and drain plug with G 1/2", rotatable, with shut-off and regulation function,


1 pc. female thread G 1" primary side.

Return manifold includes 2 - 12 pcs. integrated thermostatic valve inserts M 30 x 1.5 incl. manual regulating cap.

The manifold cabinet selection depends on the accessories e.g. heat meter.

- Manifold made of stainless steel
- Max. operating temperature: 90 °C (the max. permissible supply flow temp. of the surface heating must be respected)
- Max. operating pressure: 10 bar



Type	Number heating circuits	Connection		Dimensions [mm]					Article no.
		Primary side	Departure (ET)	A	B	C	D		
VT FH - 2	2	G 1" F	G 3/4" M	228	200	203	50	1	F18161
VT FH - 3	3	G 1" F	G 3/4" M	278	200	253	50	1	F18162
VT FH - 4	4	G 1" F	G 3/4" M	328	200	302	50	1	F18163
VT FH - 5	5	G 1" F	G 3/4" M	378	200	353	50	1	F18164
VT FH - 6	6	G 1" F	G 3/4" M	428	200	402	50	1	F18165
VT FH - 7	7	G 1" F	G 3/4" M	478	200	453	50	1	F18166
VT FH - 8	8	G 1" F	G 3/4" M	528	200	502	50	1	F18167
VT FH - 9	9	G 1" F	G 3/4" M	578	200	553	50	1	F18168
VT FH - 10	10	G 1" F	G 3/4" M	628	200	602	50	1	F18169
VT FH - 11	11	G 1" F	G 3/4" M	678	200	653	50	1	F18170
VT FH - 12	12	G 1" F	G 3/4" M	728	200	703	50	1	F18171



Pre-wired Heating Manifold Station, Flush-mounted

Pre-mounted and pre-wired manifold station, ready to install, for surface heatings, consisting of:


- Heating manifold with flowmeter installed in flush-mounted manifold cabinet
- Terminal strip
- Actuators pre-wired to terminal strip

Complete heating manifold consisting of stainless steel manifold 1" with female thread with presettable valves and flowmeters, 0-5 l/min, valve distance 50 mm, connections for heating circuits with G 3/4" M Euro taper, return flow valves (top), rotatable air vent drain 3/4" for filling, venting and draining, terminal strip 230 V for heating and cooling incl. pump module, actuators 230 V.

Flush-mounted manifold cabinet made of galvanised sheet steel in closed version, powder coating (commercial white RAL 9016), cabinet height adjustable from 750 to 850 mm, cabinet depth 110 - 165 mm, with a 45° bent edge, with manifold mounting rail, front flap with lock, supply and return flow connections optionally from left, right or below, clip rail for control module bar, pipe diverting rail, particularly easy to assemble thanks to detachable front skirt.

- Manifold made of stainless steel
- Max. operating temp.: 70 °C (the max. permissible supply flow temp. of the surface heating must be respected)
- Max. operating pressure: 6 bar



Type	Number heating circuits	Connection (ET)	Dimensions (Width) [mm]		Article no.
VT Station UP - 2	2	G 3/4" M	450	1	F18750
VT Station UP - 3	3	G 3/4" M	550	1	F18751
VT Station UP - 4	4	G 3/4" M	550	1	F18752
VT Station UP - 5	5	G 3/4" M	700	1	F18753
VT Station UP - 6	6	G 3/4" M	700	1	F18754
VT Station UP - 7	7	G 3/4" M	700	1	F18755
VT Station UP - 8	8	G 3/4" M	850	1	F18756
VT Station UP - 9	9	G 3/4" M	850	1	F18757
VT Station UP - 10	10	G 3/4" M	850	1	F18758
VT Station UP - 11	11	G 3/4" M	1000	1	F18759
VT Station UP - 12	12	G 3/4" M	1000	1	F18760



Pre-wired Heating Manifold Station, Wall-mounted

Pre-mounted and pre-wired manifold station, ready to install, for surface heatings, consisting of:


- Heating manifold with flowmeter installed in wall-mounted manifold cabinet
- Terminal strip
- Actuators pre-wired to terminal strip

Complete heating manifold consisting of stainless steel manifold 1" with female thread with presettable valves and flowmeters, 0-5 l/min, valve distance 50 mm, connections for heating circuits with G 3/4" M Euro taper, return flow valves (top), rotatable air vent drain 3/4" for filling, venting and draining, terminal strip 230 V for heating and cooling incl. pump module, actuators 230 V.

Wall-mounted manifold cabinet made of galvanised sheet steel in closed version, powder coating (commercial white RAL 9016), cabinet height 710 mm, cabinet depth 140 mm, with manifold mounting rail, front flap with lock, supply and return flow connections from below, clip rail for control module bar, pipe diverting rail, particularly easy to assemble thanks to detachable rear wall.

- Manifold made of stainless steel
- Max. operating temp.: 70 °C (the max. permissible supply flow temp. of the surface heating must be respected)
- Max. operating pressure: 6 bar



Type	Number heating circuits	Connection (ET)	Dimensions (Width) [mm]		Article no.
VT Station AP - 2	2	G 3/4" M	450	1	F18780
VT Station AP - 3	3	G 3/4" M	550	1	F18781
VT Station AP - 4	4	G 3/4" M	550	1	F18782
VT Station AP - 5	5	G 3/4" M	700	1	F18783
VT Station AP - 6	6	G 3/4" M	700	1	F18784
VT Station AP - 7	7	G 3/4" M	700	1	F18785
VT Station AP - 8	8	G 3/4" M	850	1	F18786
VT Station AP - 9	9	G 3/4" M	850	1	F18787
VT Station AP - 10	10	G 3/4" M	850	1	F18788
VT Station AP - 11	11	G 3/4" M	1000	1	F18789
VT Station AP - 12	12	G 3/4" M	1000	1	F18790

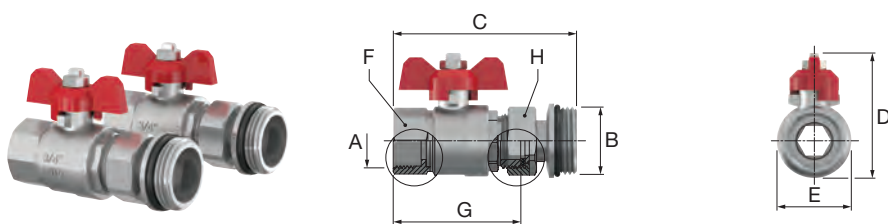



MANIFOLD ACCESSORIES

BASIC Manifold Connection Kit - Horizontal

For Simplex manifolds with horizontal connection to manifold lines, consisting of:
2 pcs. ball valves in straight pattern with screw connection, including seal and butterfly handle.

- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 95 °C
- Max. operating pressure: 10 bar



Type	Nominal diameter	Connection			Article no.
		A	B		
VA-Set BASIC W - DN20	DN 20	G 3/4" F	G 1" M	1	F14018
VA-Set BASIC W - DN25	DN 25	G 1" F	G 1" M	1	F14028



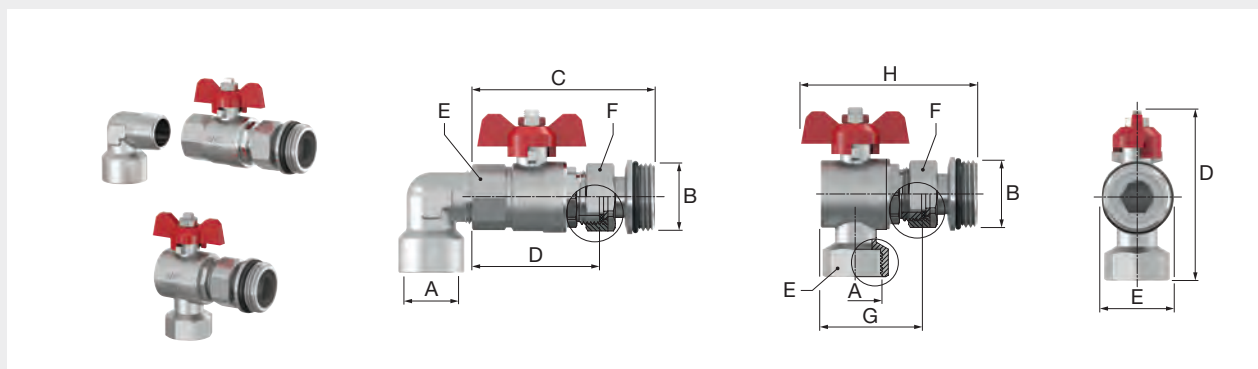
Dimensions


Type	Dimensions [mm]					
	C	D	E	F (WS)	G	H (WS)
VA-Set BASIC W - DN20	88.5	60	36	30	61	30

BASIC Manifold Connection Kit - Vertical

For Simplex manifolds with vertical connection to manifold lines, consisting of:
 1 pc. ball valve in straight pattern with screw connection, including seal and butterfly handle,
 1 pc. ball valve in angular shape with screw connection, including seal and butterfly handle,
 1 pc. connection elbow 90° with female and male thread.

- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 95 °C
- Max. operating pressure: 10 bar



Type	Nominal diameter	Connection			Article no.
		A	B		
VA-Set BASIC S - DN20	DN 20	G 3/4" F	G 1" M	1	F14019
VA-Set BASIC S - DN25	DN 25	G 1" F	G 1" M	1	F14029



Dimensions

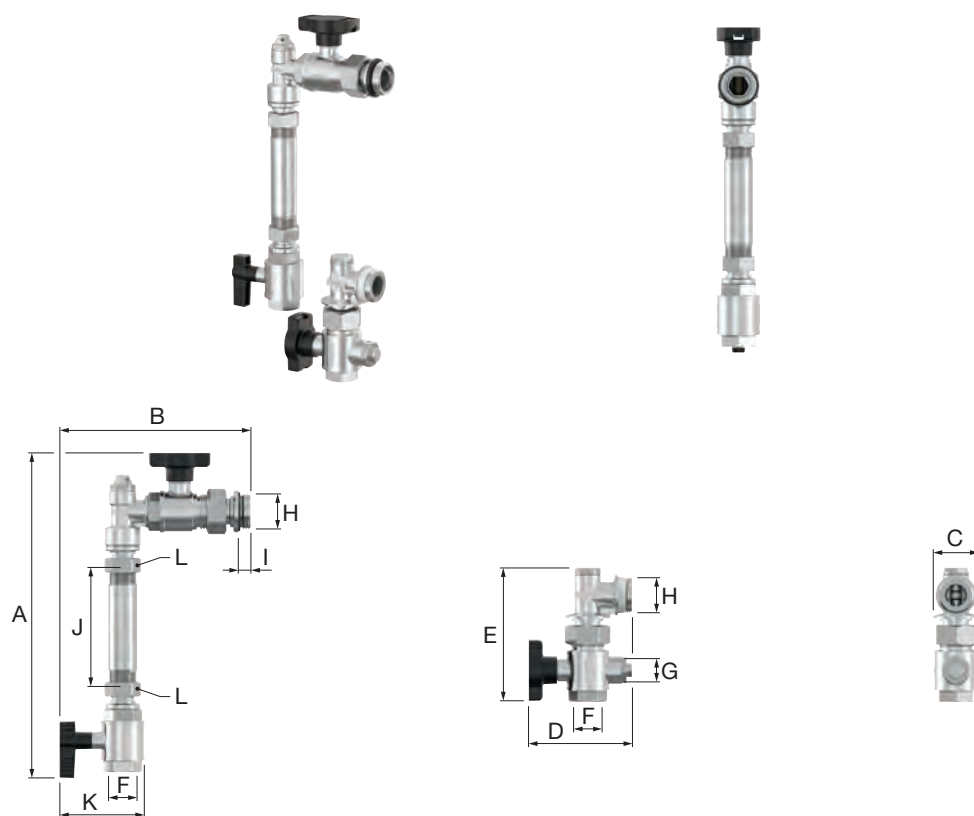
Type	Dimensions [mm]					
	C	D	E (WS)	F (WS)	G	H
VA-Set BASIC S - DN20	88.5	83.5	30	30	49	86


Universal Heat Meter Attachment Kit, Vertical

For Simplex manifolds, consisting of:

3 pcs. ball valves with screw connection with O-ring seal, T-handles, thermometer can be retrofitted,
2 pcs. 90° angle connection with self-sealing thread for vertically mounting the manifold supply lines,
1 pc. heat meter adapter piece 110 mm, G 1" M for manifold bar,
ball valves G 3/4" F, for heat meters up to 1.5 m³/h.

- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C
- Max. operating pressure: 10 bar



Type	F	Connection	H		Article no.
WMZ-Set S	G 3/4" F	G 1/2" F and M 10 x 1 F	G 1" M	1	F14031



Dimensions

Type	Dimensions [mm]									
	A	B	C	D	E	I	J	K (WS)	L (WS)	
WMZ-Set S	301	177	42	96	124	11.5	110	78.5	30	

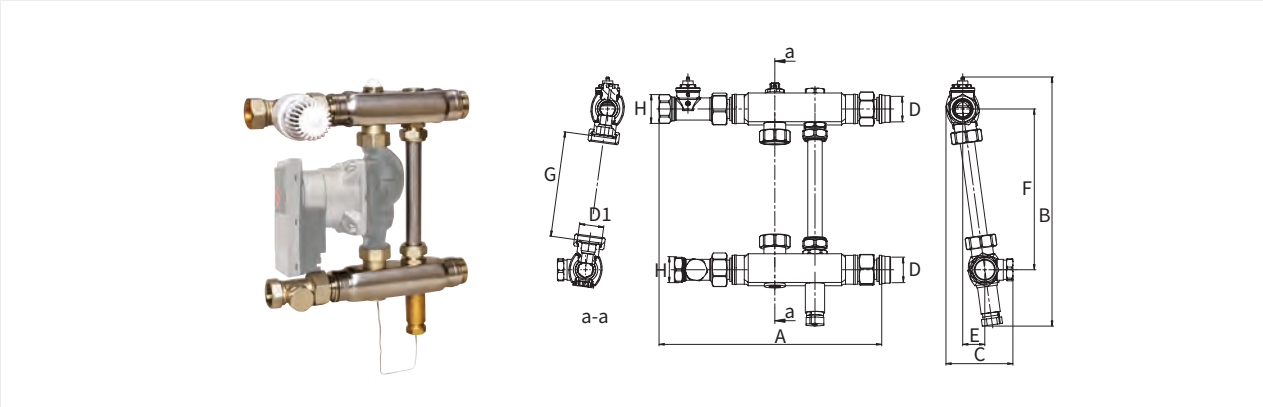
Fixed Set-point Controller Set with Immersion Sensor


Compact control station of the flow line temperature of surface heating systems up to 15 kW heating requirement, assembled directly to the heating circuit manifold. The connection can occur on the right or left of the manifold. The low installation depth of the unit makes it possible to install in standard manifold boxes.

The controller set consisting of:
fixed set-point controller set, pump including connection cable (optional), thermostatic head with immersion sensor, straight wall bracket.

Flow rate adjustable via control valve, adjustable bypass algorithm, temperature safety switch, adjustment range: 50 °C cut-off temperature, without electric installation.

- Components made of stainless steel
- Sealing materials: EPDM
- Max. operating temperature: 90 °C
- Max. operating pressure: 10 bar



Type	Pump	Nominal diameter	Connection				Article no.
			D	D1	H		
FWR-T WILO	WILO High Efficiency	DN 20	G 1" M	G 1" F	G 3/4" F	1	F18772
FWR-T	-	DN 20	G 1" M	G 1" F	G 3/4" F	1	F18774




Dimensions

Type	Dimensions [mm]					
	A	B	C	E	F	G
FWR-T / WILO	277	310	83	28	200	130

Electro-thermal actuator



For individual regulation of room temperature, connection thread M 30 x 1.5 (with adaptor), de-energised closed.

Type	Voltage	Model		Order Code
STA 230	230 V, 50 / 60 Hz		1	M1355810
STA 24	24 V AC / DC, 50 / 60 Hz		1	M1355830
STA 24 H	24 V AC / DC, 50 / 60 Hz	With integrated auxiliary switch*	1	M1355840

* Switching contact: 24 V, 50 / 60 Hz, 0.5 A

ANALOG Room Thermostat




Room temperature controller to detect and control the required room temperature. The required room temperature is set using the soft-lock dial.

Voltage is supplied directly via a terminal strip or a separate power source, "stand-alone" control or control integrated within a system, designed for heating systems, with set-back input for time-controlled set-back of the room temperature e.g. via an external system time clock, setpoint calibration, frost protection function, colour: signal white.

Technical data:

- Operating voltage: 230 V
- 50 Hz voltage supply via basic or external power unit
- IP rating: IP 20
- Protection class: II
- Switching power: 2 A ohmic load, 200 VA inductive
- Setpoint temperature range: 10 - 28 °C
- Activation of setpoint temperature demand: 0.25 °C
- Set-back temperature: 4 °C
- Max. no. of connectible actuators: 10 (max. 3 W/actuator)
- Connection terminals: 5 screw-type terminals - 0.22 mm² to 1.5 mm²
- Material: PC and ABS
- Dimensions (W x H x D): 86 x 86 x 29 mm
- Slimline, compact version
- Ease of installation and operation
- Excellent operational reliability, maintenance-free


Type	Version		Article no.
RT ANALOG	for heating systems	1	F18585

KOMFORT/CONTROL Room Thermostat



Room temperature controller to detect and control the required room temperature. With display and push-turn dial and soft-lock.
For heating/cooling including "change-over" input, selectable heating system, adjustable set-back temperature, voltage is supplied directly via a terminal strip or a separate power source, "stand-alone" control or control integrated within a system, designed for heating and cooling systems, different operating modes, adjustable set-back temperature, set-back input for time-controlled set-back of room temperature e.g. via an external system time clock, "change-over" input, correction of actual temperature detection, setpoint temperature limit, valve protection function, frost protection function, suitable for actuators with NC or NO control direction, switchable between (NC: normally closed / NO: normally open), colour: pure white.

- Technical data:
- Operating voltage: 230 V
 - 50 Hz voltage supply via basic or mains power connection
 - IP rating: IP 20
 - Protection class: II
 - Switching power: 1 A ohmic load, 200 VA inductive
 - Setpoint temperature range: 5 - 30 °C
 - Activation of setpoint temperature demand: 0.2 °C
 - Set-back temperature: adjustable
 - Max. no. of connectible actuators: 5 (max. 3 W/actuator)
 - Connection terminals: 6 screw-type terminals - 0.22 mm² to 1.5 mm²
 - Material: ABS
 - Dimensions (W x H x D): 86 x 86 x 31 mm
-
- Slimline, compact version
 - Large clearly arranged LCD with built-in back light
 - Ease of installation and operation
 - Excellent operational reliability, maintenance-free

Type	Version		Article no.
RT KOMFORT	for heating and cooling systems	1	F18594
RT CONTROL	for heating and cooling systems, with weekly time switch	1	F18635

Terminal Strip




Central connection unit of a room-by-room control for the surface temperature adjustment of heating and cooling systems.

6 or 10 control zones, for 230 V NC actuators, including pump control, connections for a temperature limiter/dewpoint sensor and input for "change-over" signal, 15 or 21 terminals for connection of max. 15 or 21 actuators, screwless terminal connection technology, proven cable routing and standard-compliant strain relief, designed for heating and/or cooling systems, protective conductor intermediate connection, mains terminal block for pump/boiler circuit, pump control, signal input for temperature limiter or dewpoint sensor, set-back channel connection for an external system time clock "change-over" connection for heating/cooling, suitable for NC actuators without pump control, also suitable for NO actuators (NO: normally open), colour of housing/cover: light grey/transparent.

Technical data:

- Operating voltage: 230 V, 50 Hz
- Max. power consumption: 50 VA
- IP rating: IP 20
- Protection class: II
- Heating zones: 6 or 10
- Max. no. of connectible actuators: 15 or 21
- Housing material: ABS
- Dimensions (H x L x D): 90 x 326.5 x 52 mm
- Ease of installation and operation
- Excellent operational reliability, maintenance-free

Type	Version		Article no.
Terminal Strip - 6	6 control zones	1	F18591
Terminal Strip - 10	10 control zones	1	F18592

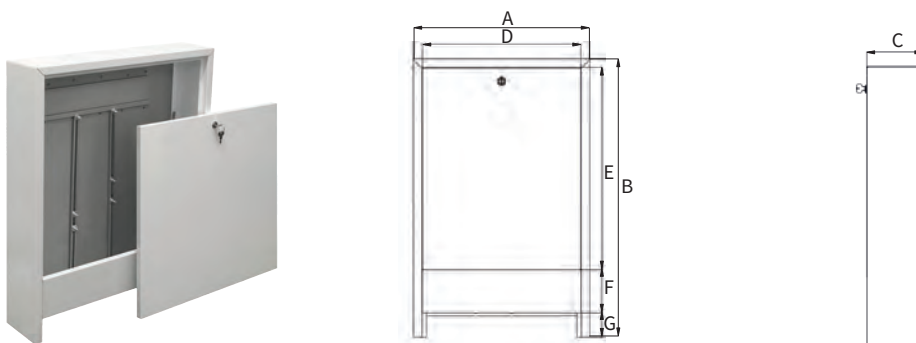
EXCLUSIV Manifold Cabinet, Wall-Mounted


For Simplex manifolds. Features:

- Cabinet height 710 mm
- Cabinet depth 140 mm
- Powder coating (commercial white RAL 9016)
- Smooth sides
- Supply and return flow connections from below
- Manifold mounting rail
- Front flap with lock
- Clip rail for control module bar
- Pipe diverting rail
- Packed in a box
- Particularly easy to assemble thanks to detachable rear wall

→ **Further sizes on request!**

- Made of galvanised sheet steel in closed version



Type	Dimensions [mm]								Article no.
	A	B	C	D	E	F	G		
Cabinet E-AP - 450	450	710	140	406	516	110	62	1	F18550
Cabinet E-AP - 550	550	710	140	506	516	110	62	1	F18551
Cabinet E-AP - 700	700	710	140	656	516	110	62	1	F18552
Cabinet E-AP - 850	850	710	140	806	516	110	62	1	F18553
Cabinet E-AP - 1000	1000	710	140	956	516	110	62	1	F18554
Cabinet E-AP - 1200	1200	710	140	1156	516	110	62	1	F18555



Manifold Cabinet Selection (EXCLUSIV Manifold Cabinets, Wall-Mounted)

Cabinet Width	Heating Circuits Manifold + Manifold Connection Set horizontal	Heating Circuits Manifold + Manifold Connection Kit vertical	Heating Circuits Manifold + Heat Meter Attachm. Kit horizontal	Heating Circuits Manifold + Heat Meter Attachm. Kit vertical	Heating Circuits Manifold + Fixed Value Control Set
450	2-3	2	-	2	-
550	4-5	3-4	-	3-4	-
700	6-8	5-7	2-4	5-7	2-3
850	9-11	8-10	5-7	8-10	4-6
1000	12	11-12	8-10	11-12	7-9
1200	13-15	13-15	11-12	13-15	10-12

The manifold cabinet selection depends on the number of heating circuits and the distributor accessories.

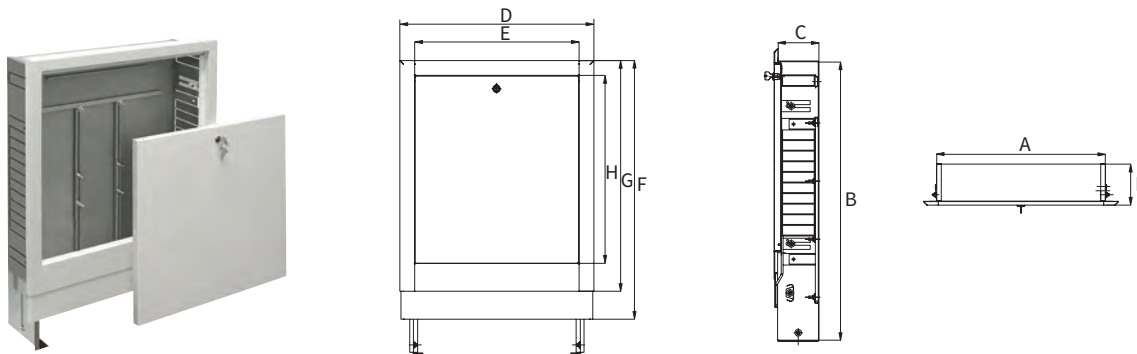
EXCLUSIV Manifold Cabinet, Flush-Mounted


For Simplex manifolds. Features:

- Cabinet height adjustable from 750 to 850 mm
- Cabinet depth 110 - 165 mm
- Powder coating (commercial white RAL 9016)
- With a 45° bent edge
- Supply and return flow connections optionally from left, right or below
- Manifold mounting rail
- Front flap with lock
- Clip rail for control module bar
- Pipe diverting rail
- Packed in a box
- Particularly easy to assemble thanks to detachable front skirt

→ **Further sizes on request!**

- Made of galvanised sheet steel in closed version



Type	Dimensions [mm]										Article no.
	A	B	C	D	E	F	G	H	I		
Cabinet E-UP - 450	450	750 - 850	110 - 165	522	442	639 - 695	620	505	120	1	F18556
Cabinet E-UP - 550	550	750 - 850	110 - 165	622	542	639 - 695	620	505	120	1	F18557
Cabinet E-UP - 700	700	750 - 850	110 - 165	772	682	639 - 695	620	505	120	1	F18558
Cabinet E-UP - 850	850	750 - 850	110 - 165	922	842	639 - 695	620	505	120	1	F18559
Cabinet E-UP - 1000	1000	750 - 850	110 - 165	1072	992	639 - 695	620	505	120	1	F18560
Cabinet E-UP - 1200	1200	750 - 850	110 - 165	1272	1192	639 - 695	620	505	120	1	F18561



Manifold Cabinet Selection (EXCLUSIV Manifold Cabinets, Flush-Mounted)

Cabinet Width	Heating Circuits Manifold + Manifold Connection Set horizontal	Heating Circuits Manifold + Manifold Connection Kit vertical	Heating Circuits Manifold + Heat Meter Attachm. Kit horizontal	Heating Circuits Manifold + Heat Meter Attachm. Kit vertical	Heating Circuits Manifold + Fixed Value Control Set
450	2-3	2	-	2	-
550	4-5	3-4	-	3-4	-
700	6-8	5-7	2-4	5-7	2-3
850	9-11	8-10	5-7	8-10	4-6
1000	12	11-12	8-10	11-12	7-9
1200	13-15	13-15	11-12	13-15	10-12

The manifold cabinet selection depends on the number of heating circuits and the distributor accessories.

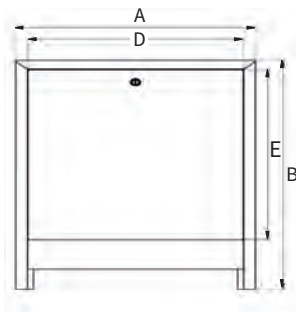
STANDARD Manifold Cabinet, Wall-Mounted


For Simplex manifolds. Features:

- Cabinet height 585 mm
- Cabinet depth 110 mm
- Powder coating (commercial white RAL 9016)
- Smooth sides
- Supply and return flow connections from below
- Manifold mounting rail
- Front flap with twist lock
- Pipe diverting rail
- Packed in a box
- Particularly easy to assemble thanks to detachable rear wall

→ **Further sizes on request!**

- Made of galvanised sheet steel in closed version



Type	Dimensions [mm]						Article no.
	A	B	C	D	E		
Cabinet S-AP - 450	450	585	110	405	436	1	F18562
Cabinet S-AP - 550	550	585	110	505	436	1	F18563
Cabinet S-AP - 700	700	585	110	655	436	1	F18564
Cabinet S-AP - 850	850	585	110	805	436	1	F18565
Cabinet S-AP - 1000	1000	585	110	955	436	1	F18566



Manifold Cabinet Selection (STANDARD Manifold Cabinets, Wall-Mounted)

Cabinet Width	Heating Circuits Manifold + Manifold Connection Set horizontal	Heating Circuits Manifold + Manifold Connection Kit vertical	Heating Circuits Manifold + Heat Meter Attachm. Kit horizontal	Heating Circuits Manifold + Heat Meter Attachm. Kit vertical	Heating Circuits Manifold + Fixed Value Control Set
450	2-3	2	-	2	-
550	4-5	3-4	-	3-4	-
700	6-8	5-7	2-4	5-7	2-3
850	9-11	8-10	5-7	8-10	4-6
1000	12	11-12	8-10	11-12	7-9

The manifold cabinet selection depends on the number of heating circuits and the distributor accessories.

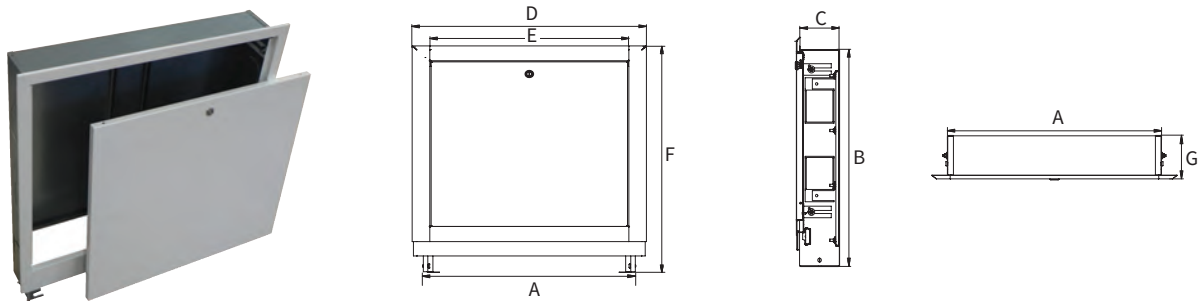
STANDARD Manifold Cabinet, Flush-Mounted


For Simplex manifolds. Features:

- Cabinet height adjustable from 560 to 660 mm
- Cabinet depth 110 - 165 mm
- Powder coating (commercial white RAL 9016)
- Supply and return flow connections optionally from left, right or below
- Manifold mounting rail
- Front flap with twist lock
- Pipe diverting rail
- Packed in a box
- Particularly easy to assemble thanks to detachable front skirt

→ **Further sizes on request!**

- Made of galvanised sheet steel in closed version



Type	Dimensions [mm]								Article no.
	A	B	C	D	E	F	G		
Cabinet S-UP - 450	450	560 - 660	110 - 165	518	435	594 - 694	120	1	F18567
Cabinet S-UP - 550	550	560 - 660	110 - 165	618	535	594 - 694	120	1	F18568
Cabinet S-UP - 700	700	560 - 660	110 - 165	768	685	594 - 694	120	1	F18569
Cabinet S-UP - 850	850	560 - 660	110 - 165	918	835	594 - 694	120	1	F18570
Cabinet S-UP - 1000	1000	560 - 660	110 - 165	1068	985	594 - 694	120	1	F18571



Manifold Cabinet Selection (STANDARD Manifold Cabinets, Flush-Mounted)

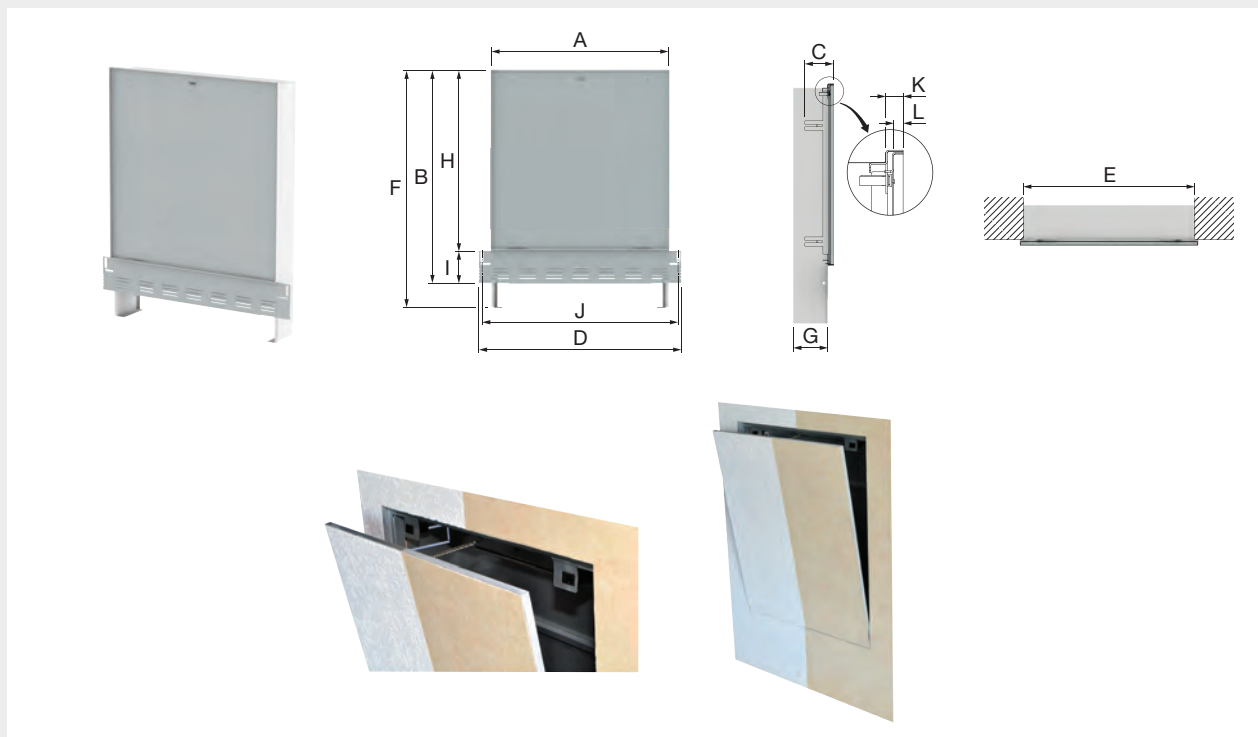
Cabinet Width	Heating Circuits Manifold + Manifold Connection Set horizontal	Heating Circuits Manifold + Manifold Connection Kit vertical	Heating Circuits Manifold + Heat Meter Attachm. Kit horizontal	Heating Circuits Manifold + Heat Meter Attachm. Kit vertical	Heating Circuits Manifold + Fixed Value Control Set
450	2-3	2	-	2	-
550	4-5	3-4	-	3-4	-
700	6-8	5-7	2-4	5-7	2-3
850	9-11	8-10	5-7	8-10	4-6
1000	12	11-12	8-10	11-12	7-9


The manifold cabinet selection depends on the number of heating circuits and the distributor accessories.

MYDESIGN Wall-integrated Cabinet Cover

Cover can be integrated into wall, individual design of the wall surface, suitable for Simplex EXCLUSIV manifold cabinets, integrable into each wall surface e.g. plaster, tiles, wallpaper, spatula technology and much more. Invisible opening with "push-to-open" technology with safety chain. Preparation of the ground and mounting of the filling material on site.

- Components made of galvanised sheet metal



Type	Suitable for		Article no.
Cabinet Cover - 450	EXCLUSIV cabinet flush-mounted 450 mm	1	F18543
Cabinet Cover - 550	EXCLUSIV cabinet flush-mounted 550 mm	1	F18544
Cabinet Cover - 700	EXCLUSIV cabinet flush-mounted 700 mm	1	F18545
Cabinet Cover - 850	EXCLUSIV cabinet flush-mounted 850 mm	1	F18546
Cabinet Cover - 1000	EXCLUSIV cabinet flush-mounted 1000 mm	1	F18547



Dimensions

Type	Dimensions [mm]											
	A	B	C	D	E*	F (min./max.)	G	H	I	J	K	L
Cabinet Cover - 450	474	687	90	550	450	764 / 881	110-150	580	62-107	530	19	10
Cabinet Cover - 550	574	687	90	650	550	764 / 881	110-150	580	62-107	630	19	10
Cabinet Cover - 700	724	687	90	800	700	764 / 881	110-150	580	62-107	780	19	10
Cabinet Cover - 850	874	687	90	950	850	764 / 881	110-150	580	62-107	930	19	10
Cabinet Cover - 1000	1024	687	90	1100	1000	764 / 881	110-150	580	62-107	1080	19	10

* Cabinet width

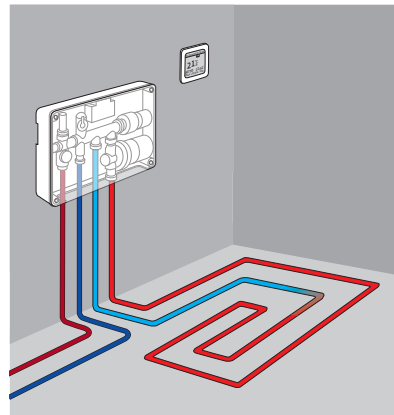
REGULATION BOXES

Types of regulation boxes according to application

5 - 40 m²

Room temperature-dependent regulation with supply temperature limitation (System Regulation Boxes)

The intelligent solution for room temperature regulation in single room surface heating systems. In combination with any standard 230 V room thermostat, the KOMPAKT and the KOMFORT system regulation box enables the implementation of simple to time-controlled temperature regulation for personalized and energy-saving regulation of the surface heating.

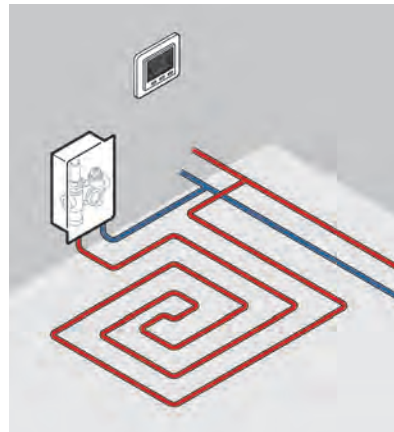


System Regulation Boxes: Room temperature regulation with supply temperature limitation for single room surface heating systems

> 15 m²

Room temperature-dependent regulation with return temperature limitation (RTL-TH Regulation Boxes)

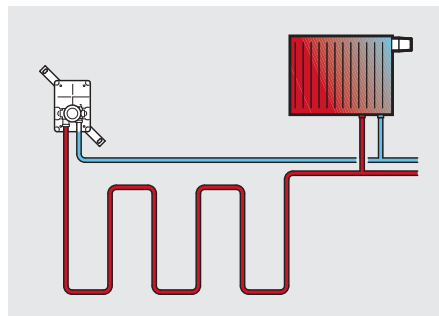
The convenient option for operating surface heating systems with high supply temperatures in RTL circuits. Particularly suitable for retrofitting existing buildings, partial equipping of new houses or decentralized regulated surface heating without a manifold.



RTL-TH Regulation Boxes: Room temperature regulation even at high supply temperatures (for use in surface heating as primary heating)

Return flow temperature-dependent regulation (RTL Regulation Boxes)

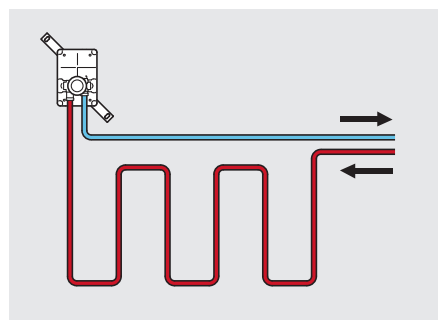
These regulation boxes regulate surface heating reliably and without auxiliary power. In conjunction with a room temperature regulated heating system, this regulation box can be used for base load supply heat for a room and for floor heating.



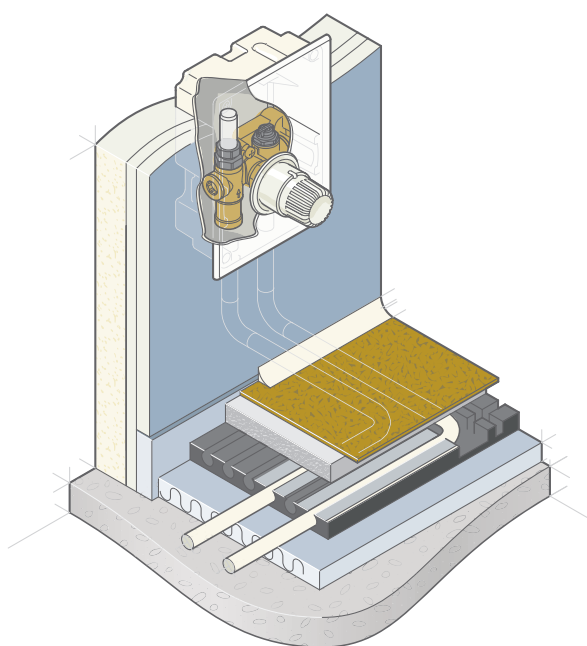
RTL Regulation Boxes: Surface heating and base load heat supply even at high supply temperatures

Room temperature-dependent regulation (TH Regulation Boxes)

Temperature regulation via built-in room thermostat. This version is used for low temperature heating systems, when the supply temperature of the connected surface heating does not need to be limited.



TH Regulation Boxes: Room temperature regulation at low supply temperatures



All Simplex Regulation Boxes can be easily installed and connected to surface heating systems using the easy to connect wall installation box.

Technical features depending on the version

Safety temperature limiter

Protects the surface heating system from overheating when a faulty thermostat head causes excessive supply temperature. After cooling off, the valve can be reset by pressing on the valve insert.

Flow indicator and regulation

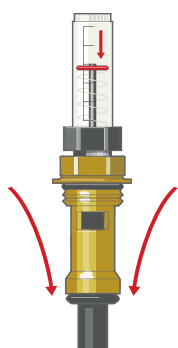
The return volume flow can be regulated. With the integrated adjustment portion, the volume flow can be set and read for controlling.

Digital room thermostat

Electronic concealed room thermostat, can be integrated into various switch series, programmable, with automatic function and illuminated display with temperature and heating display.

Fill and drain valve

For easy filling, draining and flushing of the system.



Adjustment and shut-off valve for volume flow regulation

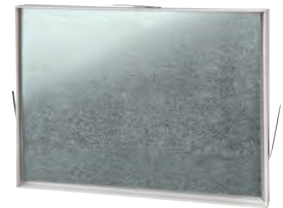
KOMPAKT / KOMFORT SYSTEM REGULATION BOXES

The KOMPAKT/KOMFORT regulation box is used to operate a single room surface heating system, allowing for **room temperature-dependent regulation of the surface heating system while limiting the supply temperature** (setting range 10 - 50 °C).

Operation by means of an electric room temperature controller (not included, please order separately).

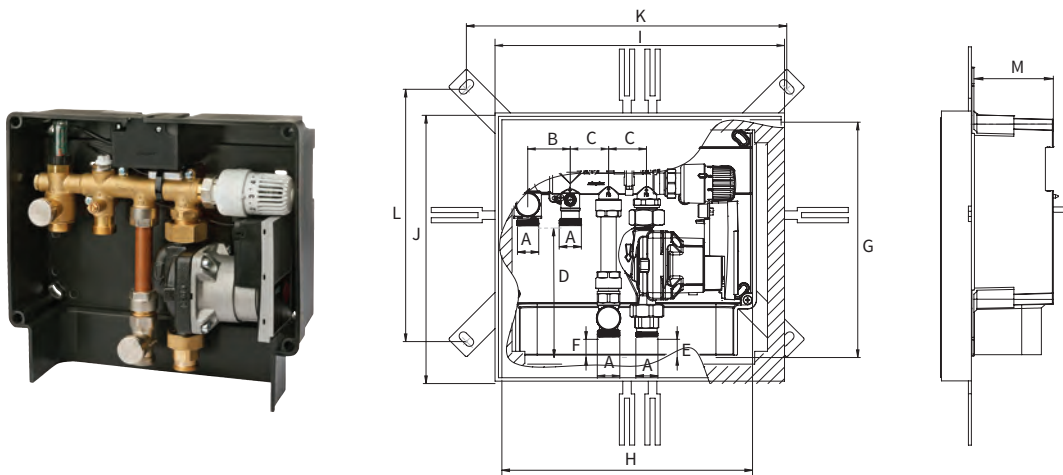
Features:

- Wall installation box, with pre-installed valve module with venting and draining
 - Valve module connection with G 3/4" M Euro taper for connection with compression adapters on the pipe side
 - Wall covering
 - Safety temperature switch
 - Shut-off set with hose connection for easy handling during commissioning and maintenance work
 - Regulation head for setting the supply temperature
 - Topmeter for flow indication and regulation
 - Pre-adjustable circulating pump
 - "Easy-connect" plug-in connection for electrical connection
 - Primary circuit connections with separate shut-off
- Components made of brass, steel and plastic
 - Sealing materials: EPDM, PTFE
 - Max. operating temperature: 60 °C
 - Max. operating pressure: 6 bar



KOMPAKT System Regulation Box

- Plastic wall installation box
- Wall covering consists of tile frame with depth compensation and universal cover (additional cover options available)
- Built into masonry



Type	Connection A (ET)	Wall Covering		Article no.
RB KOMPAKT	G 3/4" M	tile frame	1	F11852



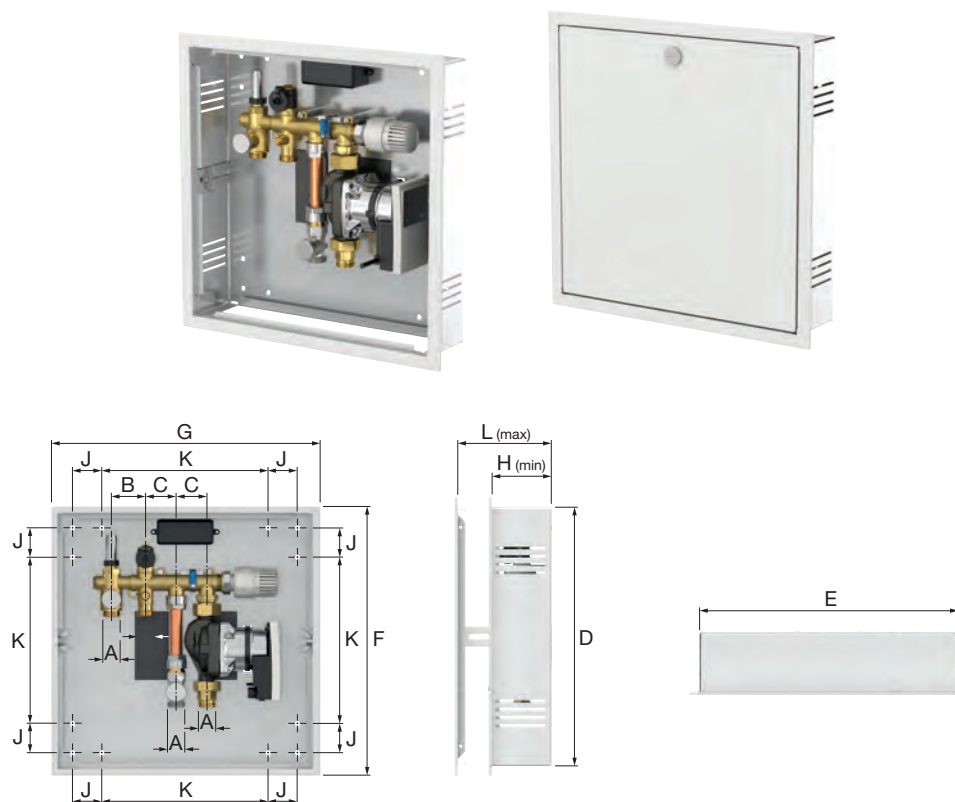
Dimensions

Type	Dimensions [mm]											
	B	C	D	E	F	G*	H*	I	J	K	L	M
RB KOMPAKT	50	45	147	16	25	280	305	340	315	377	296	80

* Wall box

KOMFORT System Regulation Box

- Metal wall installation box
- Wall covering consists of a coated case with depth adjustment
- With filling equipment
- Exchangeable primary circuit connection, right or left
- Extension for larger heating surfaces
- Built into masonry or dry construction



Type	Connection A (ET)	Wall Covering		Article no.
RB KOMFORT	G 3/4" M	coated case, white	1	F11854



Dimensions

Type	Dimensions [mm]									
	B	C	D*	E*	F	G	H	J	K	L
RB KOMFORT	50	45	380	380	410	410	87.5	43	244	140


* Wall box

Tile Frame with Cover in White

Tile frame for KOMPAKT system regulation box, colour white similar to RAL 9016.

- Components made of plastic and steel



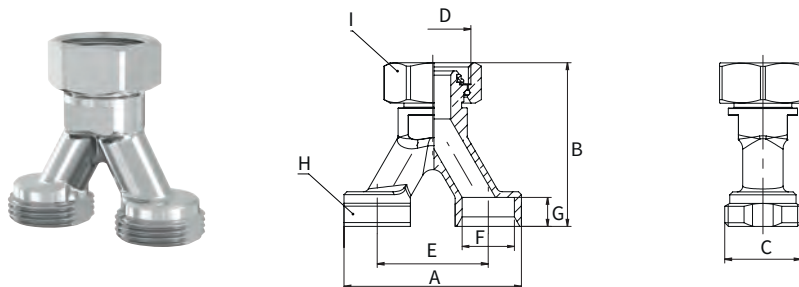
Type	Suitable for	Dimensions [mm]				Article no.
		A	B	C		
Tile Frame	KOMPAKT regulation box	335	310	2	1	F11853




Connection Adapter Y-Piece

Connection adapter for extending the heating surface of the KOMFORT system regulation box, with union nut (wrench size 30 mm) and cone sealing, elastic seal, 38.5 mm axial distance at the manifold side, spanner flat 17 mm as assembling aid.

- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temp., 130 °C short-term (the max. permissible supply flow temp. of the surface heating must be respected)
- Max. operating pressure: 10 bar



Type	Connection		Dimensions [mm]								Article no.
	C (ET)	D	A	B	E	F (Ø)	G	H (WS)	I (WS)		
Y-Piece	G 3/4" M	G 3/4" F	61.5	57	38.5	18.1	10	23	30	2 / 50	F10506



RTL-TH DIGITAL REGULATION BOX

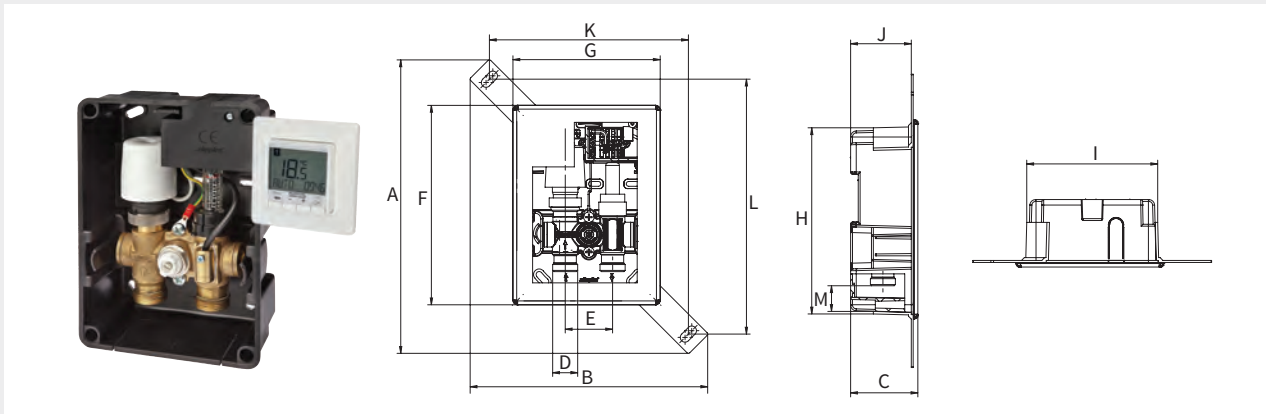
Regulation box for **room temperature-dependent regulation of surface heating systems with adjustable return flow temperature limitation.** (setting range 10 - 50 °C)

Features:

- Wall installation box with pre-mounted valve manifold with vent
- Valve module connection with G 3/4" M Euro taper for connection with compression adapters on the pipe side
- Protective cap in EPS
- White plastic wall cover (similar to RAL 9016)
- Fixing brackets for depth adjustment of the wall box
- Digital concealed room temperature controller, integrable into various switch series (frame DIN 49075, installation box DIN 49073), with week and day programmes, adjustable minimum and maximum return flow temperatures, display with white background illumination, max. 9 programmable switching times per day
- Topmeter for flow indication and regulation
- Electro-thermal actuator (230 V)
- "Easy-connect" plug-in connection for electrical connection
- Actuator and RTL sensor pre-installed and pre-wired
- Prepared for flexible installation in stud walls (installation set F11863)
- Can be combined with design covers
- Components made of brass and plastic
- Sealing materials: EPDM
- Max. primary operating temp.: 80 °C permanent temp., 95 °C short-term (the max. permissible supply flow temp. of the surface heating must be respected)
- Max. operating pressure: 6 bar



RTL-TH DIGITAL Regulation Box with Digital Room Temperature Controller



Type	Connection D (ET)	Wall Covering		Article no.
RB RTL-TH DIGITAL	G 3/4" M	plastic, white*	1	F11838

* similar to RAL 9016



Dimensions

Type	Dimensions [mm]											
	A	B	C	E	F	G	H*	I*	J	K	L	M
RB RTL-TH DIGITAL	310	250.5	71	50	210.5	155.5	197	138	64	210	270	27

* Wall box

RTL-TH BASIC REGULATION BOX

Regulation box for **room temperature-dependent regulation of surface heating systems with return flow temperature limitation 40 °C via integrated fixed value limit switch.**

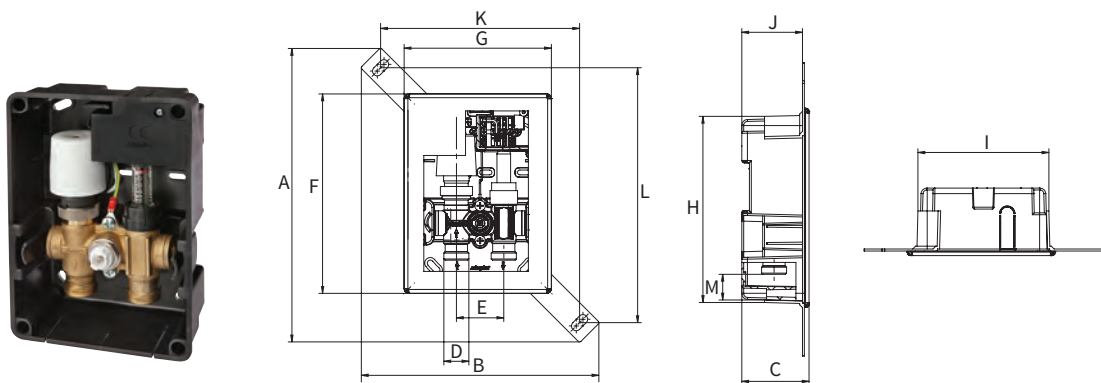
Operation by means of a room temperature controller (not included, please order separately).

Features:

- Wall installation box with pre-mounted valve manifold with vent
- Valve module connection with G 3/4" M Euro taper for connection with compression adapters on the pipe side
- Protective cap in EPS
- White plastic wall cover (similar to RAL 9016)
- Fixing brackets for depth adjustment of the wall box
- Topmeter for flow indication and regulation
- Electro-thermal actuator (230 V)
- "Easy-connect" plug-in connection for electrical connection
- Actuator pre-wired with fixed value limit switch
- Prepared for flexible installation in stud walls (installation set F11863)
- Can be combined with design covers
- Components made of brass and plastic
- Sealing materials: EPDM
- Max. primary operating temp.: 80 °C permanent temp., 95 °C short-term (the max. permissible supply flow temp. of the surface heating must be respected)
- Max. operating pressure: 6 bar



RTL-TH BASIC Regulation Box for On-site Room Temperature Controller



Type	Connection D (ET)	Wall Covering		Article no.
RB RTL-TH BASIC	G 3/4" M	plastic, white*	1	F11836

* similar to RAL 9016



Dimensions

Type	Dimensions [mm]											
	A	B	C	E	F	G	H*	I*	J	K	L	M
RB RTL-TH BASIC	310	250.5	71	50	210.5	155.5	197	138	64	210	270	27

* Wall box

DUO REGULATION BOX

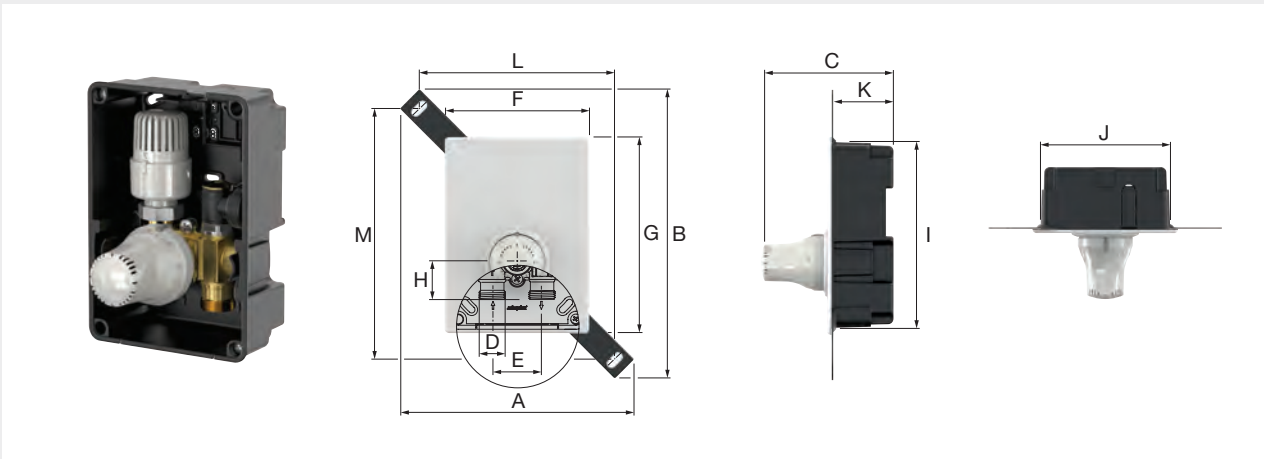
Regulation box for **room temperature-dependent regulation of surface heating systems with adjustable return flow temperature limitation.**


Features:

- Wall installation box with pre-mounted valve manifold with vent
 - Valve module connection with G 3/4" M Euro taper for connection with compression adapters on the pipe side
 - Protective cap in EPS
 - White plastic wall cover (similar to RAL 9016)
 - Fixing brackets for depth adjustment of the wall box
 - Prepared for flexible installation in stud walls (installation set F11863)
- Fill and drain valve
 - External thermostatic head for room temperature setting
 - Thermostatic valve with presetting
 - Internal RTL head for return flow temperature limitation
- Components made of brass and plastic
 - Sealing materials: EPDM
 - Max. primary operating temp.: 80 °C permanent temp., 95 °C short-term (the max. permissible supply flow temp. of the surface heating must be respected)
 - Max. operating pressure: 6 bar



DUO Regulation Box



Type	Connection D (ET)	Wall Covering		Article no.
RB RTL-TH DUO	G 3/4" M	plastic, white*	1	F11879

* similar to RAL 9016



Dimensions

Type	Dimensions [mm]											
	A	B	C	E	F	G	H	I*	J*	K	L	M
RB RTL-TH DUO	250.5	310	136	50	155.5	210.5	39	197	137.5	64	210	270

* Wall box

RTL-I REGULATION BOXES

Regulation box for **return flow temperature-dependent regulation** of surface heating systems.

Basic features:

- Wall installation box with pre-mounted valve manifold with vent
- Valve module connection with G 3/4" M Euro taper for connection with compression adapters on the pipe side
- Internal RTL head
- Protective cap in EPS
- White plastic wall cover (similar to RAL 9016)
- Fixing brackets for depth adjustment of the wall box
- Prepared for flexible installation in stud walls (installation set F11863)
- Can be combined with design covers



STANDARD version additional with:

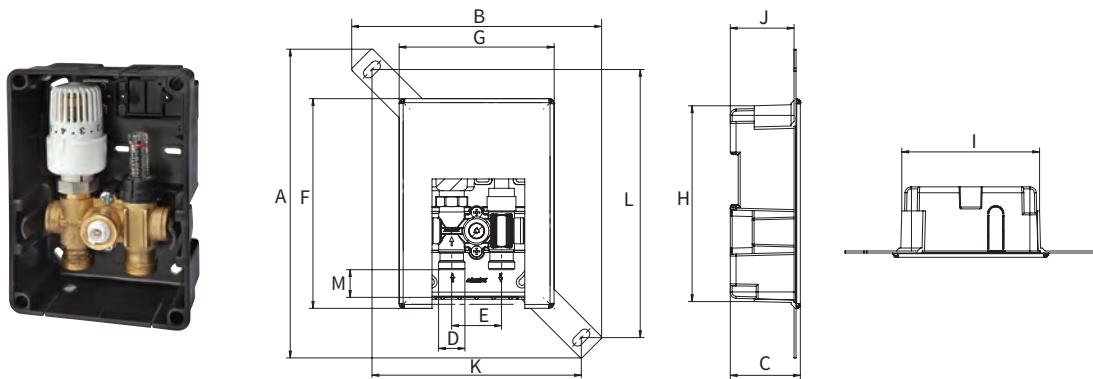
- Fill and drain valve


EXCLUSIV version additional with:

- Topmeter for flow indication and regulation
- Safety temperature switch

- Components made of brass and plastic
- Sealing materials: EPDM
- Max. primary operating temp.: 80 °C permanent temp., 95 °C short-term (the max. permissible supply flow temp. of the surface heating must be respected)
- Max. operating pressure: 6 bar

RTL-I Regulation Box with Internal Thermostatic Valve



Type	Connection D (ET)	Wall Covering		Article no.
RB RTL-I STANDARD	G 3/4" M	plastic, white*	1	F11831
RB RTL-I EXCLUSIV	G 3/4" M	plastic, white*	1	F11832

* similar to RAL 9016



Dimensions

Type	Dimensions [mm]											
	A	B	C	E	F	G	H*	I*	J	K	L	M
RB RTL-I STANDARD	310	250.5	70.3	50	210.5	155.5	197	138	64	210	270	27
RB RTL-I EXCLUSIV	310	250.5	70.3	50	210.5	155.5	197	138	64	210	270	27

* Wall box

RTL-A REGULATION BOXES

Regulation box for **return flow temperature-dependent regulation** of surface heating systems.
Basic features:

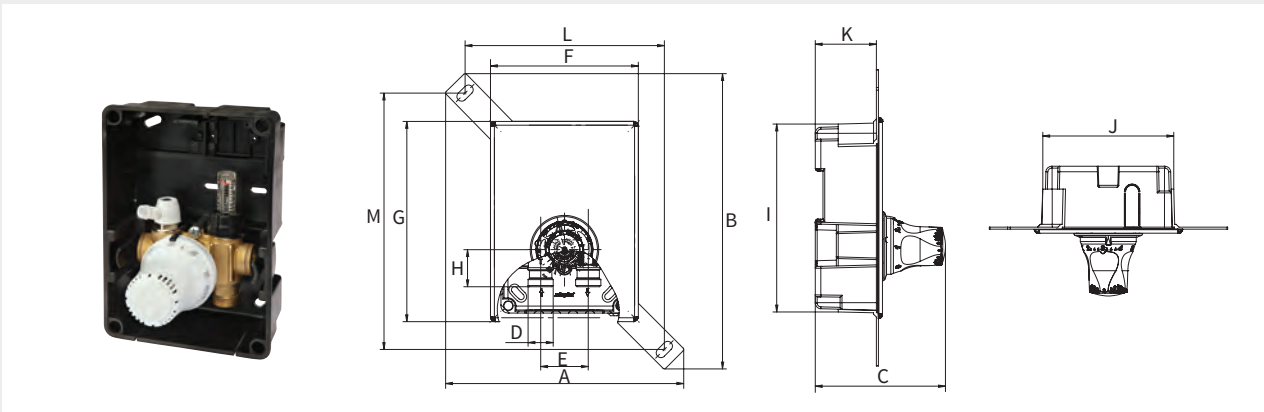
- Wall installation box with pre-mounted valve manifold with vent
- Valve module connection with G 3/4" M Euro taper for connection with compression adapters on the pipe side
- External RTL head
- Fill and drain valve
- Protective cap in EPS
- White plastic wall cover (similar to RAL 9016)
- Fixing brackets for depth adjustment of the wall box
- Prepared for flexible installation in stud walls (installation set F11863)




EXCLUSIV version additional with:

- Topmeter for flow indication and regulation
- Safety temperature switch
- Components made of brass and plastic
- Sealing materials: EPDM
- Max. primary operating temp.: 80 °C permanent temp., 95 °C short-term (the max. permissible supply flow temp. of the surface heating must be respected)
- Max. operating pressure: 6 bar

RTL-A Regulation Box with External Thermostatic Valve



Type	Connection D (ET)	Wall Covering		Article no.
RB RTL-A STANDARD	G 3/4" M	plastic, white*	1	F11828
RB RTL-A EXCLUSIV	G 3/4" M	plastic, white*	1	F11829

* similar to RAL 9016



Dimensions

Type	Dimensions [mm]											
	A	B	C	E	F	G	H	I*	J*	K	L	M
RB RTL-A STANDARD	250.5	310	136	50	155.5	210.5	39	197	137.5	64	210	270
RB RTL-A EXCLUSIV	250.5	310	136	50	155.5	210.5	39	197	137.5	64	210	270

* Wall box

TH REGULATION BOXES

Regulation box for **room temperature-dependent regulation** of surface heating systems.

Basic features:

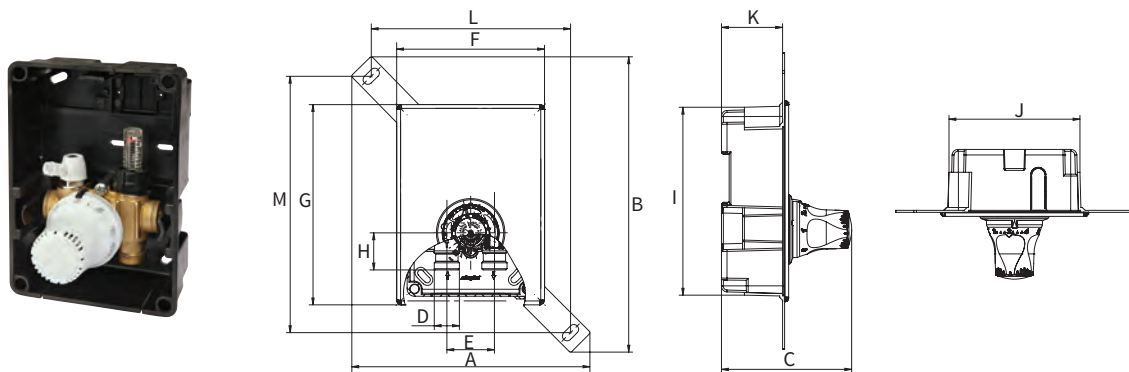
- Wall installation box with pre-mounted valve manifold with vent
- Valve module connection with G 3/4" M Euro taper for connection with compression adapters on the pipe side
- External thermostatic head
- Fill and drain valve
- Protective cap in EPS
- White plastic wall cover (similar to RAL 9016)
- Fixing brackets for depth adjustment of the wall box
- Prepared for flexible installation in stud walls (installation set F11863)




EXCLUSIV version additional with:

- Topmeter for flow indication and regulation
- Components made of brass and plastic
- Sealing materials: EPDM
- Max. primary operating temp.: 80 °C permanent temp., 95 °C short-term (the max. permissible supply flow temp. of the surface heating must be respected)
- Max. operating pressure: 6 bar

TH Regulation Box with External Thermostatic Valve



Type	Connection D (ET)	Wall Covering		Article no.
RB TH STANDARD	G 3/4" M	plastic, white*	1	F11848
RB TH EXCLUSIV	G 3/4" M	plastic, white*	1	F11849

* similar to RAL 9016



Dimensions

Type	Dimensions [mm]											
	A	B	C	E	F	G	H	I*	J*	K	L	M
RB TH STANDARD	250.5	310	136	50	155.5	210.5	39	197	137.5	64	210	270
RB TH EXCLUSIV	250.5	310	136	50	155.5	210.5	39	197	137.5	64	210	270

* Wall box


REGULATION BOX ACCESSORIES

Installation Set



Set for installing Simplex regulation boxes in panel walls.

- Components made of galvanised steel


Type	Profile Center Distance [mm]		Article no.
Installation Set RB	max. 625	1	F11863

Valve Extension for RTL-A Regulation Box



Valve extension for Simplex regulation boxes F11828 and F11829.

- Components made of brass


Type	Dimension [mm]		Article no.
Valve Extension RB - RTL	17	1 / 10	F11844

Valve Extension for TH Regulation Box



Valve extension for Simplex TH regulation boxes.

- Components made of brass


Type	Dimension [mm]		Article no.
Valve Extension RB - TH	13	1 / 10	F11872

Design Cover, Glass



Cover for cladding Simplex regulation boxes with closed cover and internal head, polished safety glass, white ceramic print, with mounting bands.

- Components made of safety glass

Type	Version		Article no.
Cover Glass - oval	oval	1 / 10	F11819
Cover Glass - square	square	1 / 10	F11820

Design Cover, High-gloss Chrome-plated



Cover for cladding Simplex regulation boxes with closed cover and internal head, high-gloss chrome-plated, with mounting bands for cladding.

- Components made of plastic

Type	Version		Article no.
Cover Plastic	chrome	1 / 10	F11821

Universal Cover for Wall Coverings



Cover for cladding Simplex regulation boxes with closed cover and internal head, consisting of base frame with magnetic bracket and galvanised cover, general purpose.

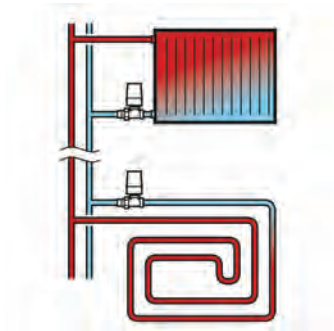
- Components made of plastic and galvanised steel

Type	Version		Article no.
Universal Cover	zink-plated	1 / 10	F11822

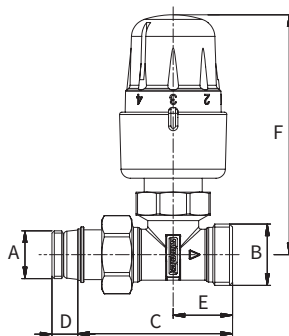
RTL VALVES


Return flow temperature limiter for the regulation of radiators or surface heating systems, self-sealing with special thread seal.

- Components made of nickel-plated brass, RTL head made of plastic
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



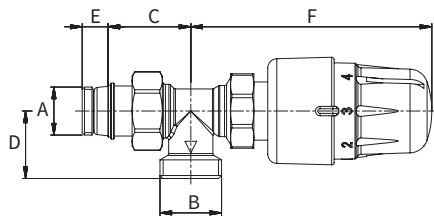
RTL Valve Type D/AG




Type	Version	Connection		Dimensions [mm]					Article no.
		A	B (ET)	C	D	E	F		
RTL-V D	straight	G 1/2" M	G 3/4" M	67	11	26	104	2	F11882



RTL Valve Type E/AG

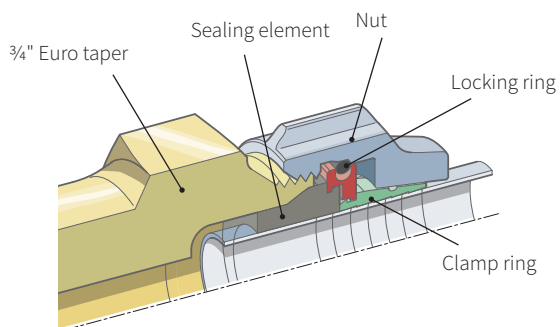
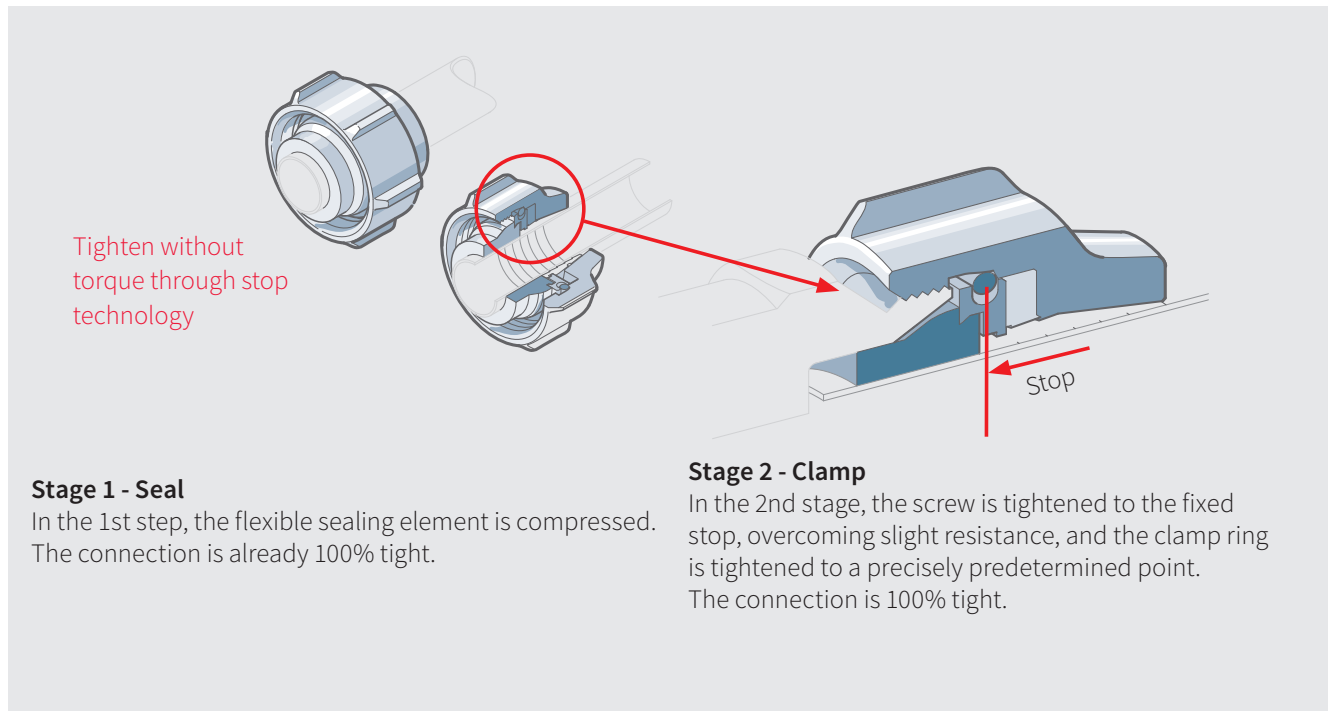


Type	Version	Connection		Dimensions [mm]					Article no.
		A	B (ET)	C	D	E	F		
RTL-V E	angle	G 1/2" M	G 3/4" M	36	29	11	104	2	F11883

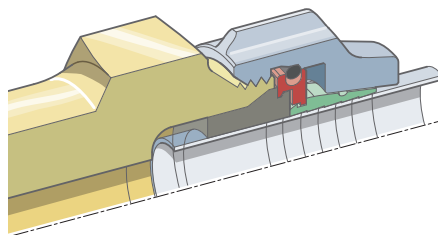


COMPRESSION ADAPTERS

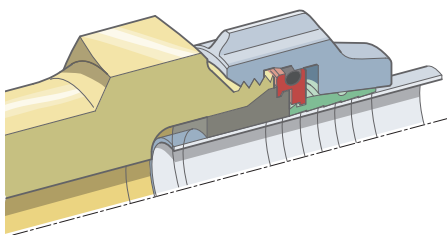
A11 Compression Adapters - Innovative 2-stage Technology



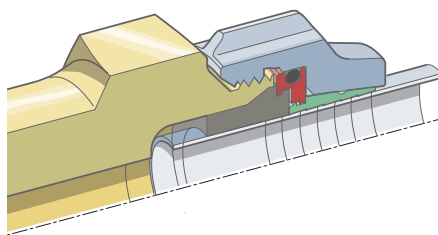
Starting condition



Stage 1: Seal



Stage 2: Clamp



Clamped state:
the nut is tightened to the stop

COMPRESSION ADAPTERS

A11 Compression Adapter Set

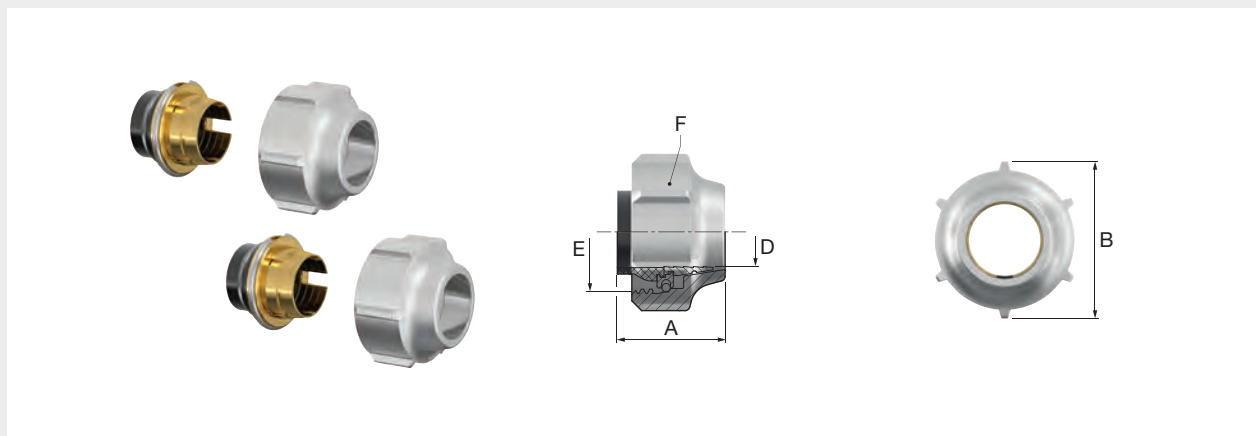
2 pcs. compression adapters for use in heating systems, for blank, nickel- and chrome-plated copper pipes, carbon steel pipes and stainless steel pipes, suitable for G $\frac{3}{4}$ " M Euro taper, elastic seal, extended clamp rings for high pull forces, no support sleeves required, ribbed nut (wrench size 30 mm), with fixed stop, 2-step function: sealing - clamping.


- High pulling forces specifically with hard pipe surfaces
- No torque specifications
- Gentle pipe connection without deformation of the connecting pipe
- Detachable connection
- Permanent seal thanks to uniquely developed raw material formula for sealing element
- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

Appropriate pipes

- Copper pipes (blank, nickel-plated, chromed*) according to DIN EN 1057 (soft, semi-hard, hard)
- Carbon steel pipes (blank, galvanised) according to DIN EN 10305
- Stainless steel pipes according to DIN EN 10312

* Limitations for chrome-plated copper pipes: Dimension 14-18 mm for semi-hard and hard copper pipes



Type	Connection		Dimensions			 [Set]	Article no.
	E (ET)	D [mm]	A* [mm]	B [mm]	F (WS) [mm]		
KV A11 - 12 x 1	G $\frac{3}{4}$ " F	12 x 1	23	34	30	20	F11171
KV A11 - 14 x 1	G $\frac{3}{4}$ " F	14 x 1	23	34	30	20	F11172
KV A11 - 15 x 1	G $\frac{3}{4}$ " F	15 x 1	23	34	30	50	F11170
KV A11 - 16 x 1	G $\frac{3}{4}$ " F	16 x 1	23	34	30	20	F11173
KV A11 - 18 x 1	G $\frac{3}{4}$ " F	18 x 1	20	34	30	20	F11174

* Minimum insertion length
F11174 with fixed stop, without 2-step function



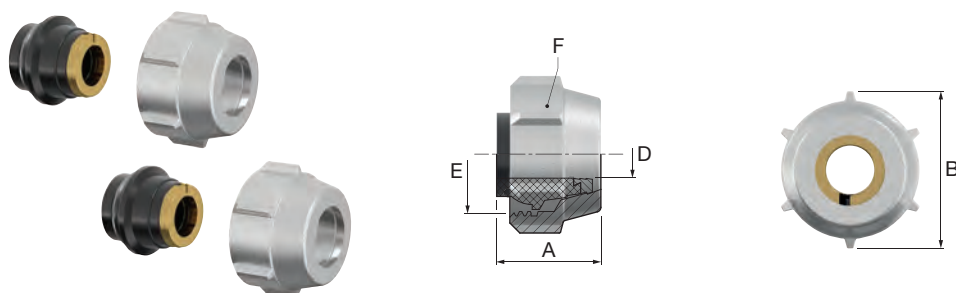
A1 Compression Adapter Set


2 pcs. compression adapters for use in heating systems, for blank copper pipes and carbon steel pipes, suitable for G 3/4" M Euro taper, elastic seal, no support sleeves required, ribbed nut (wrench size 30 mm), recommended tightening torque: 40 Nm.

- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

Appropriate pipes

- Copper pipes (blank) according to DIN EN 1057 (soft, semi-hard, hard)
 - Carbon steel pipes (blank, galvanised) according to DIN EN 10305
- Nickel-plated and chrome-plated copper pipes are not suitable!



Type	Connection		Dimensions			 [Set]	Article no.
	E (ET)	D [mm]	A [mm]	B [mm]	F (WS) [mm]		
KV A1 - 10 x 1	G 3/4" F	10 x 1	22.3	34	30	20	F11187



A3 Compression Adapter Set

2 pcs. compression adapters for use in heating systems, for plastic and multilayer composite pipes, suitable for G $\frac{3}{4}$ " M Euro taper, consisting of ribbed nut (wrench size 30 mm), plastic clamp ring and sleeve, O-ring seal on the sleeve, with fixed stop.

- Components made of nickel-plated brass
- Sealing materials: EPDM
- Pressure or temperature stress according to pipe manufacturer specifications

→ **Calibration arbor see Tools!**

Appropriate pipes

The Simplex Armaturen & Systeme GmbH has no access to technical modifications by the pipe manufacturer and therefore reserves the right make adjustments and technical amendments to the compression adapters.

For material specifications please refer to the relevant pipe manufacturer's specifications. Pipes which meet the following technical requirements are generally suitable.

DIN 16833/16834 - Pipes made of Polyethylene with raised temperature resistance (PE-RT) - general quality requirements and testing, dimensions

DIN 16892 - Pipes of cross-linked high density Polyethylene (PE-X) - general quality requirements and testing

DIN 16893 - Pipes of cross-linked high density Polyethylene (PE-X) - dimensions

DIN 16894 - Pipes of cross-linked medium density Polyethylene (PE-MDX) - general quality requirements and testing

DIN EN ISO 15875 - Plastic piping systems for cold and hot water systems - cross-linked Polyethylene (PE-X)

DIN EN ISO 15874 - Plastic piping systems for cold and hot water systems - Polypropylene (PP)

DIN EN ISO 15876 - Plastic piping systems for cold and hot water systems - Polybutylene (PB)

DIN EN ISO 15877 - Plastic piping systems for cold and hot water systems - Chlorinated Polyvinyl Chloride (CPVC)

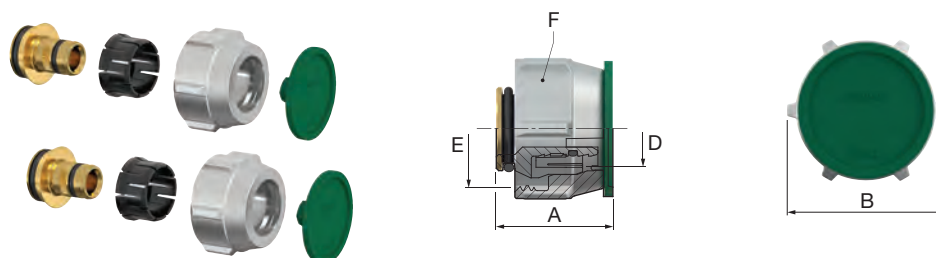
DIN 16836 - Multilayer composite pipes - Polyolefin-aluminum composite pipes


DIN 16837 - Multilayer composite pipes - Multilayer plastic composite pipes

DIN EN ISO 21003-2 - Multilayer piping systems for hot and cold water systems inside of buildings - Part 2: Pipes (ISO 21003-2:2008);

German version EN ISO 21003-2:2008

Version 2011 - Changes, mistakes and additions reserved



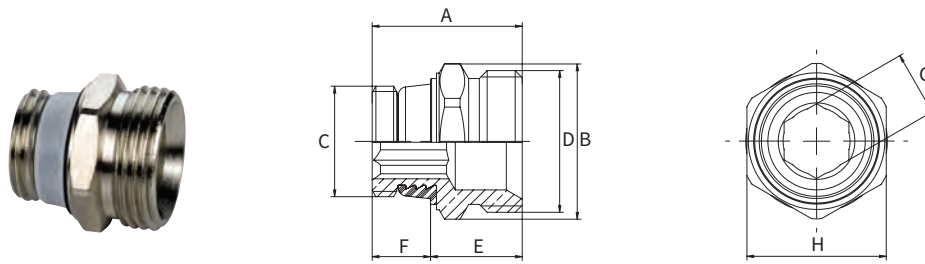
Type	Connection		Dimensions			 [Set]	Article no.
	E (ET)	D [mm]	A [mm]	B [mm]	F (WS) [mm]		
KV A3 - 12 x 2.0	G $\frac{3}{4}$ " F	12 x 2.0	24.5	34	30	20	F11401
KV A3 - 14 x 2.0	G $\frac{3}{4}$ " F	14 x 2.0	24.5	34	30	20	F11404
KV A3 - 16 x 1.5	G $\frac{3}{4}$ " F	16 x 1.5	24.5	34	30	20	F11415
KV A3 - 16 x 2.0	G $\frac{3}{4}$ " F	16 x 2.0	25.0	34	30	50	F11405
KV A3 - 16 x 2.2	G $\frac{3}{4}$ " F	16 x 2.2	24.5	34	30	20	F11412
KV A3 - 17 x 2.0	G $\frac{3}{4}$ " F	17 x 2.0	24.5	34	30	50	F11407
KV A3 - 17 x 2.5	G $\frac{3}{4}$ " F	17 x 2.5	24.5	34	30	20	F11414
KV A3 - 18 x 2.0	G $\frac{3}{4}$ " F	18 x 2.0	24.5	34	30	20	F11408
KV A3 - 18 x 2.5	G $\frac{3}{4}$ " F	18 x 2.5	24.5	34	30	20	F11409
KV A3 - 20 x 2.0	G $\frac{3}{4}$ " F	20 x 2.0	24.5	34	30	20	F11410
KV A3 - 20 x 2.25	G $\frac{3}{4}$ " F	20 x 2.25	24.5	34	30	20	F11418
KV A3 - 20 x 2.5	G $\frac{3}{4}$ " F	20 x 2.5	24.5	34	30	20	F11416
KV A3 - 20 x 2.8	G $\frac{3}{4}$ " F	20 x 2.8	24.5	34	30	20	F11417



Connection Nipple with Euro Taper for Radiators with Integrated Valve

Connection nipple self-sealing with special thread seal.

- Components made of brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



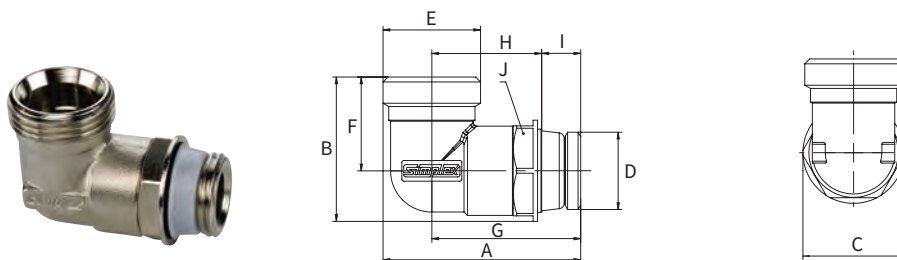
Type	Version	Connection		Dimensions [mm]							Article no.
		C	D (ET)	A	B	E	F	G (WS)	H (WS)		
Connection Nipple ET - bl.	blank	G 1/2" M	G 3/4" M	28	29	17	11	12	26	25/200	F10389
Connection Nipple ET - Ni	nickel-plated	G 1/2" M	G 3/4" M	28	29	17	11	12	26	25/200	F10390



Angle Connection with Euro Taper

Angle connection for use in heating systems, self-sealing with special thread seal, with connection for compression adapters.

- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



Type	Version	Connection		Article no.
		D	E (ET)	
Angle Connection ET - Ni	nickel-plated	G 1/2" M	G 3/4" M	F10368



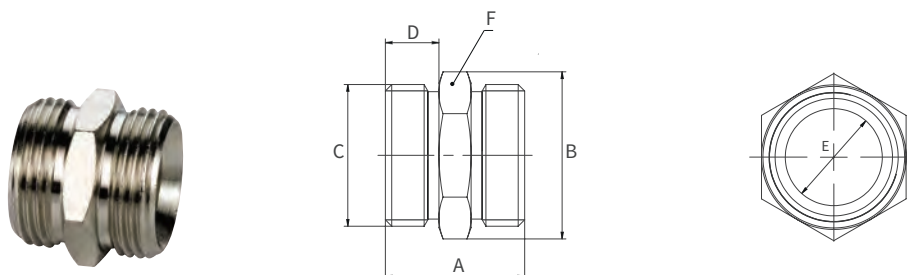
Dimensions


Type	Dimensions [mm]							
	A	B	C	F	G	H	I	J (WS)
Angle Connection ET Ni	53	38.5	27	25	39.7	29.3	10.4	24

Coupling Nipple with Euro Taper

Coupling nipple for use in heating systems.

- Components made of brass
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



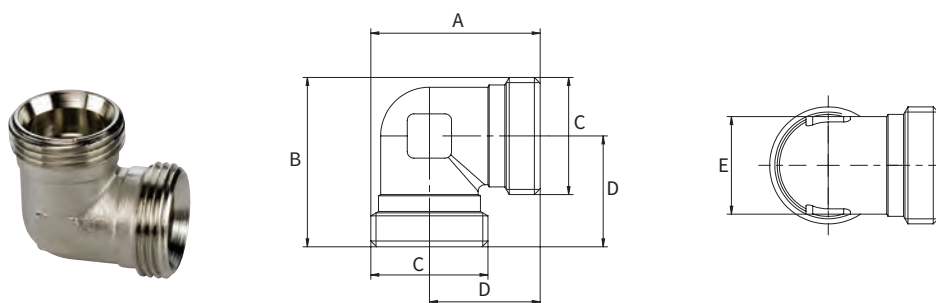
Type	Version	Connection C (ET)	Dimensions [mm]						Article no.
			A	B	D	E (Ø)	F (WS)		
Coupling Nipple ET - Ni	nickel-plated	G 3/4" M	26	31	10	18.1	27	25/200	F10393




Angle Coupling with Euro Taper

Angle coupling for use in heating systems.

- Components made of nickel-plated brass
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



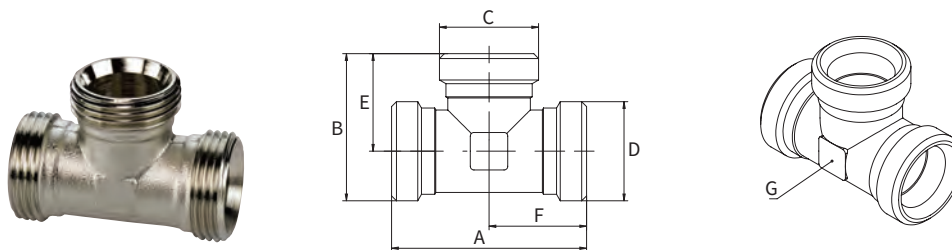
Type	Version	Connection C (ET)	Dimensions [mm]					Article no.
			A	B	D	E (WS)		
Angle Coupling ET - Ni	nickel-plated	G 3/4" M	38.2	38.2	25	22	10/100	F10387




T-Piece with Euro Taper

T-piece for use in heating systems.

- Components made of nickel-plated brass
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



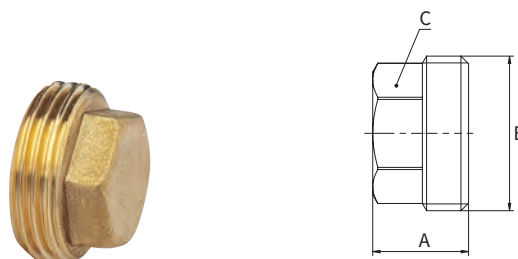
Type	Version	Connection		Dimensions [mm]						Article no.
		C (ET)	D (ET)	A	B	E	F	G (WS)		
T-Piece ET - Ni	nickel-plated	G 3/4" M	G 3/4" M	52	39.5	26	26	22	10/100	F10388




Blind Plug with Euro Taper

Blind plug for use in heating systems.

- Components made of brass
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



Type	Version	Connection B (ET)	Dimensions [mm]			Article no.
			A	C (WS)		
Blind Plug ET - bl.	blank	G 3/4" M	16.4	21	10	F10706



STEEL PIPE ADAPTERS PLUS



Easy to install and can be used in narrow spaces



No welding



No thread cutting



Application in heating installations with DIN steel pipe

How often is it that "old" radiators don't generate enough heat after a boiler replacement due to the lower system temperatures.

A new radiator is needed, but do the connections fit?

The Simplex steel pipe adapter range makes replacing radiators simple, even in the smallest spaces.

The steel pipe adapter can also be connected directly to the connection valves or used as a transition to other pipes.

Installation is very simple: The existing pipe is cut to size and the paint removed, then the pipe end cleaned to the bare metal. Attach the adapter, tighten the clamp fitting - finished. In this way building site welding equipment is not required for modernization of inhabited rooms.

The advantages at a glance

- For heating and potable water* with DVGW approval (registration number DW-8511CR0167)
- Highly stress-resistant thanks to Simplex compression adapter technology
- Can be used in niches - saves space
- Easy to install
- No thread cutting, no welding
- Detachable system
- Reusable

**DVGW (German Technical and Scientific Association for Gas and Water) certification as a brass clamp connector for galvanised steel pipes in accordance with DIN EN 10255 and DIN EN 10240 for use with cold water*

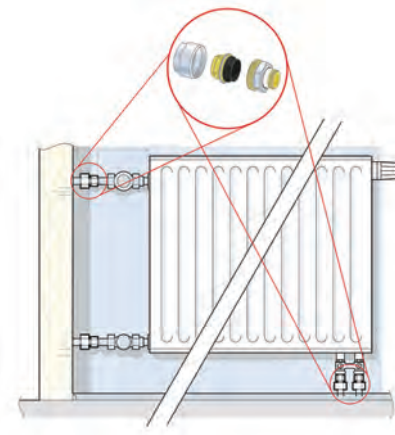


Application in potable water installations with galvanised DIN steel pipe

STEEL PIPE ADAPTERS

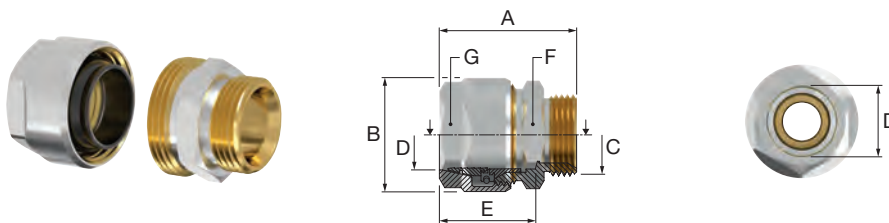
Friction-fit compact compression adapter for steel pipes in accordance with DIN EN 10255, for use in heating systems and potable water systems.


- Components made of nickel-plated brass, parts that come in contact with potable water are self finish brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar
- Highly stress-resistant thanks to proven compression adapter technology
- Easy to install
- Can be used in narrow spaces
- Removable system
- Reusable



Steel Pipe Adapter PLUS with Euro Taper

Screw connection with Euro taper.

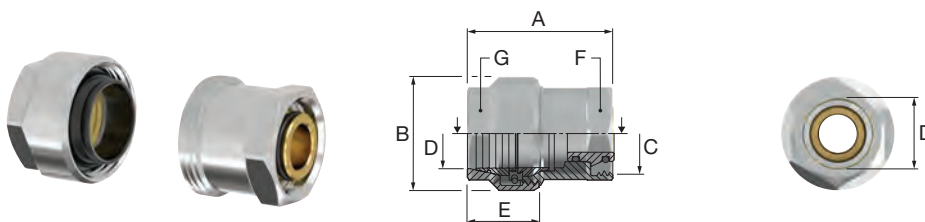



Type	Connection		Dimensions [mm]						Article no.
	C (ET)	D (for pipe)	A	B	E	F (WS)	G (WS)		
SRA - 3/4 ET x 1/2	G 3/4" M	1/2"	45	36.5	30.2	30	30	10	F13063



Steel Pipe Adapter PLUS for Euro Taper

Screw connection for Euro taper.

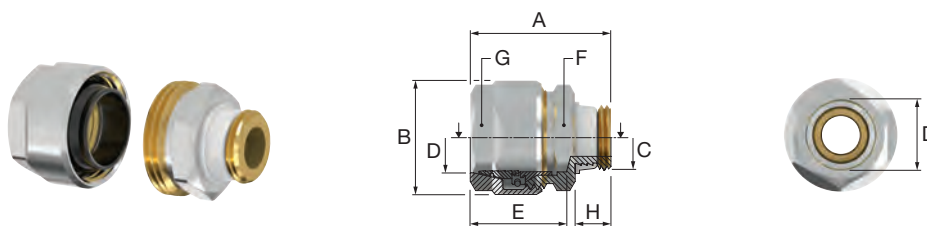



Type	Connection		Dimensions [mm]						Article no.
	C (ET)	D (for pipe)	A	B (Ø)	E	F (Ø)	G (WS)		
SRA - for 3/4 ET x 3/8	G 3/4" F	3/8"	48.7	27	31.1	34	24	10	F13064
SRA - for 3/4 ET x 1/2	G 3/4" F	1/2"	47.0	34	30.9	34	30	10	F13065



Steel Pipe Adapter PLUS with Male Thread

Screw connection with male thread, self-sealing with special thread seal.

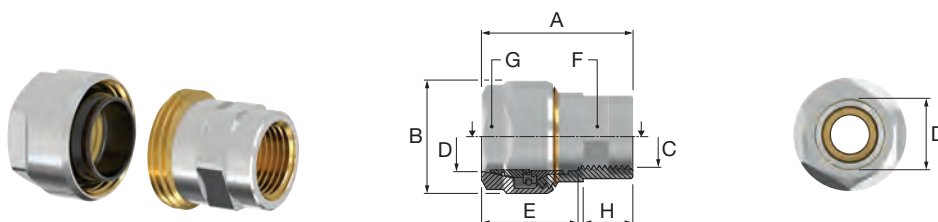



Type	Connection		Dimensions [mm]							Article no.
	C	D (for pipe)	A	B	E	F (WS)	G (WS)	H		
SRA AG - 1/2 x 3/8	G 1/2" M	3/8"	48	32	30	32	24	11.5	10	F13077
SRA AG - 1/2 x 1/2	G 1/2" M	1/2"	48	37	31	30	30	11.5	10	F13078
SRA AG - 3/4 x 3/4	G 3/4" M	3/4"	48	44	33	41	36	13.0	10	F13080
SRA AG - 1 x 1	G 1" M	1"	55	53	35	46	46	14.0	10	F13081
SRA AG - 1 1/4 x 1 1/4	G 1 1/4" M	1 1/4"	57	65	36	55	55	15.0	10	F13082



Steel Pipe Adapter PLUS with Female Thread

Screw connection with female thread.



Type	Connection		Dimensions [mm]							Article no.
	C	D (for pipe)	A	B	E	F (WS)	G (WS)	H		
SRA IG - 1/2 x 3/8	G 1/2" F	3/8"	52	32.0	34	27	24	13.6	10	F13090
SRA IG - 1/2 x 1/2	G 1/2" F	1/2"	49	36.5	31	27	30	13.6	10	F13091
SRA IG - 3/4 x 3/4	G 3/4" F	3/4"	53	43.5	31	36	36	14.6	10	F13092
SRA IG - 1 x 1	G 1" F	1"	52	53.0	30	46	46	17.0	10	F13093
SRA IG - 1 1/4 x 1 1/4	G 1 1/4" F	1 1/4"	57	65.0	33	55	55	19.8	10	F13094



REFURBISHMENT SYSTEMS FOR MONO-TUBE HEATING SYSTEMS

Meibes offers custom-made Rossweiner solutions for converting vertical mono-tube heating systems in municipal housing and Forst single-storey heating systems, and which are suitable for new radiators and retrofitting on old heating surfaces.

The use of heat-stop elbows and socket threaded unions with spiral reduces heating of the heating surfaces caused by the system, and therefore reducing heating costs.

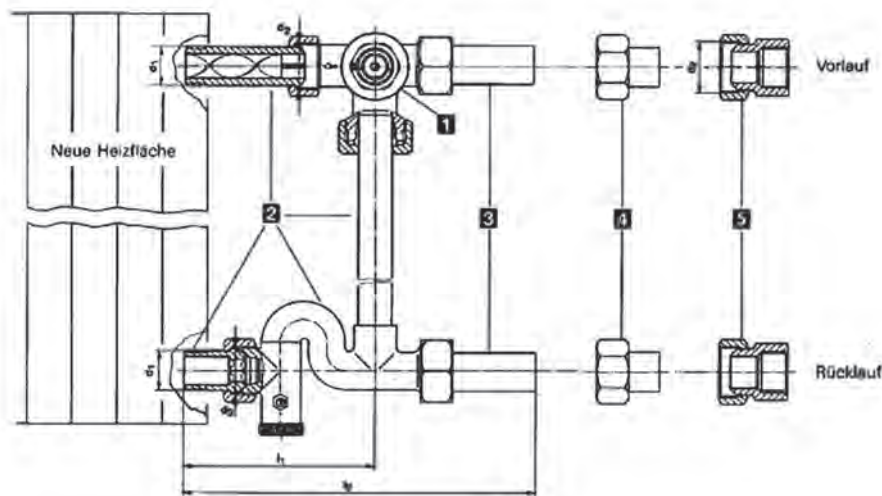
The range includes pre-assembled short end sections, i.e. bypass T-piece, heat-stop elbow and bypass pipe form a rigidly connected unit; metallic or flat sealing and thermostatic valve bodies for vertical mono-tube heating with pre-adjustment (white protection cap) or without pre-adjustment (black protection cap). Pre-adjustment is optional via the valve or the heat-stop elbow (can be shut off and drained). Application of thermostatic heads with M 33 x 2 connections.

Advantages for you

- Dimensions analogous to TGL
- Valves with pre-adjustment for hydraulic balancing
- Minimal spacial requirements
- Quick and easy installation
- High technical reliability

Bypass assembly for converting and re-installing vertical mono-tube heating systems, metallic sealing

- Model: Nickel-plated hot-pressed brass
- Permissible operating pressure: PB 10 bar
- Permissible Operating temperature: TB 120 °C
- Flow medium: Heating water



Nominal width	L1	L2	d1 DIN 2999	d2	d3
DN 15	96.5	178.0	R 1/2"	G 3/4"	G 3/4"
DN 20	99.0	186.5	R 1/2"	G 1"	G 3/4"

Please note! When using old radiators, the old sockets must be removed from the heating surface!

Three-way thermostat valve bodies, type 753.1M / 753.2M [1]



For Ball-socket seal connection without screw fittings with clamping connection on the bypass with pre-adjustment.



Type	Nominal width	Model		Order Code
Three-way 753.1M right DN15	DN 15	Right	30	M1237421
Three-way 753.1M right DN20	DN 20	Right	20	M1237461
Three-way 753.2M left DN15	DN 15	Left	30	M1237431
Three-way 753.2M left DN20	DN 20	Left	20	M1237471

Figure illustrates right-hand valve

Bypass assembly, type 743 m [2]


Without valve



Type	Nominal width	Max. boss spacing for the radiator [mm]		Order Code
Assembly 743 m DN15 - 600	DN 15	600	5	M1237401
Assembly 743 m DN20 - 600	DN 20	600	5	M1237411
Assembly 743 m DN15 - 900	DN 15	900	5	M1237601
Assembly 743 m DN20 - 900	DN 20	900	5	M1237621
Assembly 743 m DN20 - 2000	DN 20	2000	5	M1237631

Screw fitting with welded socket [3]




Type	Nominal width		Order Code
Threaded joint welded DN10	DN 10*	10	M1391461
Threaded joint welded DN15	DN 15	10	M1391391
Threaded joint welded DN20	DN 20	10	M1391401

* Suitable for three-way thermostatic valve DN 15


Screw fitting with soldered socket [4]



Type	Dimension [mm]		Order Code
Threaded joint soldered 15mm	15	10	M1391571
Threaded joint soldered 18mm	18	10	M1391521
Threaded joint soldered 22mm	22	10	M1391681

Screw fitting with female-threaded socket [5]



Type	Nominal width		Order Code
Threaded joint female thread DN10	DN 10*	10	M1391471
Threaded joint female thread DN15	DN 15	10	M1391411
Threaded joint female thread DN20	DN 20	10	M1391421

* Suitable for three-way thermostatic valve DN 15

Socket connector set



Can be used as compensation fitting with spiral for complete short end section (Ball-socket seal), for preventing the radiator from re-heating despite shut-off fitting.

Type	Nominal width	Model		Order Code
Socket connection DN15	DN 15	One-piece	10	M1391351
Socket connection DN20	DN 20	Two-piece	5	M1391361

Please order components individually!

Example of an order for a complete short end section, DN 15 with threaded joints with welded socket and three-way thermostatic valve body with preadjustment with left-hand connection:

Article	Model	Quantity	Order number
Thermostatic head	M 33 × 2 with 0-position	1	1356400
Three-way thermostatic valve body	Nr. 753.2M	1	1237431
Bypass assembly	Nr. 743 m	1	1237401
Screw fittings	With welded sockets	2	1391391

Please note: Two screw fittings are required per short end section!

Bypass assembly for converting and re-installing vertical mono-tube heating systems, flat sealing

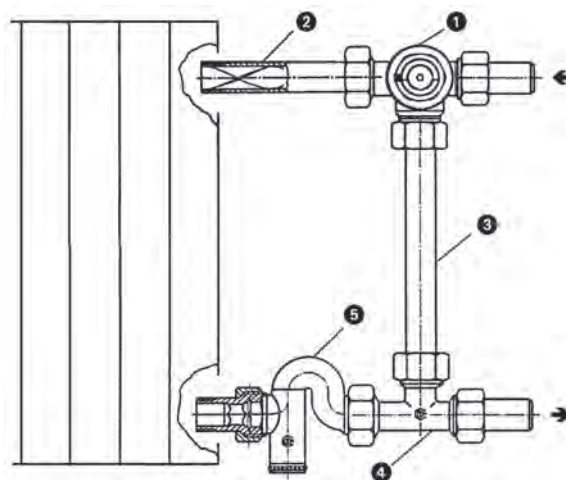
- Model: Nickel-plated hot-pressed brass
- Permissible operating pressure: PB 10 bar
- Permissible Operating temperature: TB 120 °C
- Flow medium: Heating water

Variant 1 - Short end section with compensation fitting with spiral in the flow line and heat-stop elbow in the return line

Application: Using new heating surfaces

Advantage: good visual appearance, fewer sealing points

Please note! The old, upper socket must be removed from the heating surface when using old radiators. Displacement of radiator with DN 15: 62 mm, with DN 20: 67 mm

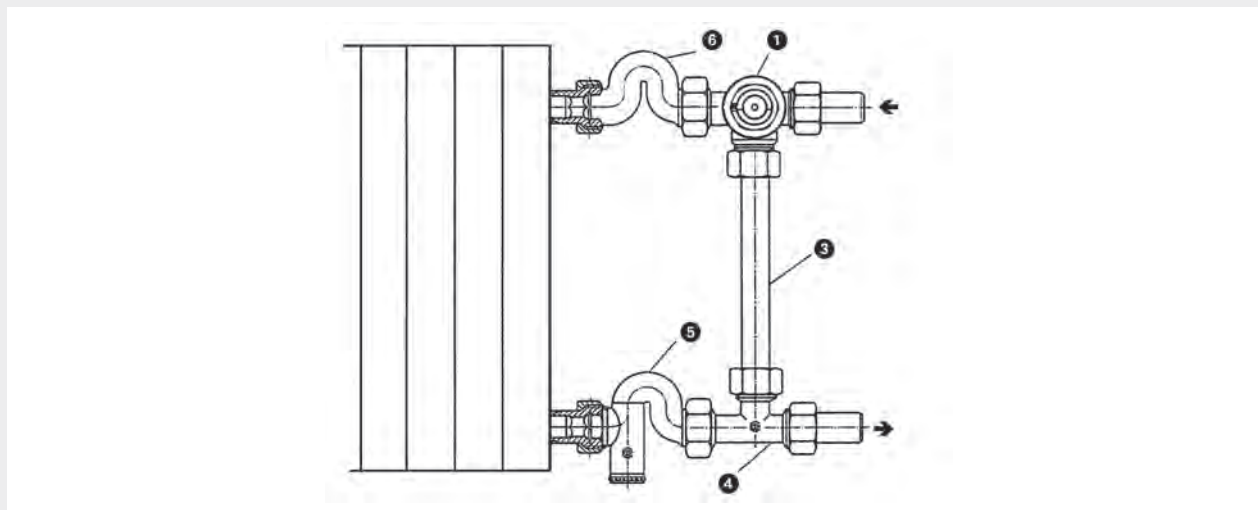


Variant 2 - Short end section with complete connection socket fitting in the flow line and heat-stop elbow in the return line

Application: Using old heating surfaces

Advantage: old sockets can remain in the radiator, solution with the best technical effect

Please note! Displacement of radiator with DN 15: 62 mm, with DN 20: 67 mm

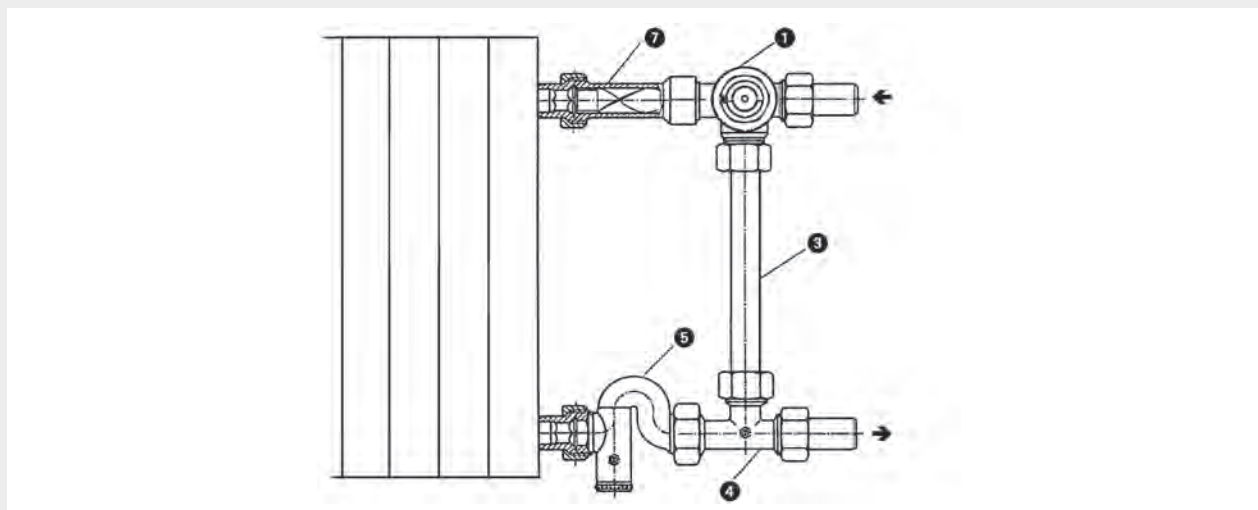


Variant 3 - Short end section with transition piece with spiral in the flow line and heat-stop elbow in the return line

Application: Using old heating surfaces

Advantage: old sockets can remain in the radiator

Please note! Displacement of radiator with DN 15: 62 mm, variant 3 for DN 15 only



Three-way thermostat valve bodies, type 753.1K / 753.2K [1]

For flat sealing connection, with screw fittings (male-threaded socket, welded socket, cutting ring), with pre-adjustment.





Type	Nominal width	Model		Order Code
Three-way 753.1K right DN15	DN 15	Right	20	M1234601
Three-way 753.1K right DN20	DN 20	Right	15	M1234661
Three-way 753.2K left DN15	DN 15	Left	20	M1234611
Three-way 753.2K left DN20	DN 20	Left	15	M1234671

Figure illustrates right-hand valve

Compensation fitting with spiral [2]




For use with new heating surfaces, for preventing the radiator from re-heating despite shut-off fitting.

Type	Nominal width		Order Code
Compensation fitting Spiral DN15	DN 15	20	M1391331
Compensation fitting Spiral DN20	DN 20	15	M1391341

Connection socket, type 740 [6]




For use as a heat-stop elbow in mono-tube heating systems, for preventing the radiator from re-heating despite shut-off fitting.

Type	Nominal width		Order Code
Connection socket 740 DN15	DN 15	20	M1390351
Connection socket 740 DN20	DN 20	15	M1390361

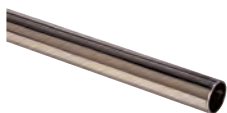
Transition piece with spiral [7]



For converting - old sockets can remain in the radiator, for preventing the radiator from re-heating despite shut-off fitting.

Type	Nominal width		Order Code
Transition piece Spiral DN15	DN 15	20	M1351931

Precision pipe [3]



DIN 2391, 570 mm in length for use as a bypass pipe for three-way thermostatic valves.

Type	Nominal width	Diameter [mm]		Order Code
Precision piece DN15-570	DN 15	18	20	M1351231
Precision piece DN20-570	DN 20	22	15	M1351251

Bypass T-piece, type 781 [4]




With screw fittings (male-threaded socket, welded socket, cutting ring).

Type	Nominal width	Bypass (Ø) [mm]		Order Code
Bypass T-piece 781 DN15	DN 15	18	20	M1232211
Bypass T-piece 781 DN20	DN 20	22	20	M1232231

Heat-stop elbow, type 741 [5]



Lockable, drainable, pre-adjustable in mono-tube heating systems, for preventing the radiator from re-heating despite shut-off fitting.

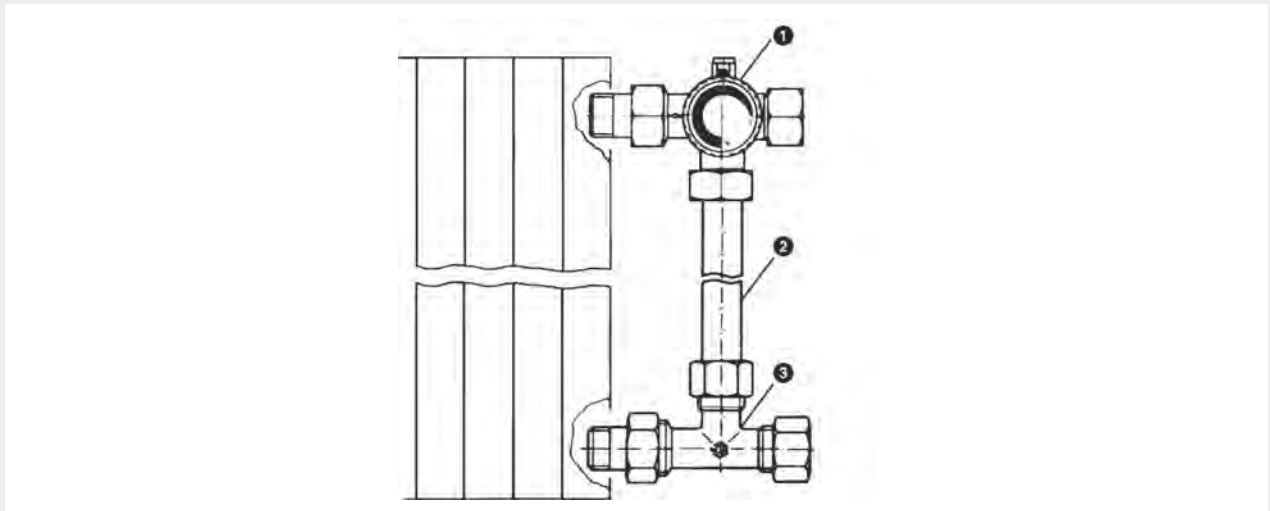
Type	Nominal width		Order Code
Heat-stop elbow 741 DN15	DN 15	20	M1234181
Heat-stop elbow 741 DN20	DN 20	15	M1234191

Bypass assembly for converting Forst single-storey heating

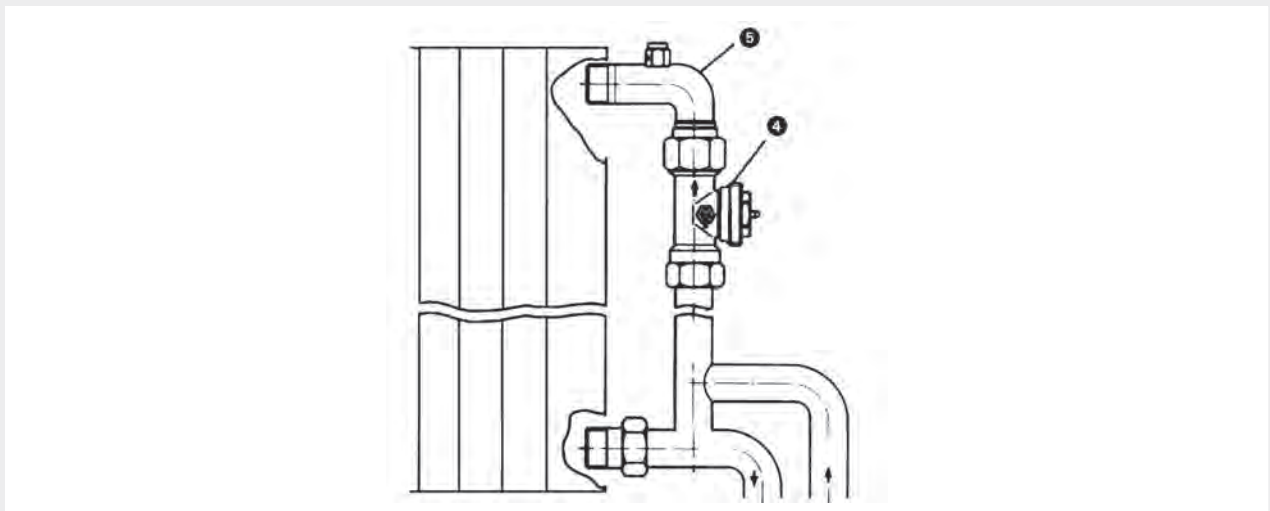
- Model: Nickel-plated hot-pressed brass
- Permissible operating pressure: PB 10 bar
- Permissible Operating temperature: TB 120 °C
- Flow medium: Heating water

When converting heating systems (manufactured by TGA Forst) from manual controller to thermostatic controller, three-way thermostatic valves with bleed valves or straight thermostatic valves with connection elbows that enable bleeding are used as not all radiators feature a bleeding device.

Variant 1



Variant 2



Three-way thermostat valve body, type 752.6K / 752.7K [1]



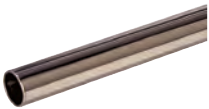
For flat sealing connection with screw fittings (male-threaded socket, cutting ring), with bleed valve, for Forst heating systems, without pre-adjustment.

- For suitable thermostatic heads with M 33 × 2 connection thread, see thermostatic control elements.

Type	Nominal width	Model		Order Code
Three-way 752.6K right DN15	DN 15	Right	20	M1237141
Three-way 752.7K left DN 15	DN 15	Left	20	M1237151

Figure illustrates right-hand valve


Precision pipe Ø 15 mm [2]



Type	Nominal width	Length [mm]		Order Code
Precision pipe DN15-600	DN 15	600	30	M1351241
Precision pipe DN15-1100	DN 15	1100	30	M1351261

Bypass T-piece with screw fitting , type 780 [3]




Type	Nominal width		Order Code
Bypass T-piece 780 DN15	DN 15	20	M1232201

Thermostat valve body without screw fittings [4]




Straight pattern with pre-adjustment EN 215-D.

- For suitable thermostatic heads with M 33 × 1.5 connection thread, see thermostatic control elements.

Type	Nominal width		Order Code
Thermostatic valve body without threaded joint	DN 15	20	M1238541

Connection elbow with bleed valve, complete [5]



Type	Nominal width		Order Code
Connection elbow bleed valve	DN 15	20	M1352141

Thermostat valve bodies for converting vertical mono-tube heating systems, flat sealing

- Model: Polished nickel-plated hot-pressed brass
- Permissible operating pressure: PB 10 bar
- Permissible Operating temperature: TB 120 °C
- Flow medium: Heating water

Three-way thermostat valve body, type 751.1 / 751.2

Without threaded joints, flat sealing with pre-adjustment.

- Refer to the spare-parts price list for associated series threaded connection fittings. For suitable thermostatic heads with M 33 x 2 connection thread, see thermostatic control elements.




Type	Nominal width	Model	Connection				Order Code
			Eingang	Ausgang zum Heizkörper	Bypass		
Three-way 751.1 right DN10	DN 10	Right	G 1/2"	G 3/4"	G 3/4"	30	M1235001
Three-way 751.1 right DN15	DN 15	Right	G 3/4"	G 3/4"	G 7/8"	30	M1234301
Three-way 751.1 right DN20	DN 20	Right	G 1"	G 1"	G 1 1/8"	20	M1234381
Three-way 751.2 left DN10	DN 10	Left	G 1/2"	G 3/4"	G 3/4"	30	M1235011
Three-way 751.2 left DN15	DN 15	Left	G 3/4"	G 3/4"	G 7/8"	30	M1234311
Three-way 751.2 left DN20	DN 20	Left	G 1"	G 1"	G 1 1/8"	20	M1234391

Figure illustrates right-hand valve

Thermostat valve bodies for converting Forst single-storey heating


- Model: Polished nickel-plated hot-pressed brass
- Permissible operating pressure: PB 10 bar
- Permissible Operating temperature: TB 120 °C
- Flow medium: Heating water

Three-way thermostat valve body, type 752.6 / 752.7

Without threaded joints (with bleed valve, for Forst heating systems).


- For suitable thermostatic heads with M 33 × 2 connection thread, see thermostatic control elements.



Type	Nominal width	Model	Connection				Order Code
			Ausgang	Eingang	Bypass		
Three-way 752.6 right DN15	DN 15	Right	G 3/4"	M 220 x 1.5	M 220 x 1.5	30	M1236121
Three-way 752.7 left DN15	DN 15	Left	G 3/4"	M 220 x 1.5	M 220 x 1.5	30	M1236131

Pre-adjustment key




Type	For three-way thermostatic valves		Order Code
Pre-adjustment key	Nr. 751, 753	1	M1351711

Disassembly device, type 767



For exchanging the cores of thermostatic valve bodies (type 711, 712, 713) with M 33 x 2 connection and three-way thermostatic valve bodies (type 751, 752, 753), at system operating pressure.

Type	Model		Order Code
Disassembly device 767		1	M1351450

H-MODULES

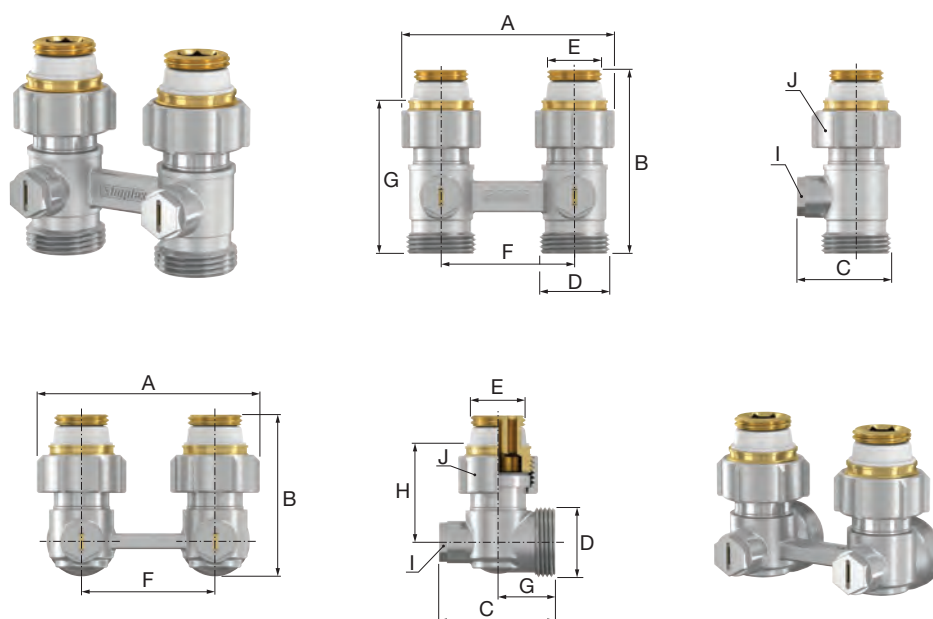
EXCLUSIV H-Module with Connection Nipples

Connection valve with ball shut-off for radiators with integrated valve, control head with a concealed stop, with Euro taper on the pipe side for connection with compression adapters, 50 mm axial distance.

With self-sealing connection nipples for radiators with integrated valve with Rp 1/2" connection.

- Components made of nickel-plated brass
- Sealing materials: EPDM, PTFE.
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

→ Matching design covers, compression adapters and assembly accessories available!



Type	Version	Connection			Article no.
		D (ET)	E		
HB EXCLUSIV D1/50	straight	G 3/4" M	G 1/2" M	5	F10010
HB EXCLUSIV E1/50	angle	G 3/4" M	G 1/2" M	5	F10012



Dimensions

Type	Dimensions [mm]							
	A	B	C	F	G	H	I (WS)	J (WS)
HB EXCLUSIV D1/50	84	69	39	50	58.6	-	13	30
HB EXCLUSIV E1/50	84	71	44	50	21.5	37	13	30

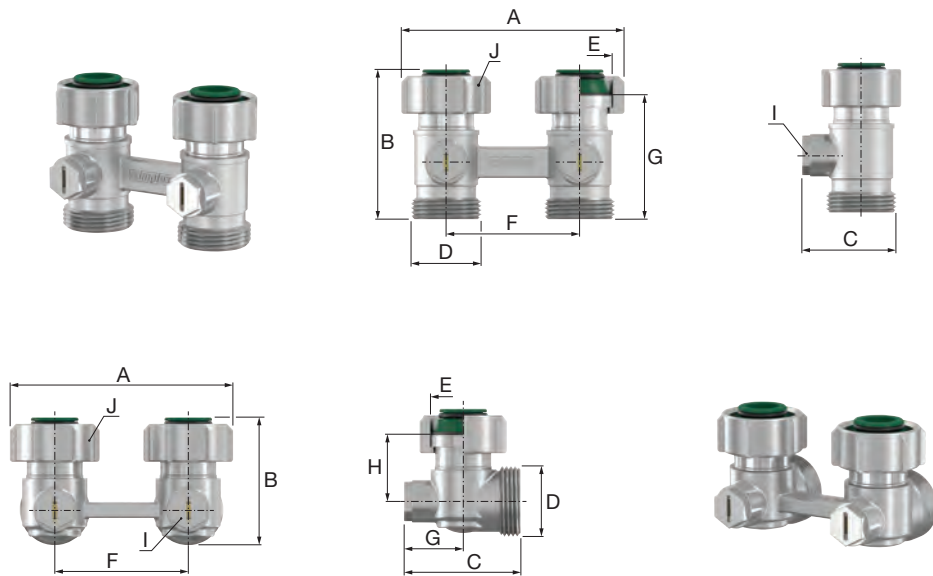
EXCLUSIV H-Module with Cone Inserts

Connection valve with ball shut-off for radiators with integrated valve, control head with a concealed stop, with Euro taper on the pipe side for connection with compression adapters, 50 mm axial distance.

With cone inserts for radiators with integrated valve with G 3/4" M (Euro taper) connection.

- Components made of nickel-plated brass
- Sealing materials: EPDM, PTFE.
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

→ **Matching design covers, compression adapters and assembly accessories available!**



Type	Version	Connection			Article no.
		D (ET)	E		
HB EXCLUSIV D2/50	straight	G 3/4" M	G 3/4" F	5	F10014
HB EXCLUSIV E2/50	angle	G 3/4" M	G 3/4" F	5	F10016



Dimensions

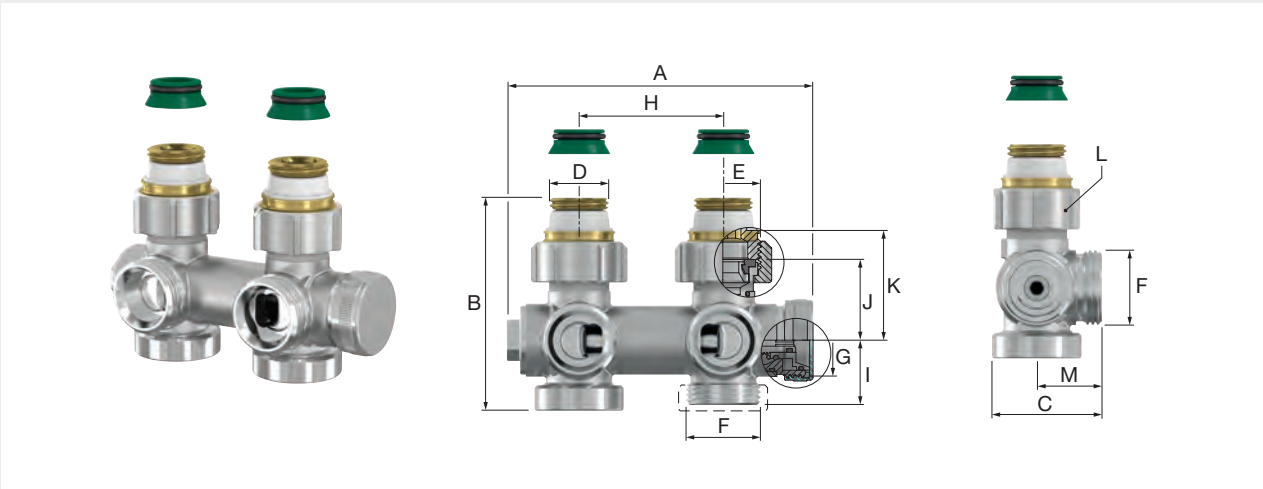
Type	Dimensions [mm]							
	A	B	C	F	G	H	I (WS)	J (WS)
HB EXCLUSIV D2/50	84	56	35.5	50	47.5	-	13	30
HB EXCLUSIV E2/50	84	48	44.0	50	21.5	26	13	30

UNIVERSAL H-Module with Drain

H-module with spindle shut-off for radiators with integrated valve, combines angle and straight design, convertible for right- or left-side connection, integrated drain valve, easy draining by connecting a standard hose connection, with self-sealing connection nipples and cone inserts for radiators with integrated valve with Rp 1/2" or G 3/4" M (Euro taper) connection, with Euro taper on the pipe side for connection with compression adapters, axial distance 50 mm.

- H-Module with 4 connection options
- Easy filling and draining
- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

→ Matching compression adapters and assembly accessories available!



Type	Version	Connection			Drain (G)		Article no.
		D	E	F (ET)			
HB UNIVERSAL with Drain	straight and angle	G 1/2" M	G 3/4" F	G 3/4" M	G 3/4" M	1	F10447



Dimensions

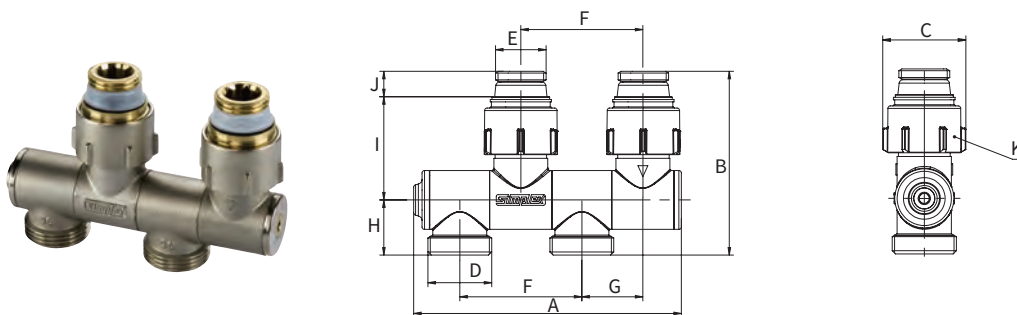
Type	Dimensions [mm]								
	A	B	C	H	I	J	K	L (WS)	M
HB UNIVERSAL with Drain	106	74	38	50	22.5	28	38	30	22.5

VARIOCON N Connection Valve with Connection Nipples

Connection valve with shut-off for radiators with integrated valve, swivelling for angle or straight connection, left or right connection, with Euro taper on the pipe side for connection with compression adapters, 50 mm axial distance, 25 mm axial offset. With self-sealing connection nipples for radiators with integrated valve with Rp 1/2" connection.

- Continuously swivelling connections for a flexible installation
- 4 connection options
- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

→ **Matching design covers and compression adapters available!**



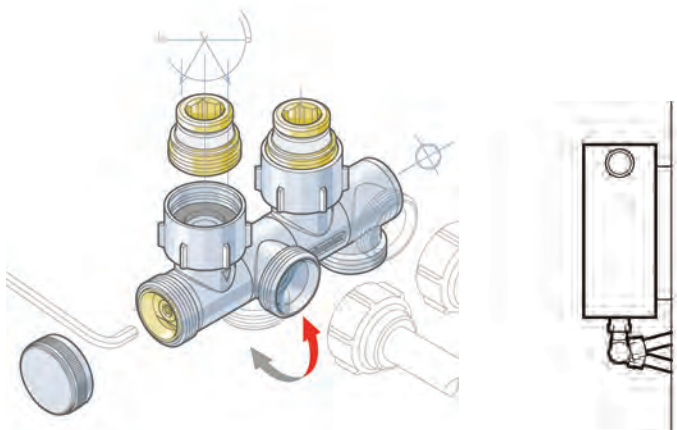
Type	Version	Connection			Article no.
		D (ET)	E		
HB VARIOCON N1	straight and angle	G 3/4" M	G 1/2" M	1 / 5	F12001



Dimensions

Type	Dimensions [mm]								
	A	B	C	F	G	H	I	J	K (WS)
HB VARIOCON N1	109	75	34	50	25	22.5	42.1	10.4	30

VARIOCON connection valves: continuously swivelling connection for angle or straight installation

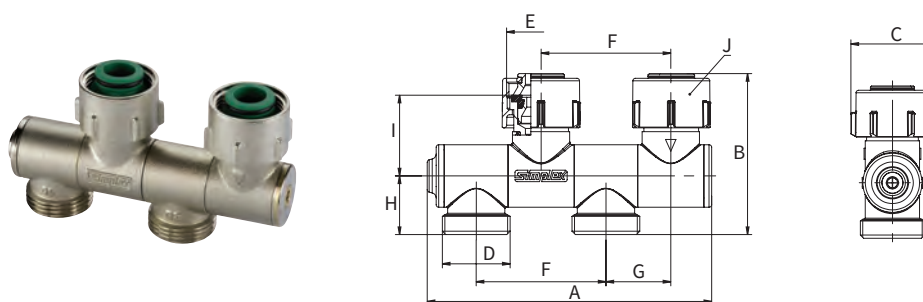


VARIOCON N Connection Valve with Cone Inserts

Connection valve with shut-off for radiators with integrated valve, swivelling for angle or straight connection, left or right connection, with Euro taper on the pipe side for connection with compression adapters, 50 mm axial distance, 25 mm axial offset. With cone inserts for radiators with integrated valve with G 3/4" M (Euro taper) connection.

- Continuously swivelling connections for a flexible installation
- 4 connection options
- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

→ **Matching design covers and compression adapters available!**



Type	Version	Connection			Article no.
		D (ET)	E		
HB VARIOCON N2	straight and angle	G 3/4" M	G 3/4" F	1 / 5	F12002



Dimensions

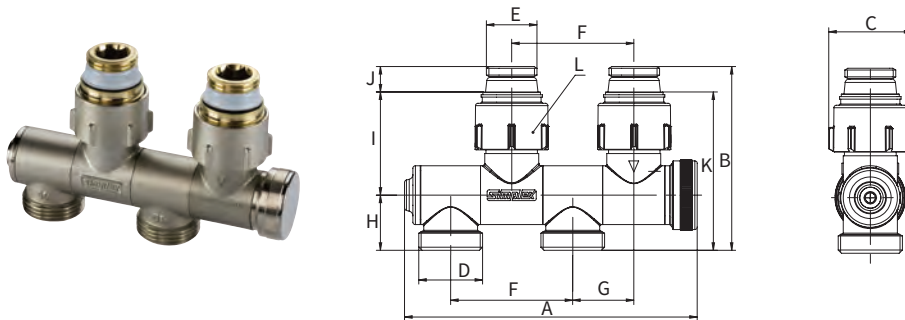
Type	Dimensions [mm]							
	A	B	C	F	G	H	I	J (WS)
HB VARIOCON N2	109	62	34	50	25	22.5	31	30

VARIOCON FE Connection Valve with Connection Nipples

Connection valve with shut-off for radiators with integrated valve, swivelling for angle or straight connection, left or right connection, draining or filling without adapter, simply by connecting a standard hose connection, with Euro taper on the pipe side for connection with compression adapters, 50 mm axial distance, 25 mm axial offset. With self-sealing connection nipples for radiators with integrated valve with Rp 1/2" connection.

- Continuously swivelling connections for a flexible installation
- 4 connection options
- Draining or filling without adapter
- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

→ **Matching design covers and compression adapters available!**



Type	Version	Connection			Article no.
		D (ET)	E		
HB VARIOCON FE1	straight and angle	G 3/4" M	G 1/2" M	1 / 5	F12003



Dimensions

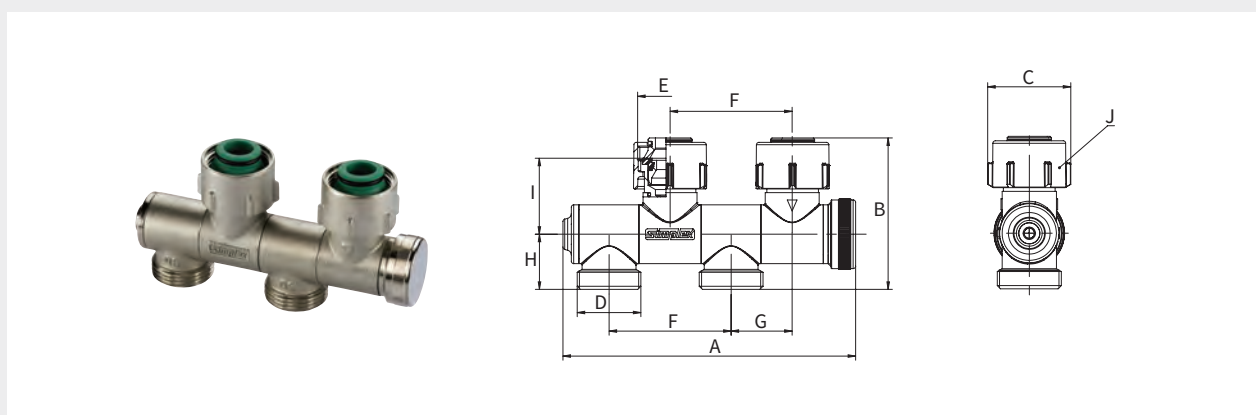
Type	Dimensions [mm]									
	A	B	C	F	G	H	I	J	K	L (WS)
HB VARIOCON FE1	120	75	34	50	25	22.5	42.1	10.4	64.4	30

VARIOCON FE Connection Valve with Cone Inserts

Connection valve with shut-off valve for radiators with integrated valve, swivelling for angle or straight connection, left or right connection, draining or filling without adapter, simply by connecting a standard hose connection, with Euro taper on the pipe side for connection with compression adapters, 50 mm axial distance, 25 mm axial offset. With cone inserts for radiators with integrated valve with G 3/4" M (Euro taper) connection.

- Continuously swivelling connections for a flexible installation
- 4 connection options
- Draining or filling without adapter
- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

→ Matching design covers and compression adapters available!



Type	Version	Connection			Article no.
		D (ET)	E		
HB VARIOCON FE2	straight and angle	G 3/4" M	G 3/4" F	1 / 5	F12004



Dimensions

Type	Dimensions [mm]							
	A	B	C	F	G	H	I	J (WS)
HB VARIOCON FE2	120	62	34	50	25	22.5	31	30

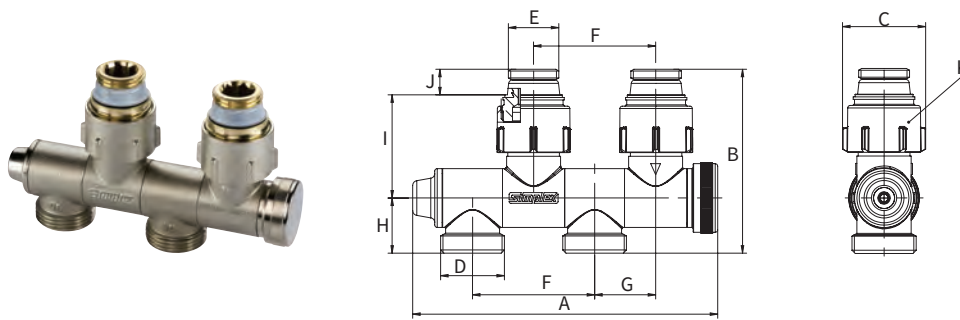
VARIOCON U Connection Valve with Connection Nipples

Connection valve with shut-off for radiators with integrated valve, for one-pipe (radiator supply ratio 25 - 100%) or two-pipe operation, swivelling for angle or straight connection, left or right connection, draining or filling without adapter, simply by connecting a standard hose connection, with Euro taper on the pipe side for connection with compression adapters, 50 mm axial distance, 25 mm axial offset.

With self-sealing connection nipples for radiators with integrated valve with Rp 1/2" connection.

- 4 connection options
- Draining or filling without adapter
- For one-pipe or two-pipe operation
- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

→ **Matching design covers and compression adapters available!**



Type	Version	Connection			Article no.
		D (ET)	E		
HB VARIOCON U1	straight and angle	G 3/4" M	G 1/2" M	1 / 5	F10026



Dimensions

Type	Dimensions [mm]								
	A	B	C	F	G	H	I	J	K (WS)
HB VARIOCON U1	124.5	75	34	50	25	22.5	42.1	10.4	30

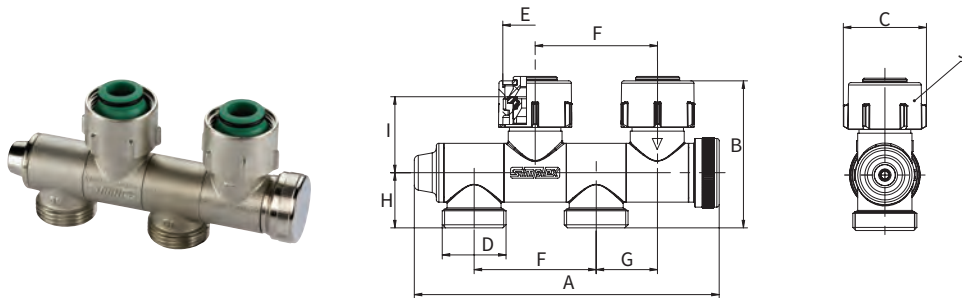
VARIOCON U Connection Valve with Cone Inserts

Connection valve with shut-off for radiators with integrated valve, for one-pipe (radiator supply ratio 25 - 100%) or two-pipe operation, swivelling for angle or straight connection, left or right connection, draining or filling without adapter, simply by connecting a standard hose connection, with Euro taper on the pipe side for connection with compression adapters, 50 mm axial distance, 25 mm axial offset.

With cone inserts for radiators with integrated valve with G 3/4" M (Euro taper) connection.

- 4 connection options
- Draining or filling without adapter
- For one-pipe or two-pipe operation
- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

→ **Matching design covers and compression adapters available!**



Type	Version	Connection			Article no.
		D (ET)	E		
HB VARIOCON U2	straight and angle	G 3/4" M	G 3/4" F	1 / 5	F10027



Dimensions

Type	Dimensions [mm]							
	A	B	C	F	G	H	I	J (WS)
HB VARIOCON U2	124.5	64.5	34	50	25	22.5	31	30

SINGLE VALVES

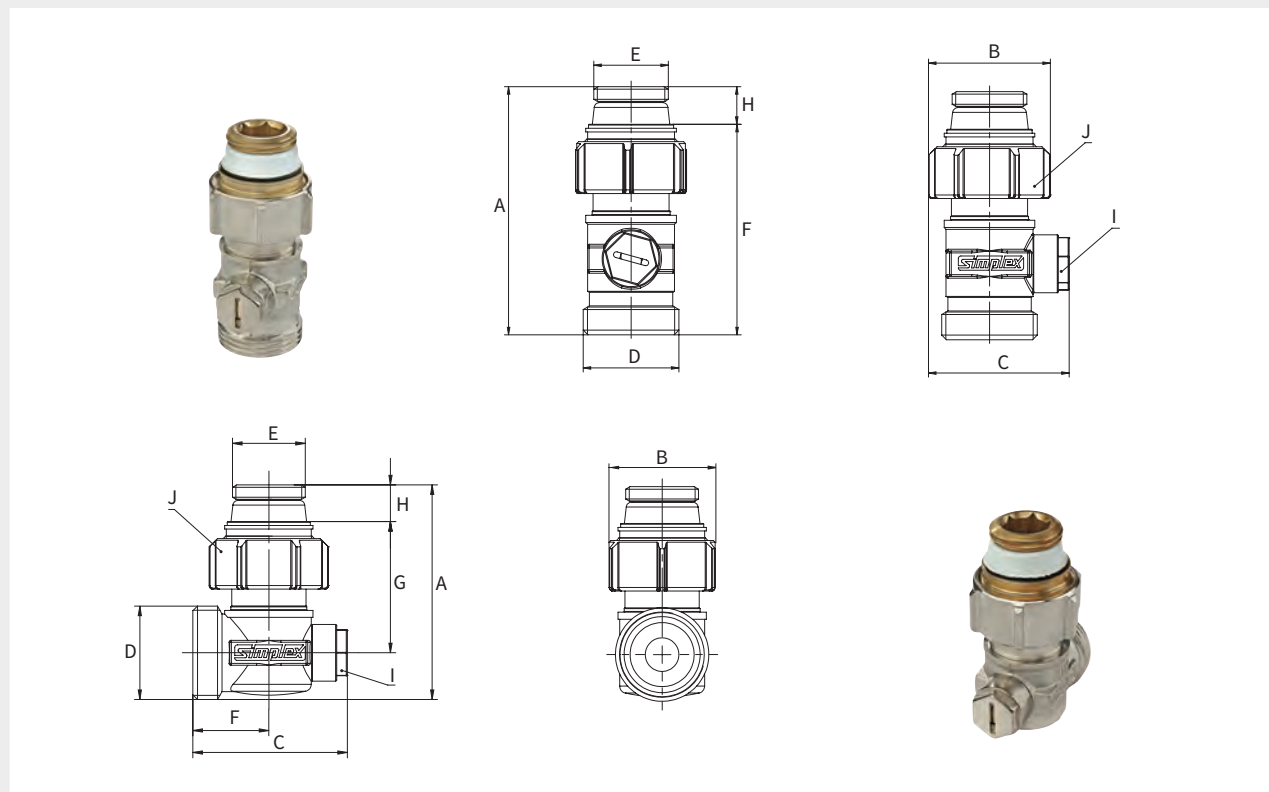
Connection valve with ball shut-off for radiators with integrated valve, control head with a concealed stop.

- Components made of nickel-plated brass
- Sealing materials: EPDM, PTFE
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

EXCLUSIV Single Valve with Connection Nipples and Male Thread

With self-sealing connection nipples for radiators with integrated valve with Rp 1/2" connection.
With G 3/4" M (Euro taper) on the pipe side.

→ Matching compression adapters available!



Type	Version	Connection			Article no.
		D (ET)	E		
EKH EXCLUSIV D1/AG	straight	G 3/4" M	G 1/2" M	1 / 10	F10018
EKH EXCLUSIV E1/AG	angle	G 3/4" M	G 1/2" M	1 / 10	F10019

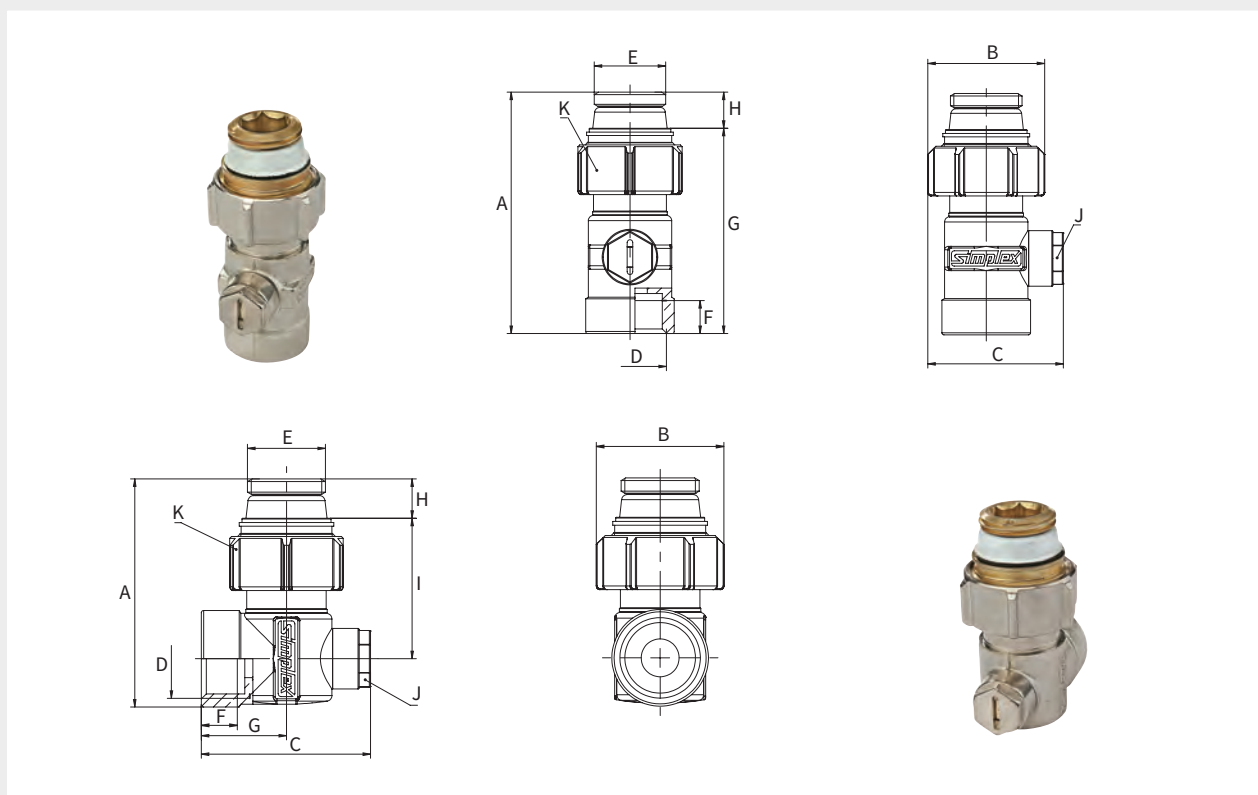



Dimensions

Type	Dimensions [mm]							
	A	B	C	F	G	H	I (WS)	J (WS)
EKH EXCLUSIV D1/AG	68.5	34	39.0	58.0	-	10.4	13	30
EKH EXCLUSIV E1/AG	60.7	34	43.7	21.5	37.1	10.4	13	30

EXCLUSIV Single Valve with Connection Nipples and Female Thread

With self-sealing connection nipples for radiators with integrated valve with Rp 1/2" connection.
With Rp 1/2" on the pipe side.



Type	Version	Connection			Article no.
		D	E		
EKH EXCLUSIV D1/IG	straight	Rp 1/2"	G 1/2" M	1 / 10	F10022
EKH EXCLUSIV E1/IG	angle	Rp 1/2"	G 1/2" M	1 / 10	F10023



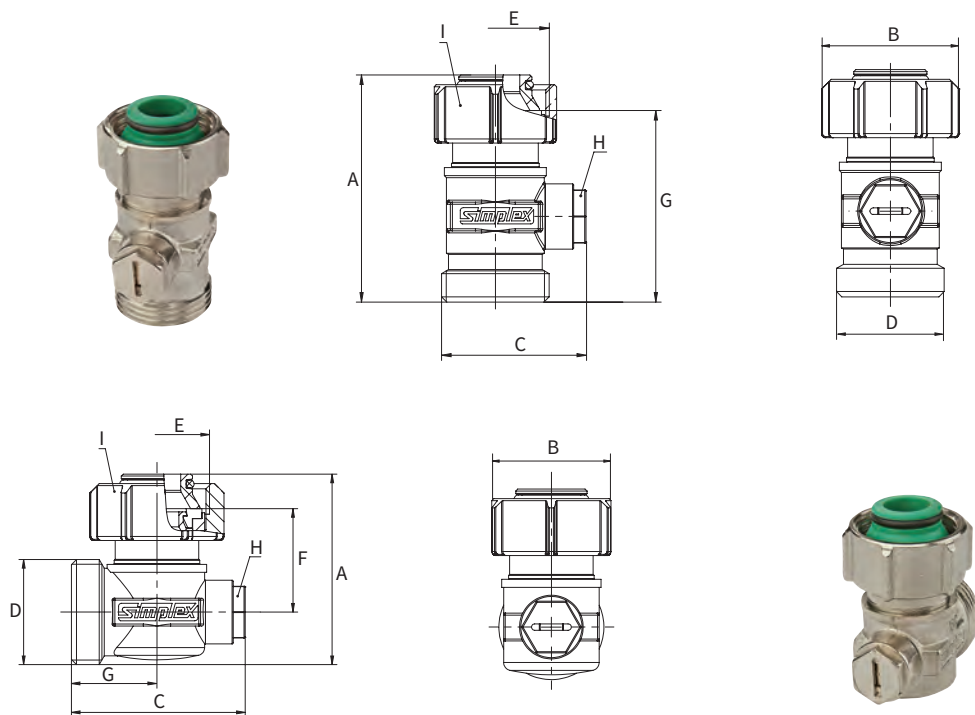
Dimensions

Type	Dimensions [mm]								
	A	B	C	F	G	H	I	J (WS)	K (WS)
EKH EXCLUSIV D1/IG	69.5	34	39	9.5	59.1	10.4	-	13	30
EKH EXCLUSIV E1/IG	60.5	34	48	9.5	22.5	10.4	37.1	13	30

EXCLUSIV Single Valve with Cone Inserts and Male Thread

With cone inserts for radiators with integrated valve with G $\frac{3}{4}$ " M (Euro taper) connection.
With G $\frac{3}{4}$ " M (Euro taper) on the pipe side.

→ Matching compression adapters available!



Type	Version	Connection			Article no.
		D (ET)	E		
EKH EXCLUSIV D2/AG	straight	G $\frac{3}{4}$ " M	G $\frac{3}{4}$ " F	1 / 10	F10020
EKH EXCLUSIV E2/AG	angle	G $\frac{3}{4}$ " M	G $\frac{3}{4}$ " F	1 / 10	F10021

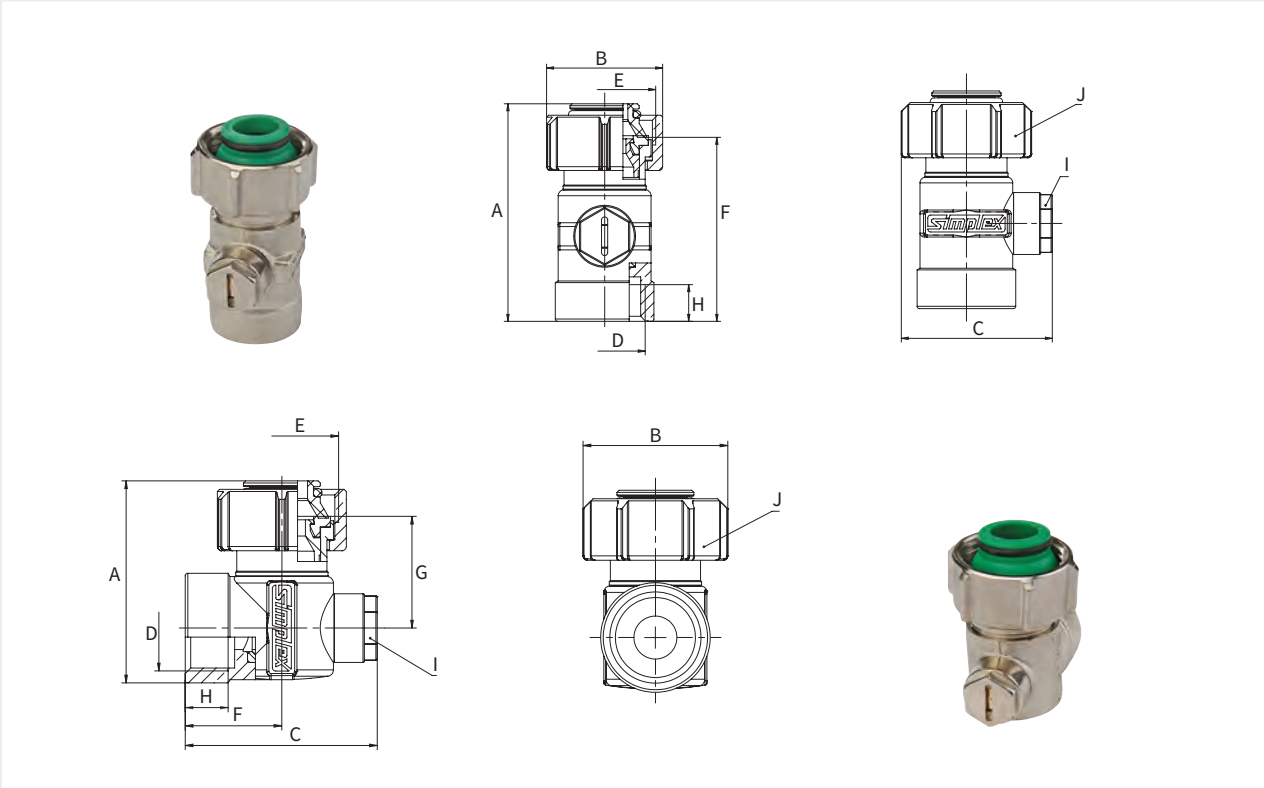



Dimensions

Type	Dimensions [mm]						
	A	B	C	F	G	H (WS)	I (WS)
EKH EXCLUSIV D2/AG	55.7	34	39.0	-	47.0	13	30
EKH EXCLUSIV E2/AG	47.9	34	43.7	26	21.5	13	30

EXCLUSIV Single Valve with Cone Inserts and Female Thread

With cone inserts for radiators with integrated valve with G 3/4" M (Euro taper) connection.
With Rp 1/2" on the pipe side.



Type	Version	Connection			Article no.
		D	E		
EKH EXCLUSIV D2/IG	straight	Rp 1/2"	G 3/4" F	1 / 10	F10024
EKH EXCLUSIV E2/IG	angle	Rp 1/2"	G 3/4" F	1 / 10	F10025



Dimensions

Type	Dimensions [mm]							
	A	B	C	F	G	H	I (WS)	J (WS)
EKH EXCLUSIV D2/IG	57	34	39.5	48.0	-	9.5	13	30
EKH EXCLUSIV E2/IG	48	34	45.0	22.5	26.0	9.5	13	30

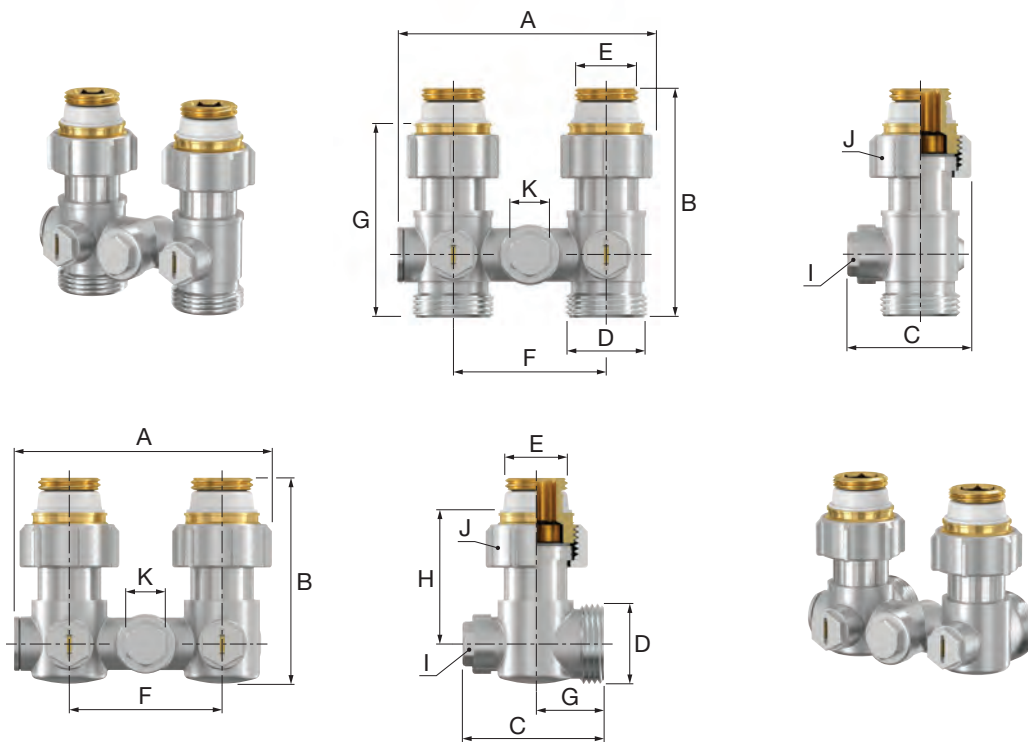
H-MODULES FOR ONE-PIPE SYSTEM

EXCLUSIV H-Module for One-pipe System with Connection Nipples

Connection valve with backflow protection for radiators with integrated valve, radiator supply ratio 30 - 100% (factory set to 35%), with ball shut-off, control head with a concealed stop, with Euro taper on the pipe side for connection with compression adapters, 50 mm axial distance. Supply and return line exchangeable by replacing the backflow protection. With self-sealing connection nipples for radiators with integrated valve with Rp 1/2" connection.

- Incl. backflow protection to avoid unintentional gravity circulation
- Components made of nickel-plated brass
- Sealing materials: EPDM, PTFE
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

→ **Matching compression adapters and assembly accessories available!**



Type	Version	Connection			Article no.
		D (ET)	E		
HB 1-P EXCLUSIV D1/50	straight	G 3/4" M	G 1/2" M	5	F10001
HB 1-P EXCLUSIV E1/50	angle	G 3/4" M	G 1/2" M	5	F10003



Dimensions

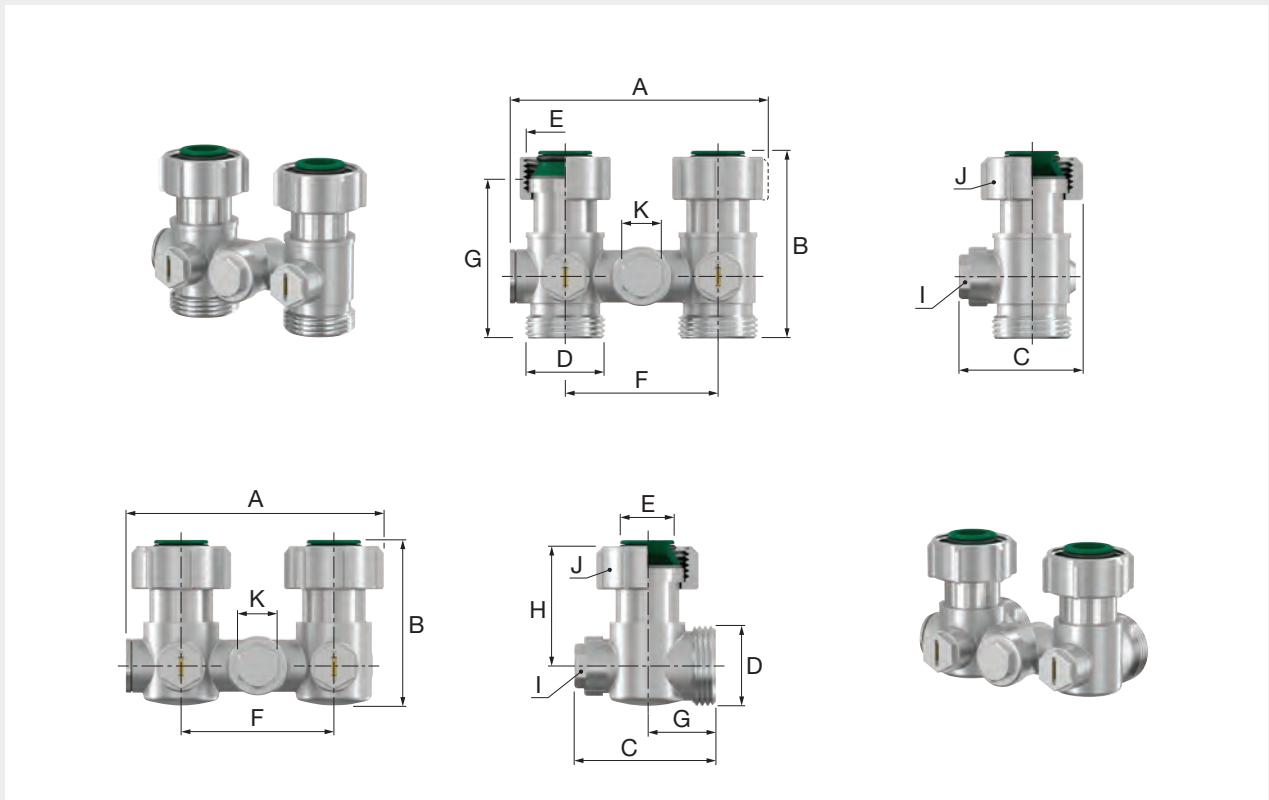
Type	Dimensions [mm]								
	A	B	C	F	G	H	I	J (WS)	K (WS)
HB 1-P EXCLUSIV D1/50	83	75.0	41.0	-	50	64.5	10.4	13	30
HB 1-P EXCLUSIV E1/50	85	68.0	46.5	22.5	50	44.0	10.4	13	30

EXCLUSIV H-Module for One-pipe System with Cone Inserts

Connection valve with backflow protection for radiators with integrated valve, radiator supply ratio 30 - 100% (factory set to 35%), with ball shut-off, control head with a concealed stop, with Euro taper on the pipe side for connection with compression adapters, 50 mm axial distance. Supply and return line exchangeable by replacing the backflow protection. With cone inserts for radiators with integrated valve with G 3/4" M (Euro taper) connection.

- Incl. backflow protection to avoid unintentional gravity circulation
- Components made of nickel-plated brass
- Sealing materials: EPDM, PTFE
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

→ **Matching compression adapters and assembly accessories available!**



Type	Version	Connection			Article no.
		D (ET)	E		
HB 1-P EXCLUSIV D2/50	straight	G 3/4" M	G 3/4" F	5	F10005
HB 1-P EXCLUSIV E2/50	angle	G 3/4" M	G 3/4" F	5	F10007



Dimensions

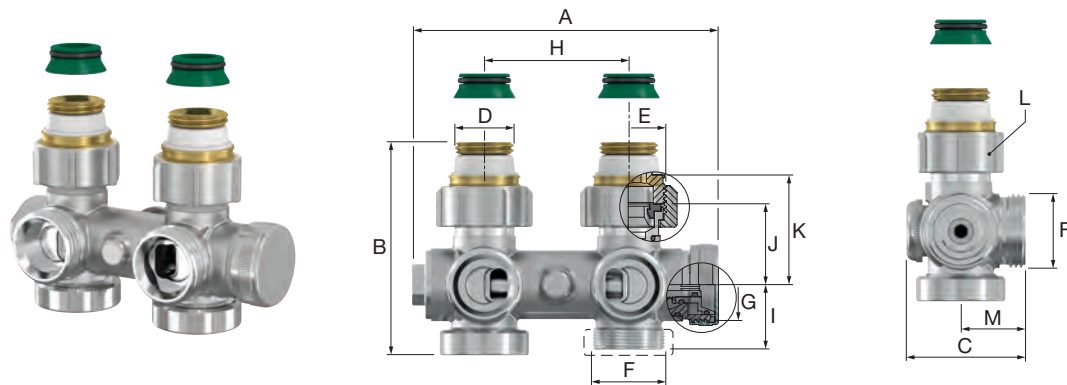
Type	Dimensions [mm]							
	A	B	C	F	G	H	I (WS)	J (WS)
HB 1-P EXCLUSIV D2/50	85	62.0	41.0	50	53.4	-	13	30
HB 1-P EXCLUSIV E2/50	85	54.5	46.5	50	32.9	22.5	13	30

UNIVERSAL H-Module for One-pipe System with Drain

H-module with spindle shut-off for radiators with integrated valve, for one-pipe and two-pipe operation, combines angle and straight design, convertible for right- or left-side connection, radiator supply ratio 30 - 100% (factory default 35%), bypass for continuous adjustment in one-pipe operation, integrated drain valve, easy draining by connecting a standard hose connection, with self-sealing connection nipples and cone inserts for radiators with integrated valve with Rp 1/2" or G 3/4" M (Euro taper) connection, with Euro taper on the pipe side for connection with compression adapters, axial distance 50 mm.

- H-Module with 4 connection options
- Easy filling and draining
- Applicable in one-pipe and two-pipe systems
- Bypass valve can be adjusted comfortably from the front
- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

→ **Matching compression adapters and assembly accessories available!**



Type	Version	Connection			Drain (G)		Article no.
		D	E	F (ET)			
HB 1-P UNIVERSAL with Drain	straight and angle	G 1/2" M	G 3/4" F	G 3/4" M	G 3/4" M	1	F10448



Dimensions

Type	Dimensions [mm]								
	A	B	C	H	I	J	K	L (WS)	M
HB 1-P UNIVERSAL with Drain	106	74	41.5	50	22.5	28	38	30	22.5

H-MODULES - PROBLEM SOLVERS

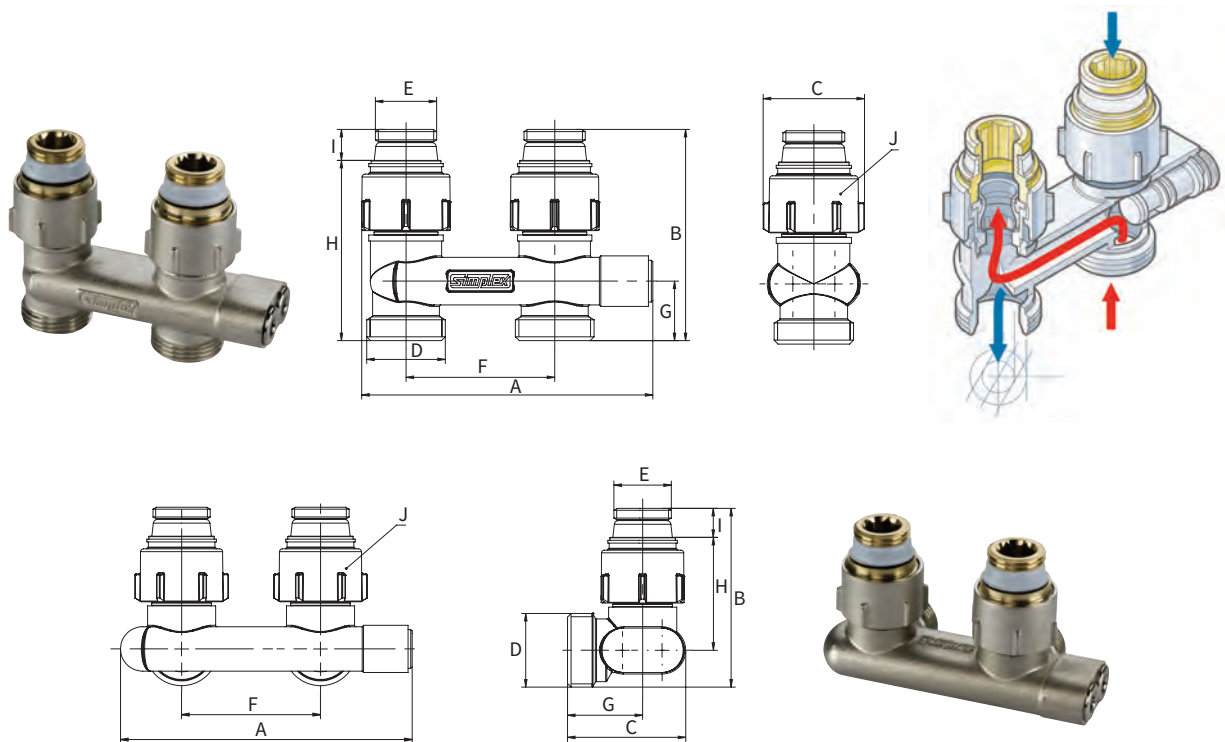
Reverser with Connection Nipples for Reversed Supply and Return Pipes

Compact shut-off connection valve for radiators with integrated valve, with Euro taper on the pipe side for connection with compression adapters, 50 mm axial distance.

With self-sealing connection nipples for radiators with integrated valve with Rp 1/2" connection.

- For connections without crossover for reversed supply and return pipes
- Can easily replace a two-pipe H-module
- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

→ **Matching compression adapters available!**



Type	Version	Connection			Article no.
		D (ET)	E		
US D1/50	straight	G 3/4" M	G 1/2" M	1 / 5	F10076
US E1/50	angle	G 3/4" M	G 1/2" M	1 / 5	F10077



Dimensions

Type	Dimensions [mm]							
	A	B	C	F	G	H	I	J (WS)
US D1/50	98	71.0	34.0	50	20	60.6	10.4	30
US E1/50	105	64.5	42.5	50	27	40.6	10.4	30

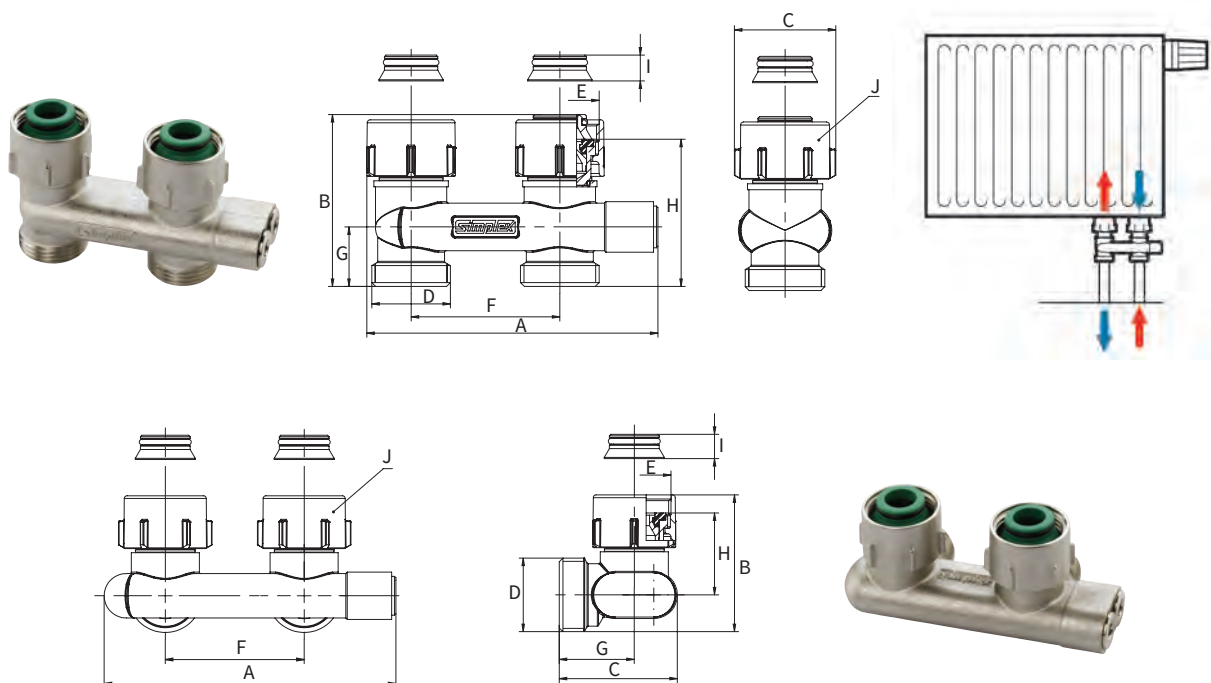
Reverser with Cone Inserts for Reversed Supply and Return Pipes

Compact shut-off connection valve for radiators with integrated valve, with Euro taper on the pipe side for connection with compression adapters, 50 mm axial distance.

With cone inserts for radiators with integrated valve with G 3/4" M (Euro taper) connection.

- For connections without crossover for reversed supply and return pipes
- Can easily replace a two-pipe H-module
- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

→ **Matching compression adapters available!**



Type	Version	Connection			Article no.
		D (ET)	E		
US D2/50	straight	G 3/4" M	G 3/4" F	1 / 5	F10078
US E2/50	angle	G 3/4" M	G 3/4" F	1 / 5	F10079



Dimensions

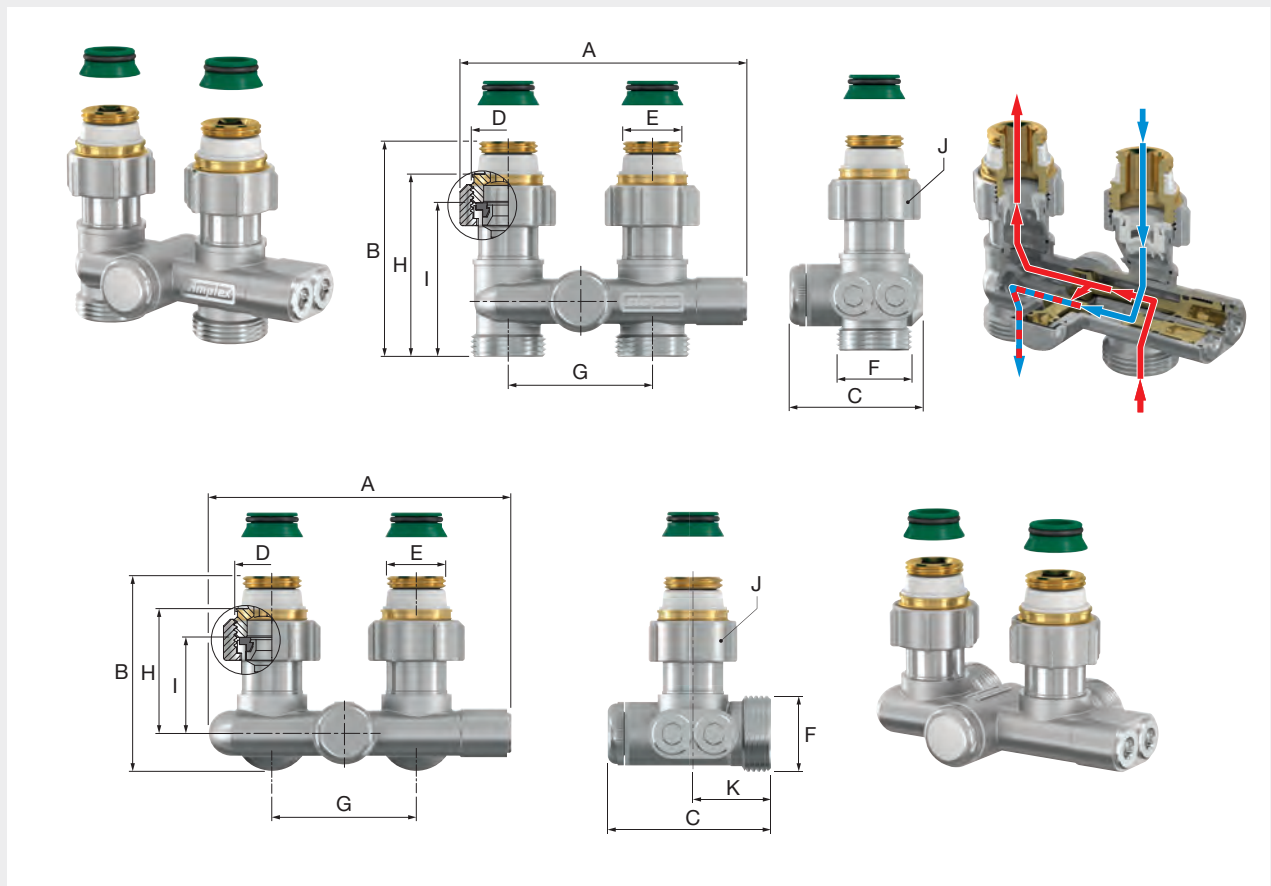
Type	Dimensions [mm]							
	A	B	C	F	G	H	I	J (WS)
US D2/50	98	58	34.0	50	20	49.5	8.7	30
US E2/50	105	49	42.5	50	27	29.5	8.7	30


Reverser for One-pipe System for Reversed Supply and Return Pipes

Compact shut-off connection valve for radiators with integrated valve, one-pipe or two-pipe operation possible, radiator supply ratio 30 - 100% (factory default 35%), bypass for continuous adjustment in one-pipe operation, with self-sealing connection nipples and cone inserts for radiators with integrated valve with Rp 1/2" or G 3/4" M (Euro taper) connection, with Euro taper on the pipe side for connection with compression adapters, 50 mm axial distance.

- For connections without crossover for reversed supply and return pipes
- Can easily replace an H-module for one-pipe systems
- Incl. backflow protection to avoid unintentional gravity circulation
- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

→ Matching compression adapters available!



Type	Version	Connection		F (ET)		Article no.
		D	E			
US 1-P D/50	straight	G 3/4" F	G 1/2" M	G 3/4" M	1 / 5	F10465
US 1-P E/50	angle	G 3/4" F	G 1/2" M	G 3/4" M	1 / 5	F10467



Dimensions

Type	Dimensions [mm]							
	A	B	C	G	H	I	J (WS)	K
US 1-P D/50	100	75.0	46.5	50	63.4	53.4	30	-
US 1-P E/50	100	67.6	56.5	50	42.9	32.9	30	27

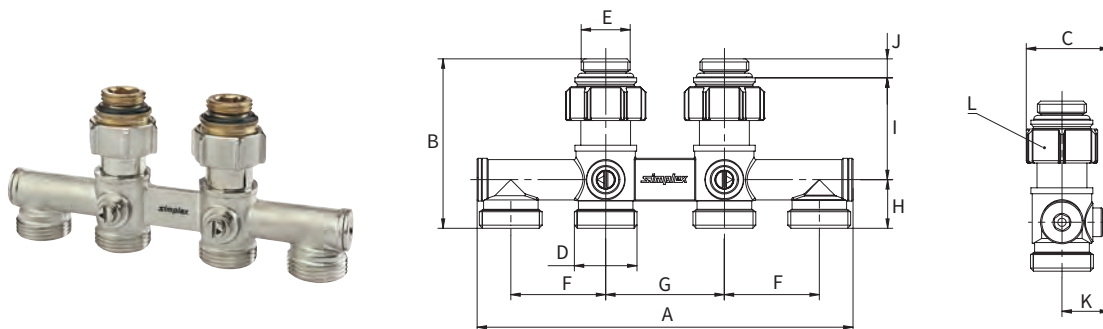
4-way H-Module with Connection Nipples

Connection valve for radiators with integrated valve, with 3-way ball shut-off for jointless laying in floors or to connect additional heating surfaces, with position indicator, without stop, with Euro taper on the pipe side for connection with compression adapters, 50 mm axial distance.

With connection nipples with O-ring seal for radiators with integrated valve, with Rp 1/2" connection.

- Components made of nickel-plated brass
- Sealing materials: EPDM, PTFE
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

→ **Matching compression adapters available!**



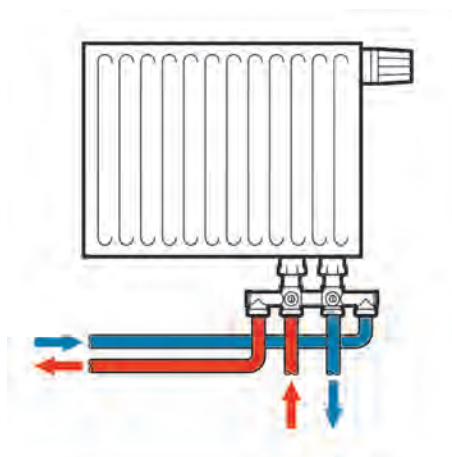
Type	Version	Connection			Article no.
		D (ET)	E		
4-HB D1	straight	G 3/4" M	G 1/2" M	1 / 5	F10058



Dimensions

Type	Dimensions [mm]									
	A	B	C	F	G	H	I	J	K	L (WS)
4-HB D1	158.4	71.4	35	40	50	20.5	43	8	20	30

Installation example 4-way H-Module



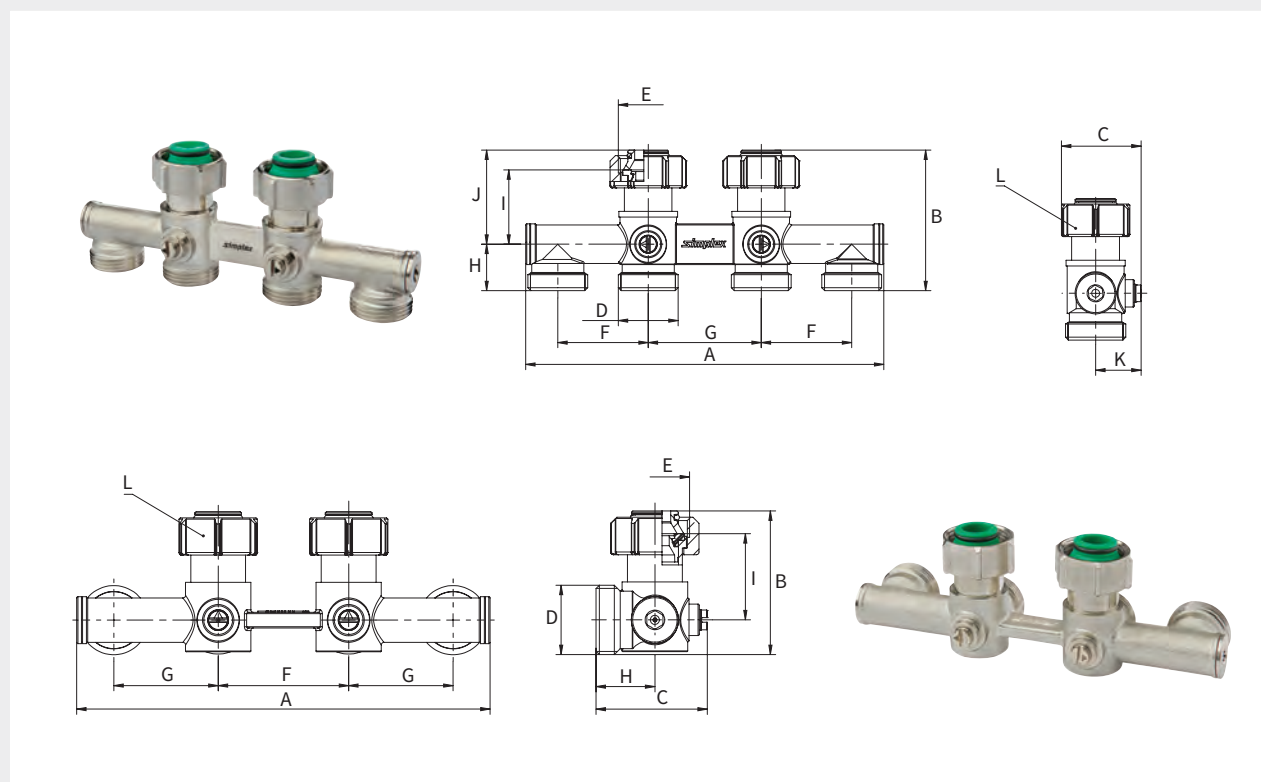
4-way H-Module with Cone Inserts

Connection valve for radiators with integrated valve, with 3-way ball shut-off for jointless laying in floors or to connect additional heating surfaces, with position indicator, without stop, with Euro taper on the pipe side for connection with compression adapters, 50 mm axial distance.

With cone inserts for radiators with integrated valve with G 3/4" M (Euro taper) connection.

- Components made of nickel-plated brass
- Sealing materials: EPDM, PTFE
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

→ Matching compression adapters available!



Type	Version	Connection			Article no.
		D (ET)	E		
4-HB D2	straight	G 3/4" M	G 3/4" F	1 / 5	F10059
4-HB E2	angle	G 3/4" M	G 3/4" F	1 / 5	F10449



Dimensions

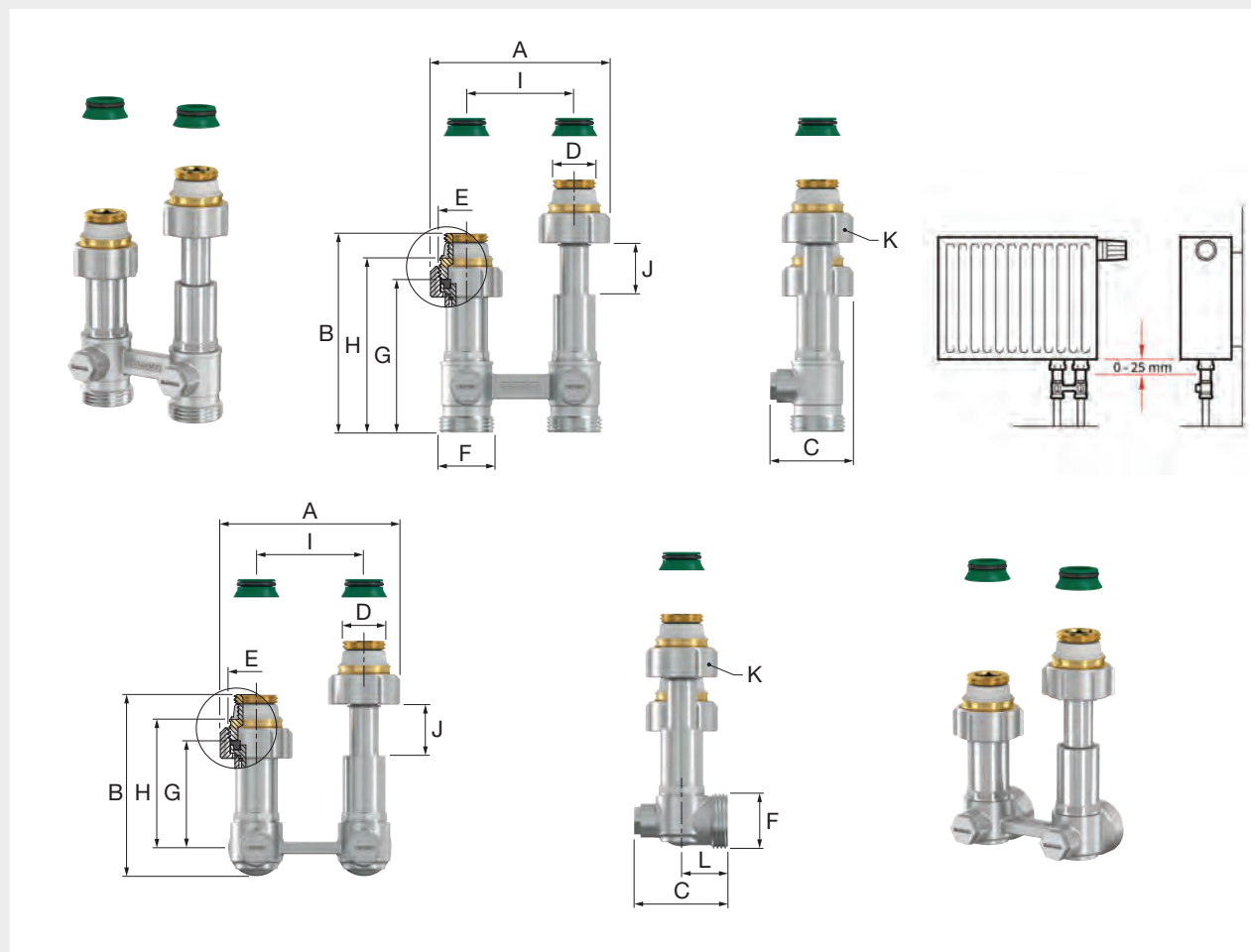
Type	Dimensions [mm]									
	A	B	C	F	G	H	I	J	K	L (WS)
4-HB D2	158.4	62	35.0	40	50	20.5	33	41.6	20	30
4-HB E2	158.4	55	42.5	50	40	22.5	33	-	-	30


EXCLUSIV H-Module with Telescope Adjustment

Telescopic connection valve with up to 25 mm height adjustment for radiators with integrated valve, with ball shut-off, control head with a concealed stop, with self-sealing connection nipples and cone inserts for radiators with integrated valve with Rp 1/2" or G 3/4" M (Euro taper) connection, with Euro taper on the pipe side for connection with compression adapters, 50 mm axial distance.

- Components made of nickel-plated brass
- Sealing materials: EPDM, PTFE
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

→ **Matching compression adapters and assembly accessories available!**



Type	Version	Connection				Article no.
		D	E	F (ET)		
HB TELE DT/50	straight	G 1/2" M	G 3/4" F	G 3/4" M	1 / 5	F10084
HB TELE ET/50	angle	G 1/2" M	G 3/4" F	G 3/4" M	1 / 5	F10086



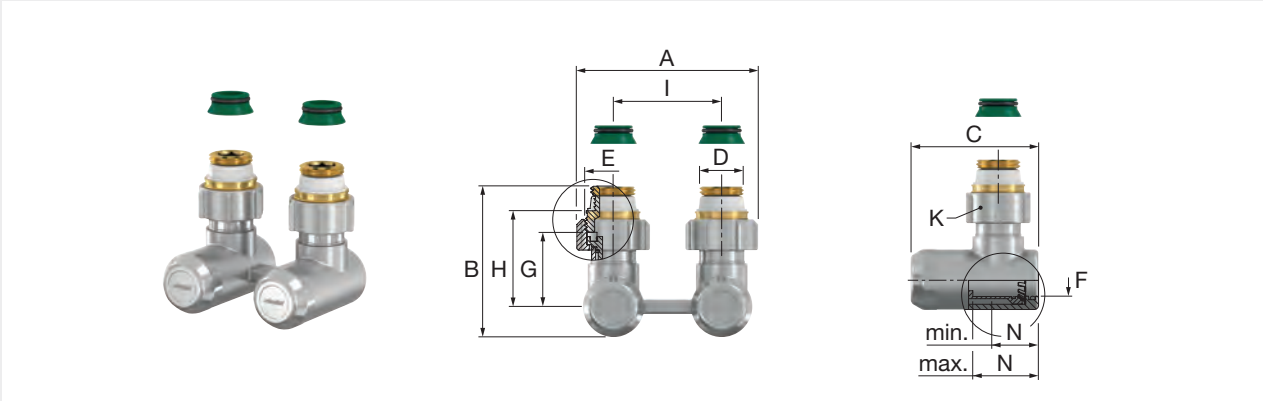
Dimensions


Type	Dimensions [mm]							
	A	B	C	G	H	I	J (max.)	K (WS)
HB TELE DT/50	83.7	92.7	39.0	49.7	59.7	50	25	30
HB TELE ET/50	83.7	84.5	43.9	49.7	59.7	50	25	30

MULTIGRIP H-Module

Connection valve for radiators with integrated valve, integrated screw connection with depth adjustment (13 mm), spindle shut-off with stop, for copper, stainless steel and carbon steel pipes, with self-sealing connection nipples and cone inserts for radiators with integrated valve with Rp 1/2" or G 3/4" M (Euro taper) connection, 50 mm axial distance.

- Compression adapter is not needed for installation
- Quick and easy installation - pipes are simply inserted into the valve and locked with spanner 13 mm
- Connection can be released at any time with little effort
- Reusable
- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



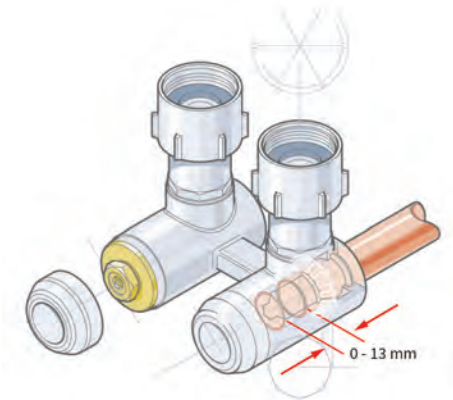
Type	Version	D	Connection	E	F (Ø) [mm]		Article no.
HB MULTIGRIP	angle	G 1/2" M	G 3/4" F		15	1 / 5	F13424



Dimensions

Type	Dimensions [mm]								
	A	B	C	G	H	I	K (WS)	N (min.)	N (max.)
HB MULTIGRIP	84	70	59	34	45.1	50	30	13	31.6

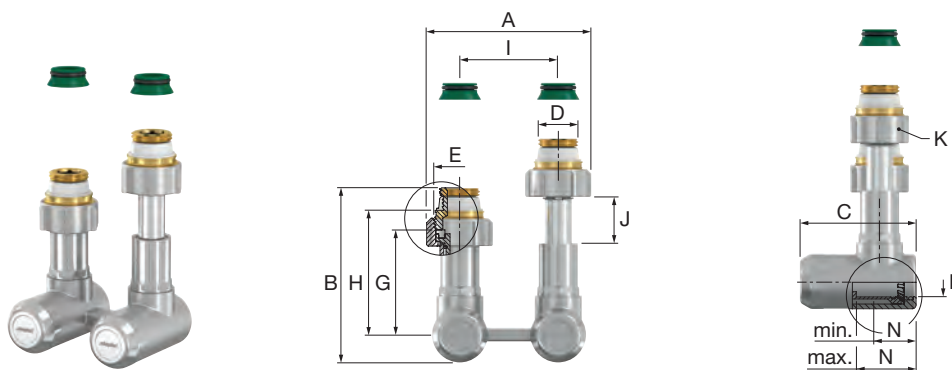
MULTIGRIP H-Module - up to 13 mm depth adjustment




MULTIGRIP H-Module with Telescope Adjustment

Telescopic connection for radiators with integrated valve, with up to 25 mm height adjustment, integrated screw connection with depth adjustment (13 mm), spindle shut-off with stop, for copper, stainless steel and carbon steel pipes, with self-sealing connection nipples and cone inserts for radiators with integrated valve with Rp 1/2" or G 3/4" M (Euro taper) connection, 50 mm axial distance.

- Compression adapter is not needed for installation
- Quick and easy installation - pipes are simply inserted into the valve and locked with spanner 13 mm
- Connection can be released at any time with little effort
- Reusable
- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



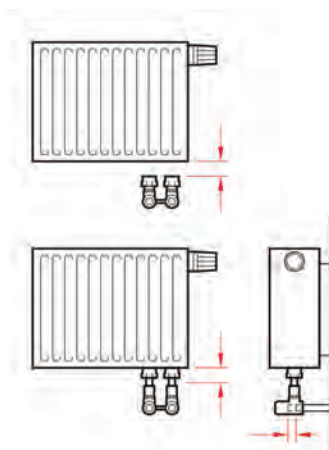
Type	Version	D	Connection	F (Ø) [mm]		Article no.
HB MULTIGRIP TELE	angle	G 1/2" M	G 3/4" F	15	1 / 5	F13444



Dimensions

Type	Dimensions [mm]									
	A	B	C	G	H	J (max.)	I	K (WS)	N (min.)	N (max.)
HB MULTIGRIP TELE	84	89.3	59	53.4	63.4	25	50	30	13	31.6

Up to 13 mm depth adjustment and up to 25 mm height adjustment

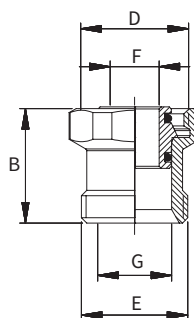



CONNECTION ACCESSORIES

- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

Extension G 3/4" Euro Taper

20 mm extension, for the Euro taper connection situation in accordance with DIN 16313 on radiator connection fittings, including H-modules, thermostatic valve bodies, lockshield valves etc.

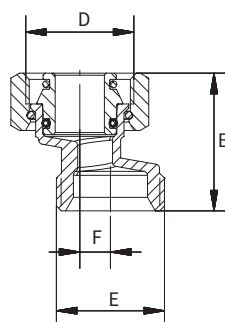


Type	Connection		Dimensions [mm]				Article no.
	D	E (ET)	B	F	G (Ø)		
Extension ET	G 3/4" F	G 3/4" M	28	12	18	2 / 10	F22165



Compensation for G 3/4" Euro Taper

S-piece for use in heating systems, 35 mm total height, 7.5 mm offset, with union nut.

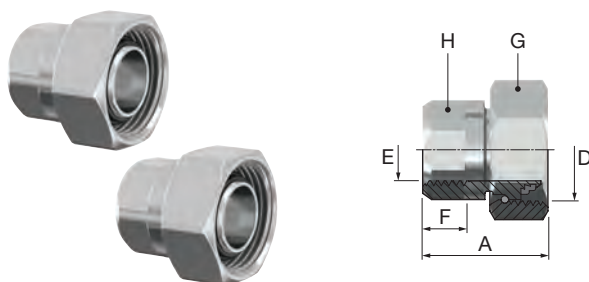



Type	Connection		Dimensions [mm]			Article no.
	D	E (ET)	B	F		
Compensation ET	G 3/4" F	G 3/4" M	34	7.5	5	F10530



G5 Connection Set

2 pcs. screw connections for use in heating systems.



Type	Connection		Dimensions					 [Set]	Article no.
	D (ET)	E	A	B	F	G (WS)	H (WS)		
Connection Set G5 - 3/8	G 3/4" F	G 3/8" F	30.2	33.7	10	30	22	1 / 50	F10369
Connection Set G5 - 1/2	G 3/4" F	G 1/2" F	31.9	33.7	12	30	27	1 / 50	F10370



THERMOSTATIC VALVES

VARIODESIGN Regulator Valve

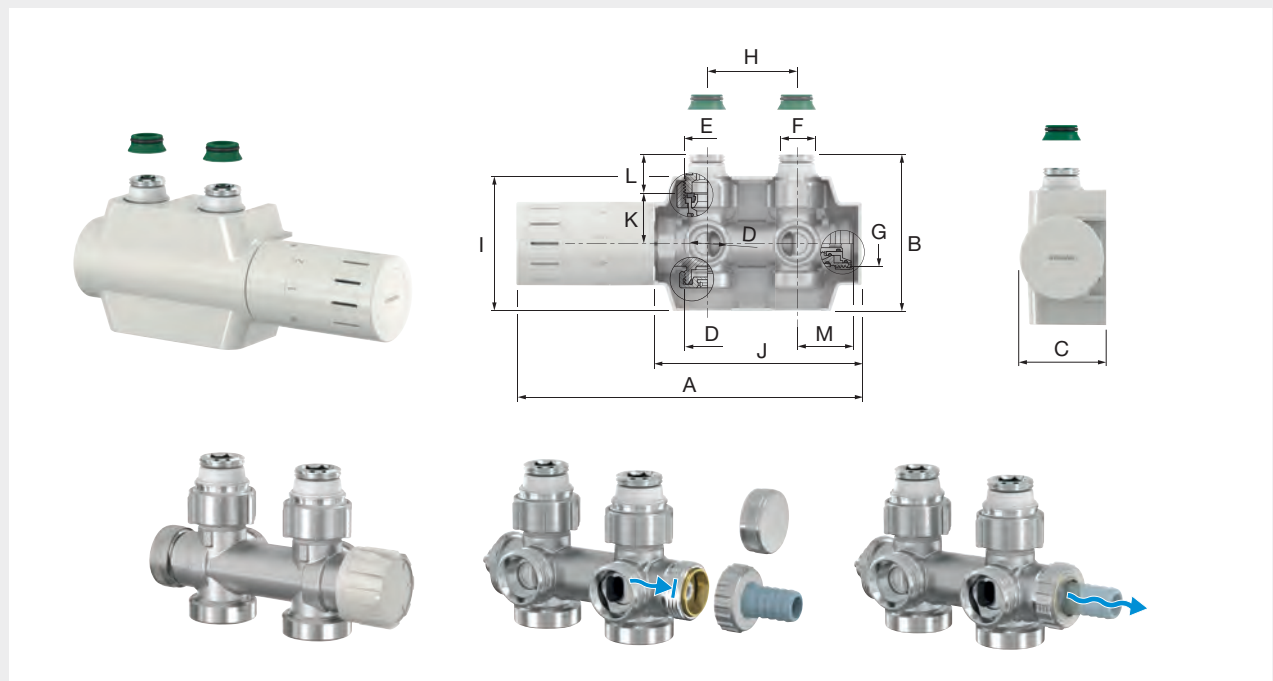
Set consisting of:

1 pc. connection valve with shut-off and pre-adjustable valve insert for towel and design radiators, connection thread to the thermostatic head M 30 x 1.5, combines angle and straight design, convertible for right- or left-side connection, integrated fill and drain valve for hose connections, with self-sealing connection nipples and cone inserts for towel and design radiators with Rp 1/2" or G 3/4" M (Euro taper) connection, with Euro taper on the pipe side for connection with compression adapters, axial distance 50 mm, with adjustment key,

1 pc. design cover made of plastic with polished optics,

1 pc. design thermostic head with integrated liquid sensor, threaded connection M 30 x 1.5, setpoint value: 7 - 28 °C, with zero position and frost protection, non-rising, white version classified according to "TELL-Thermostatic Efficiency-Label" in energy efficiency class I.

- Attractive design
- 4 connection options
- Simple filling and draining
- Components made of nickel-plated brass and plastic
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



Type	Colour	Version	Connection			Drain (G)		Article no.
			D (ET)	E	F			
VH VARIODESIGN W	white*	connection right/left convertible	G 3/4" M	G 3/4" F	G 1/2" M	G 3/4" M	1	F12160
VH VARIODESIGN C	chromed	connection right/left convertible	G 3/4" M	G 3/4" F	G 1/2" M	G 3/4" M	1	F12161

* similar to RAL 9016



Dimensions

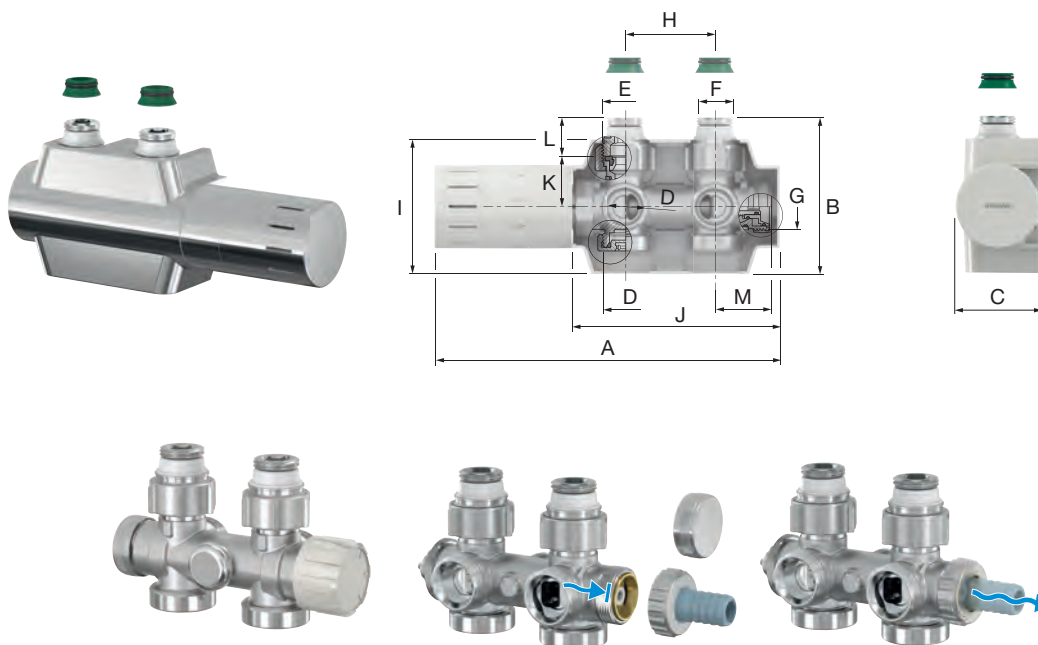
Type	Dimensions [mm]								
	A	B	C	H	I	J	K	L	M
VH VARIODESIGN W	191	87	48	50	75	115.5	28	21.5	31
VH VARIODESIGN C	191	87	48	50	75	115.5	28	21.5	31

VARIODESIGN Regulator Valve for One-pipe System

Set consisting of:

1 pc. connection valve with shut-off and pre-adjustable valve insert for towel and design radiators, one-pipe or two-pipe operation possible, radiator supply ratio 30 - 100% (factory default 35%), bypass for continuous adjustment in one-pipe operation, connection thread to the thermostatic head M 30 x 1.5, combines angle and straight design, convertible for right- or left-side connection, integrated fill and drain valve for hose connections, with self-sealing connection nipples and cone inserts for towel and design radiators with Rp 1/2" or G 3/4" M (Euro taper) connection, with Euro taper on the pipe side for connection with compression adapters, axial distance 50 mm, with adjustment key, 1 pc. design cover made of plastic with polished optics, 1 pc. design thermostatic head with integrated liquid sensor, threaded connection M 30 x 1.5, setpoint value: 7 - 28 °C, with zero position and frost protection, non-rising, white version classified according to "TELL-Thermostatic Efficiency-Label" in energy efficiency class I.

- 4 connection options
- For one-pipe or two-pipe operation
- Bypass valve can be easily adjusted from the front
- Components made of nickel-plated brass and plastic
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



Type	Colour	Version	Connection			Drain (G)		Article no.
			D (ET)	E	F			
VH 1-P VARIODESIGN W	white*	connection right/left convertible	G 3/4" M	G 3/4" F	G 1/2" M	G 3/4" M	1	F12165
VH 1-P VARIODESIGN C	chromed	connection right/left convertible	G 3/4" M	G 3/4" F	G 1/2" M	G 3/4" M	1	F12166

* similar to RAL 9016



Dimensions

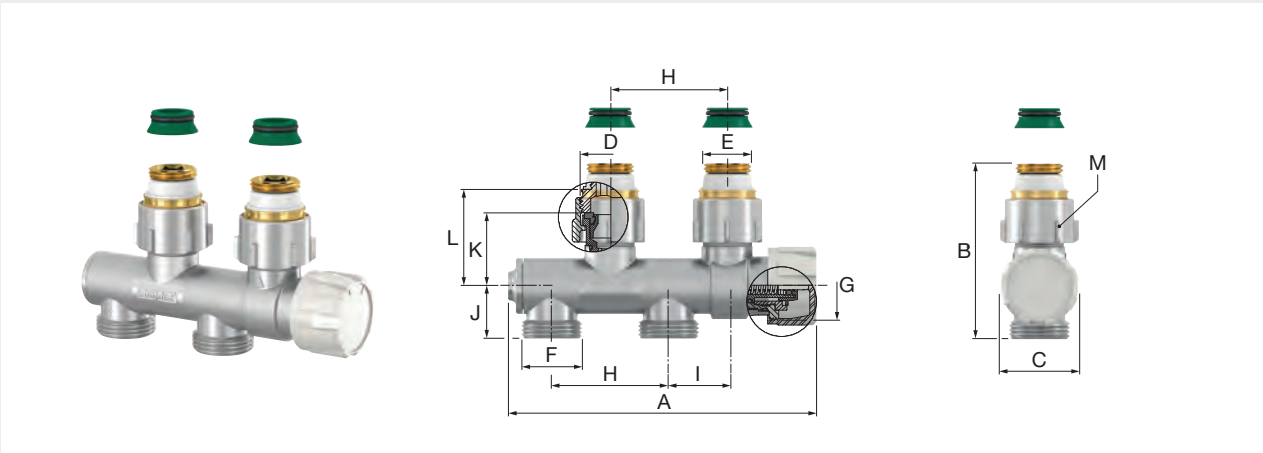
Type	Dimensions [mm]								
	A	B	C	H	I	J	K	L	M
VH 1-P VARIODESIGN W	191	87	48	50	75	115.5	28	21.5	31
VH 1-P VARIODESIGN C	191	87	48	50	75	115.5	28	21.5	31


VARIOCON Swivelling Regulator Valve

Connection valve with shut-off and pre-adjustable valve insert for towel and design radiators, swivelling connections on the pipe side for angle or straight connection, left or right-side connection, connection thread to the thermostatic head M 30 x 1.5, with self-sealing connection nipples and cone inserts for towel and design radiators with Rp 1/2" or G 3/4" M (Euro taper) connection, with Euro taper on the pipe side for connection with compression adapters, axial distance 50 mm, axial offset 25 mm, with adjustment key, without thermostatic head.

- Continuously swivelling connects for a flexible installation
- 4 connection options
- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

→ Matching design covers and compression adapters available!



Type	Version	Connection					Article no.
		D	E	F (ET)	G		
VH VARIOCON	connection right or left	G 3/4" F	G 1/2" M	G 3/4" M	M 30 x 1.5	1 / 25	F12020



Dimensions

Type	Dimensions [mm]								
	A	B	C	H	I	J	K	L	M (WS)
VH VARIOCON	132	75	34	50	25	22.5	31	41	30

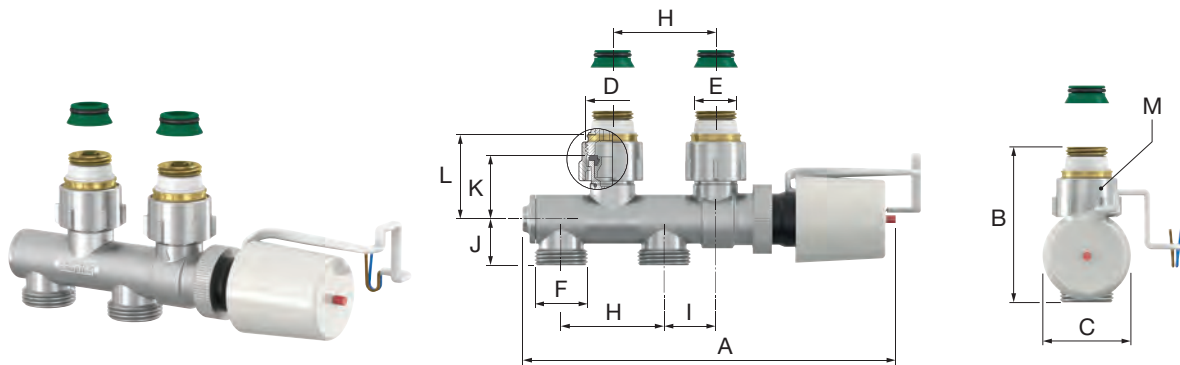
VARIOCON Swivelling Regulator Valve with Electro-thermal Actuator

Connection valve with shut-off and pre-adjustable valve insert for towel and design radiators, swivelling connections on the pipe side for angle or straight connection, left or right-side connection, connection thread M 30 x 1.5, with self-sealing connection nipples and cone inserts for towel and design radiators with Rp 1/2" or G 3/4" M (Euro taper) connection, with Euro taper on the pipe side for connection with compression adapters, axial distance 50 mm, axial offset 25 mm, with adjustment key, without thermostatic head.

With actuator, closed without current, 230 V, opening/closing time 3 - 4 min., connection cable length 1 m.

- Continuously swivelling connects for a flexible installation
- 4 connection options
- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

→ **Matching design covers and compression adapters available!**



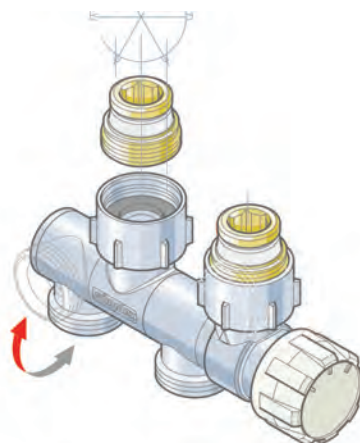
Type	Version	Connection				Article no.
		D	E	F (ET)		
VH VARIOCON STA	connection right or left	G 3/4" F	G 1/2" M	G 3/4" M	1 / 25	F12018

Dimensions



Type	Dimensions [mm]								
	A	B	C	H	I	J	K	L	M (WS)
VH VARIOCON STA	181	75	42.5	50	25	22.5	31	41	30

VARIOCON connection valves: continuously swivelling connections for a flexible installation

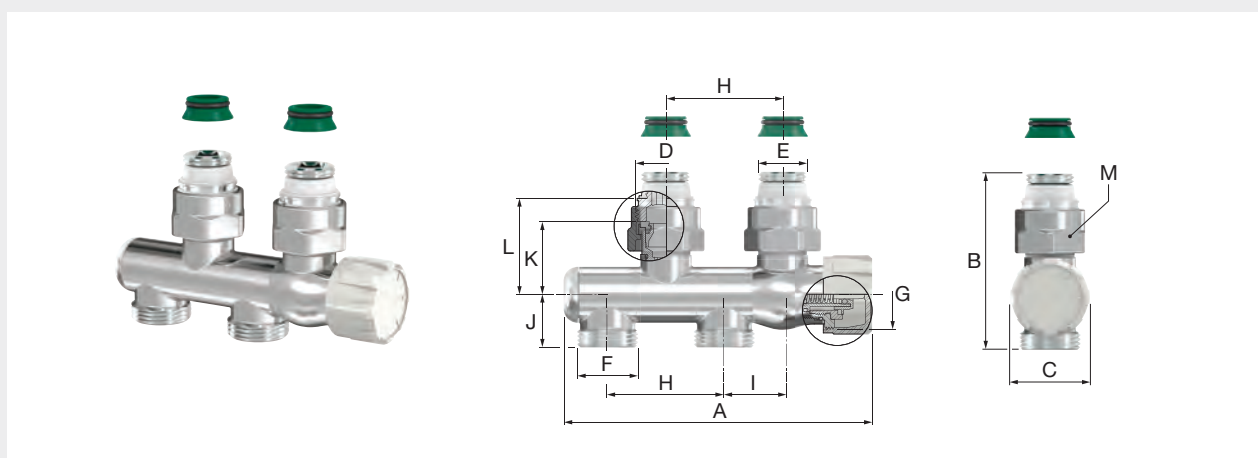



VARIOCON Swivelling Design Regulator Valve

Connection valve with shut-off and pre-adjustable valve insert for towel and design radiators, swivelling connections on the pipe side for angle or straight connection, left or right-side connection, connection thread to the thermostatic head M 30 x 1.5, with self-sealing connection nipples and cone inserts for towel and design radiators with Rp 1/2" or G 3/4" M (Euro taper) connection, with Euro taper on the pipe side for connection with compression adapters, axial distance 50 mm, axial offset 25 mm, with adjustment key, without thermostatic head.

- Continuously swivelling connections for a flexible installation
- 4 connection options
- Components made of high gloss chrome-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

→ Matching chrome-plated compression adapters available!



Type	Version	Connection					Article no.
		D	E	F (ET)	G		
VH VARIOCON C	connection right or left	G 3/4" F	G 1/2" M	G 3/4" M	M 30 x 1.5	1	F12019



Dimensions

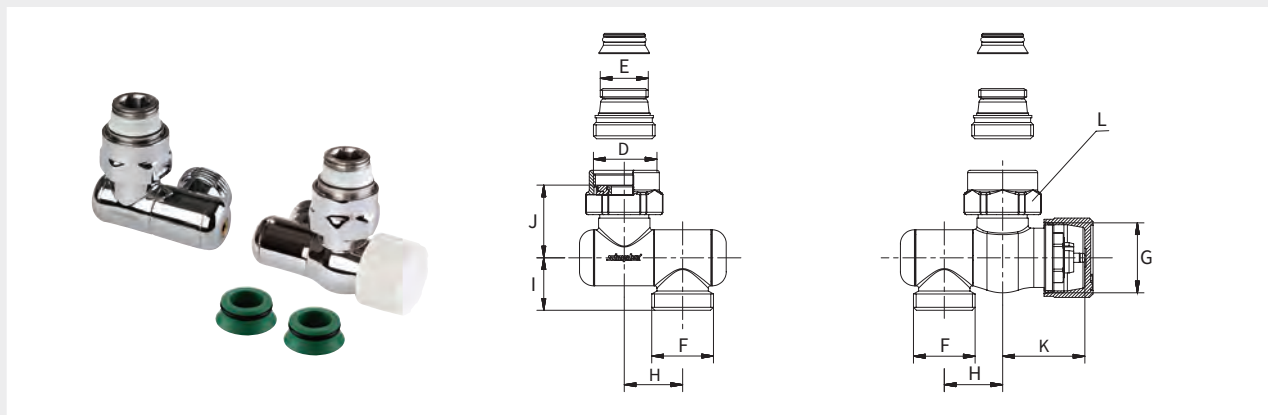
Type	Dimensions [mm]								
	A	B	C	H	I	J	K	L	M (WS)
VH VARIOCON chromed	132	75	34	50	25	22.5	31	41	30


VARIOCON Swivelling Design Regulator Valve Kit

Connection valve kit with shut-off and pre-adjustable valve insert for towel and design radiators, swivelling connections on the pipe side for angle or straight connection, left or right-side connection, connection thread to the thermostatic head M 30 x 1.5, with self-sealing connection nipples and cone inserts for towel and design radiators with Rp 1/2" or G 3/4" M (Euro taper) connection, with Euro taper on the pipe side for connection with compression adapters, axial offset 25 mm, with adjustment key, without thermostatic head.

- Continuously swivelling connects for a flexible installation
- 4 connection options
- Components made of high gloss chrome-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

→ **Matching chrome-plated compression adapters available!**



Type	Version	Connection					Article no.
		D	E	F (ET)	G		
VG-2 VARIOCON C	connection right or left	G 3/4" F	G 1/2" M	G 3/4" M	M 30 x 1.5	1	F12016



Dimensions

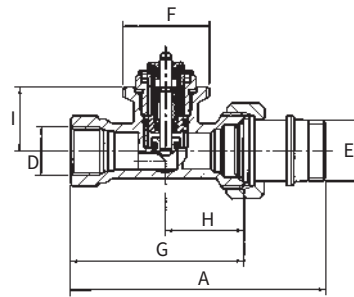
Type	Dimensions [mm]				
	H	I	J	K	L (WS)
VG-2 VARIOCON chromed	25	22.5	31	35	30


THERMOSTATIC VALVE BODIES

- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 120 °C
- Max. operating pressure: 10 bar
- Certified according to DIN EN 215
- The thermostatic valve bodies with continuous pre-adjustment facilitate hydraulic balancing
- Valve insert replaceable using disassembly device
- Socket threaded union in the housing soft-sealing and to the radiators self-sealing with special thread seal

Thermostatic Valve Body - Straight Shape

Thermostatic valve body for two-pipe heating systems, with continuous pre-adjustment, dimensions according to EN 215-D, protection cap white.



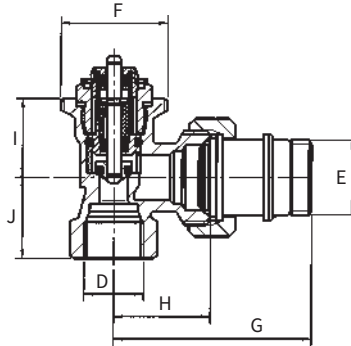
Type	No- minal dia- meter	Kvs [m³/h]	Connection			Dimensions [mm]					Article no.
			D	E	F	A	G	H	I		
TVU S721.11 - DN10*	DN 10	1.0	Rp 3/8"	G 1/2" M	M 30 x 1.5	88	60	27	22	20	F34000
TVU S721.11 - DN15*	DN 15	1.0	Rp 1/2"	G 1/2" M	M 30 x 1.5	95	66	29	22	20	F34001
TVU S721.11 - DN20*	DN 20	1.27	Rp 3/4"	G 3/4" M	M 30 x 1.5	105	74	34	22	20	F34002


* Certified according to DIN EN 215



Thermostatic Valve Body - Angle Shape

Thermostatic valve body for two-pipe heating systems, with continuous pre-adjustment, dimensions according to EN 215-D, protection cap white.



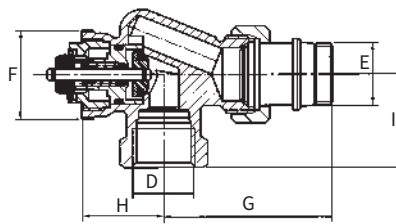
Type	No- minal dia- meter	Kvs [m³/h]	Connection			Dimensions [mm]					Article no.
			D	E	F	G	H	I	J		
TVU S722.11 - DN10*	DN 10	1.0	Rp 3/8"	G 1/2" M	M 30 x 1.5	55	22.5	22	27	20	F34003
TVU S722.11 - DN15*	DN 15	1.0	Rp 1/2"	G 1/2" M	M 30 x 1.5	58	27.5	22	29	20	F34004
TVU S722.11 - DN20*	DN 20	1.27	Rp 3/4"	G 3/4" M	M 30 x 1.5	65	30.0	22	34	20	F34005


* Certified according to DIN EN 215



Thermostatic Valve Body - Axial Shape

Thermostatic valve body for two-pipe heating systems, with continuous pre-adjustment, dimensions according to EN 215-D, protection cap white.



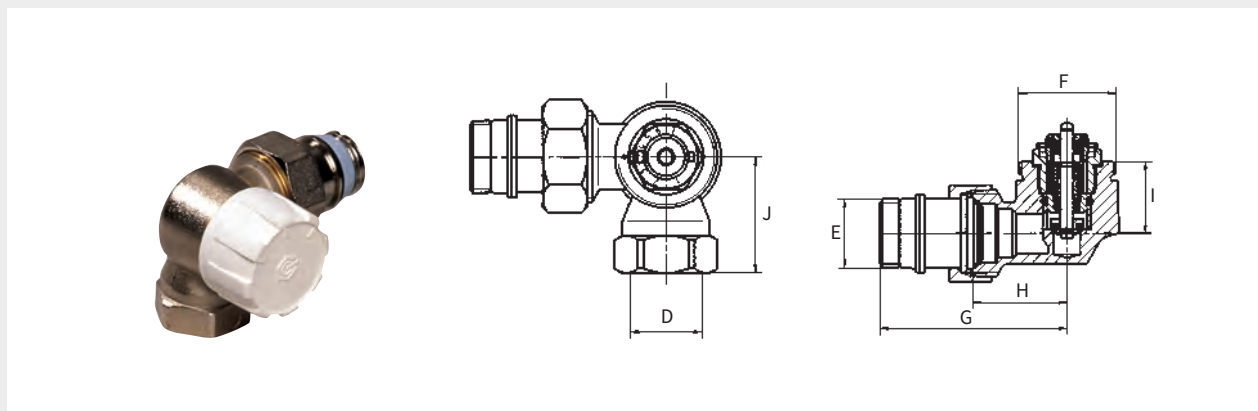
Type	No- minal dia- meter	Kvs [m³/h]	Connection			Dimensions [mm]					Article no.
			D	E	F	G	H	I	J		
TVU S726.11 - DN15*	DN 15	0.64	Rp 1/2"	G 1/2" M	M 30 x 1.5	57.5	28	31.5	20	20	F34008


* Certified according to DIN EN 215



Thermostatic Valve Body - Double-angle Shape Left

Thermostatic valve body for two-pipe heating systems, with continuous pre-adjustment, dimensions according to EN 215-D, protection cap white.

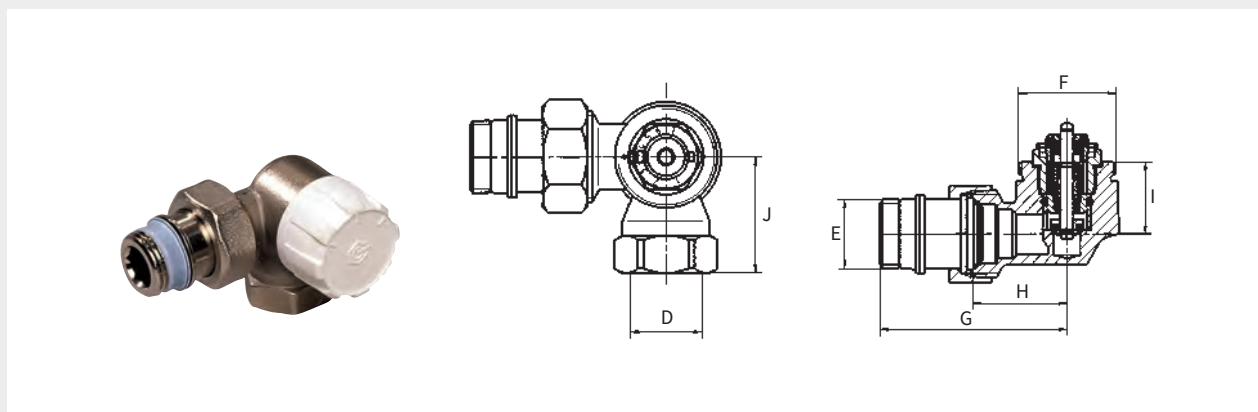



Type	No- minal dia- meter	Kvs [m³/h]	Connection			Dimensions [mm]					Article no.
			D	E	F	G	H	I	J		
TVU S724.11 - DN15	DN 15	1.0	Rp 1/2"	G 1/2" M	M 30 x 1.5	57.5	29	22	33	20	F34015



Thermostatic Valve Body - Double-angle Shape Right

Thermostatic valve body for two-pipe heating systems, with continuous pre-adjustment, dimensions according to EN 215-D, protection cap white.

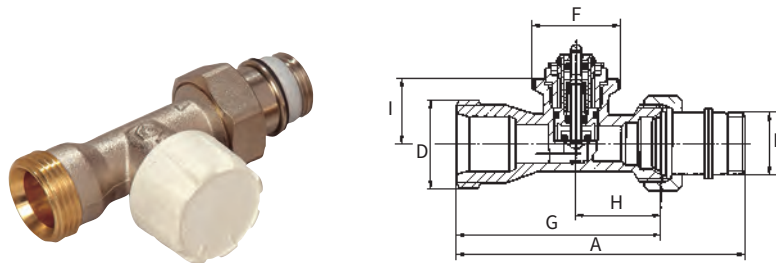



Type	No- minal dia- meter	Kvs [m³/h]	Connection			Dimensions [mm]					Article no.
			D	E	F	G	H	I	J		
TVU S725.11 - DN15	DN 15	1.0	Rp 1/2"	G 1/2" M	M 30 x 1.5	57.5	29	22	33	20	F34016



Thermostatic Valve Body - G 3/4" Euro Taper, Straight Shape

Thermostatic valve body for two-pipe heating systems, with continuous pre-adjustment, dimensions according to EN 215-D, protection cap white.



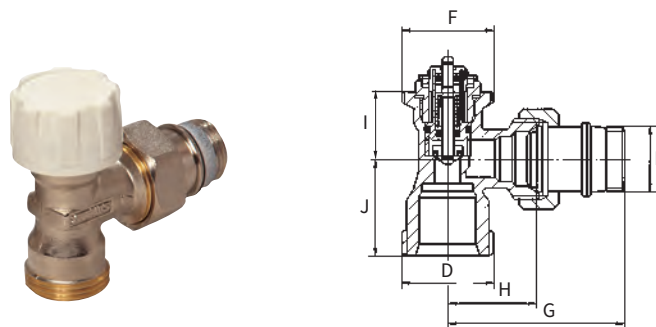
Type	No- minal dia- meter	Kvs [m³/h]	Connection			Dimensions [mm]					Article no.
			D (ET)	E	F	A	G	H	I		
TVU S721.12 - DN15*	DN 15	1.0	G 3/4" M	G 1/2" M	M 30 x 1.5	95	66	39	22	20	F34006


* Certified according to DIN EN 215



Thermostatic Valve Body - G 3/4" Euro Taper, Angle Shape

Thermostatic valve body for two-pipe heating systems, with continuous pre-adjustment, dimensions according to EN 215-D, protection cap white.



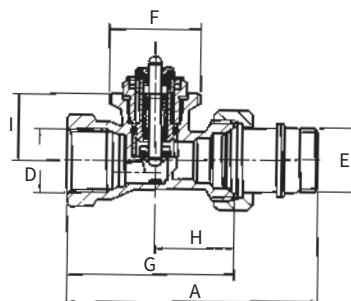
Type	No- minal dia- meter	Kvs [m³/h]	Connection			Dimensions [mm]					Article no.
			D (ET)	E	F	G	H	I	J		
TVU S722.12 - DN15*	DN 15	1.0	G 3/4" M	G 1/2" M	M 30 x 1.5	58	29	22	27.5	20	F34007


* Certified according to DIN EN 215



Thermostatic Valve Body - Short Design, Straight Shape

Thermostatic valve body for two-pipe heating systems, with continuous pre-adjustment, dimensions according to EN 215-F (French standard), protection cap white.

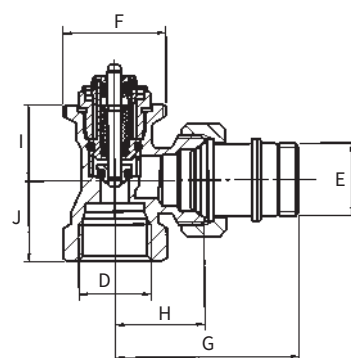



Type	No- minal dia- meter	Kvs [m³/h]	Connection			Dimensions [mm]					Article no.
			D	E	F	A	G	H	I		
TVU Fr721.11 - DN10*	DN 10		Rp 3/8"	G 1/2" M	M 30 x 1.5	75	50.0	24	22	20	F34009
TVU Fr721.11 - DN15*	DN 15		Rp 1/2"	G 1/2" M	M 30 x 1.5	83	55.0	26	22	20	F34011
TVU Fr721.11 - DN20*	DN 20		Rp 3/4"	G 3/4" M	M 30 x 1.5	97	65.5	30	22	20	F34013



Thermostatic Valve Body - Short Design, Angle Shape

Thermostatic valve body for two-pipe heating systems, with continuous pre-adjustment, dimensions according to EN 215-F (French standard), protection cap white.



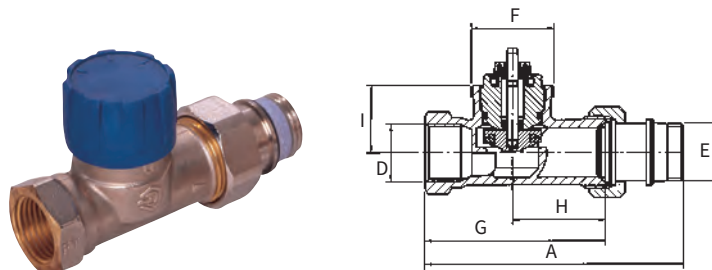
Type	No- minal dia- meter	Kvs [m³/h]	Connections			Dimensions [mm]					Article no.
			D	E	F	G	H	I	J		
TVU Fr722.11 - DN10*	DN 10		Rp 3/8"	G 1/2" M	M 30 x 1.5	49.0	24	22	20.5	20	F34010
TVU Fr722.11 - DN15*	DN 15		Rp 1/2"	G 1/2" M	M 30 x 1.5	54.0	26	22	23.5	20	F34012
TVU Fr722.11 - DN20*	DN 20		Rp 3/4"	G 3/4" M	M 30 x 1.5	61.5	30	22	26.0	20	F34014


* Certified according to DIN EN 215



Thermostatic Valve Body - With Extended Flow Coefficient, Straight Shape

Thermostatic valve body for two-pipe heating systems, without pre-adjustment, with extended flow coefficient, dimensions according to EN 215-D, protection cap blue.

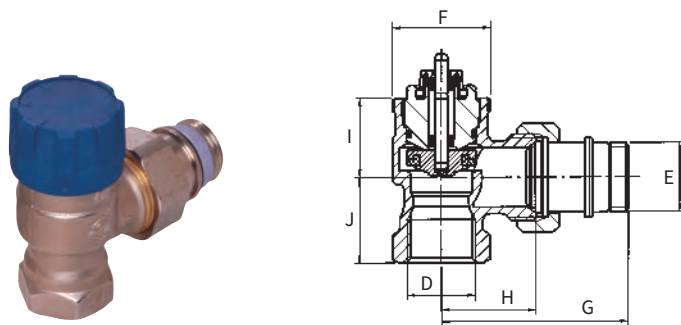



Type	No- minal dia- meter	Kvs [m³/h]	Connection			Dimensions [mm]					Article no.
			D	E	F	A	G	H	I		
TVU S721.51 - DN15	DN 15	2.7	Rp 1/2"	G 1/2" M	M 30 x 1.5	95	66	29	22	20	F34020
TVU S721.51 - DN20	DN 20	3.1	Rp 3/4"	G 3/4" M	M 30 x 1.5	105	74	34	22	20	F34021



Thermostatic Valve Body - With Extended Flow Coefficient, Angle Shape

Thermostatic valve body for two-pipe heating systems, without pre-adjustment, with extended flow coefficient, dimensions according to EN 215-D, protection cap blue.

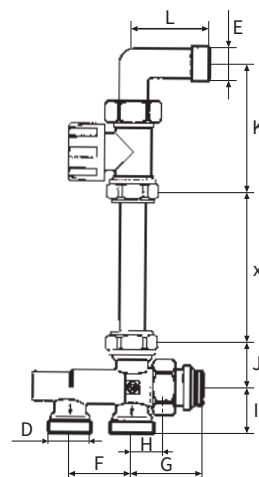



Type	No- minal dia- meter	Kvs [m³/h]	Connection			Dimensions [mm]					Article no.
			D	E	F	G	H	I	J		
TVU S722.51 - DN15	DN 15	2.7	Rp 1/2"	G 1/2" M	M 30 x 1.5	58	29	22	27.5	20	F34022
TVU S722.51 - DN20	DN 20	3.1	Rp 3/4"	G 3/4" M	M 30 x 1.5	65	34	22	29.0	20	F34023



Two-pipe Connection Set with Straight-way Valve

Consisting of: 90° elbow, thermostatic valve straight shape, without pre-adjustment, connection thread to the thermostatic head M 30 × 1.5, clamping ring screw union 15 mm, two-pipe connector (lockable and presettable), max. operating temperature: 110 °C, max. operating pressure: 10 bar.

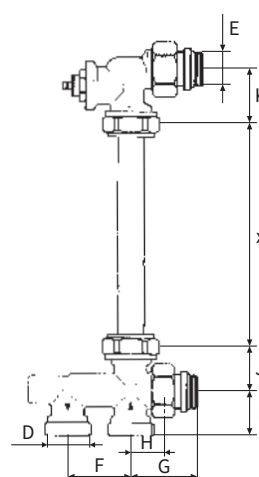



Type	No- minal diameter	Connection		Dimensions [mm]								Article no.
		D (ET)	E	F	G	H	I	J	K	L		
TVU-Set 2-P D	DN 15	G 3/4" M	G 1/2" M	36.5	42	19.5	28	25.5	75.5	45	1	F34150



Two-pipe Connection Set with Axial Valve

Consisting of: Thermostatic valve axial shape, without pre-adjustment, connection thread to the thermostatic head M 30 × 1.5, clamping ring screw union 15 mm, two-pipe connector (lockable and presettable), max. operating temperature: 110 °C, max. operating pressure: 10 bar.

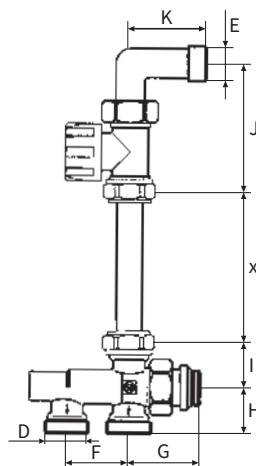


Type	Nominal diameter	Connection		Dimensions [mm]								Article no.
		D (ET)	E	F	G	H	I	J	K			
TVU-Set 2-P A	DN 15	G 3/4" M	G 1/2" M	36.5	42	19.5	28	25.5	33.5		1	F34151



One-pipe Connection Set with Straight-way Valve

Consisting of: 90° elbow, thermostatic valve straight shape, without pre-adjustment, with extended flow coefficient, connection thread to the thermostatic head M 30 × 1.5, clamping ring screw union 15 mm, one-pipe connector (lockable), max. operating temperature: 110 °C, max. operating pressure: 10 bar.



Type	Nominal diameter	Connection		Dimensions [mm]							Article no.
		D (ET)	E	F	G	H	I	J	K		
TVU-Set 1-P D	DN 15	G 3/4" M	G 1/2" M	36.5	42	28	25.5	75.5	45	1	F34152



Precision Steel Pipe




DIN 2391

Type	Diameter [mm]	Length [mm]		Article no.
Pipe - 15x600	15	600	30	F34154
Pipe - 15x1100	15	1100	30	F34156

Thermostatic Valve Adapter




For conversion of manual regulator valves according to TGL 25 877 to thermostatic regulation (thermostatic head connection M 33 x 2).

Type	Nominal diameter	Connection			Article no.
		to TH head	to valve		
Adapter 72.1 - DN15	DN 15	M 33 x 2	M 22 x1.5	30	F34164
Adapter 72.1 - DN20	DN 20	M 33 x 2	G 3/4" M	25	F34165
Adapter 72.1 - DN25	DN 25	M 33 x 2	G 1" M	15	F34166

Eccentric Connection




For radiator connections, for compensating boss spacing differences up to 5 mm per radiator.

Type	Nominal diameter		Article no.
Eccentric Connection	DN 15	20	F34158

Disassembly Device



For changing the internal parts of thermostatic valve bodies with connection thread M 30 x 1.5 at operating pressure in the system.

Type	Connection thread		Article no.
Disassembly 769	M 30 x 1.5	1	F34167

Connection Element

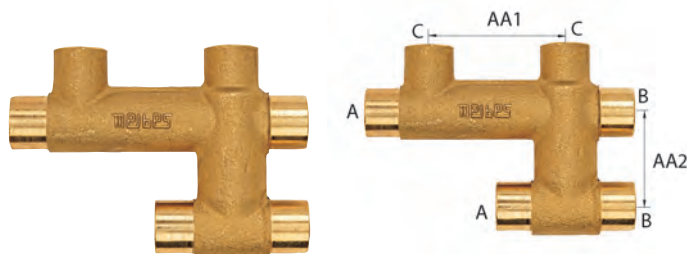



Between pipe crossing fittings and radiator valve - specially suited to connection to valve radiators. Elbows made of copper pipe for soldered or plug connections.

Type	Dimensions [mm]	Leg length [mm]		Article no.
Soldering Elbow 15mm	15 x 1	65 x 100	1	F34159

Double Crossing Pieces

Suitable for compact radiators, types RA 4 HZ and RA 5 HZ HZ also for standard pipe clips.

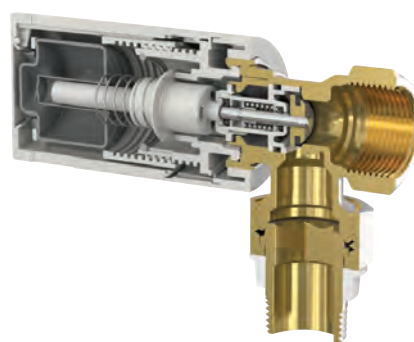


Type	Free access [mm]	Connection [mm]			Axial distance [mm]			Article no.
		A	B	C	AA 1	AA 2		
Crossing Piece RA 4 HZ	15	15	15	15	50	35	1	F34162
Crossing Piece RA 5 HZ	18	18	18	15	50	35	1	F34163
Crossing Piece RA 5	18	18	18	15	50	30	1	F34161



THERMOSTATIC HEADS

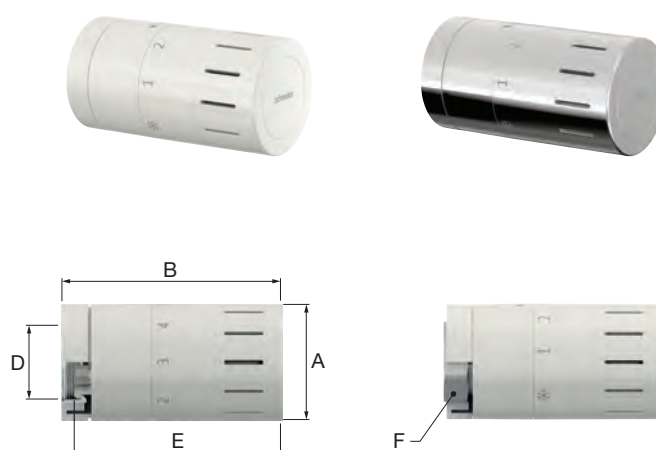
- Setpoint value range: 7 - 28 °C
- With zero position
- Position 3: about 20 °C
- Frost protection: about 7 °C
- Thermostatic heads with threaded connection M 30 x 1.5 tested according to DIN EN 215




Design Thermostatic Head TC-D1

Thermostatic head in a modern design with high level of installation convenience, with threaded connection M 30 x 1.5 or clamping connection, built-in fluid sensor, concealed threaded nut, white model classified according to "TELL-Thermostatic Efficiency-Label". Non-rising spindle, so the length of the head does not change when actuated.

- Consistently homogeneous smooth surface makes the TC-D1 particularly user-friendly
- The desired temperature can be set via one-hand operation on the thermostat



Type	Version	Connection (D)	Dimensions [mm]					Article no.
			A (Ø)	B	E	F (WS)		
TK TC-D1 M30 x 1,5 - W	white*	M 30 x 1.5	46.3	88.0	84	32	10	F35320
TK TC-D1 M30 x 1,5 - C	chromed	M 30 x 1.5	46.3	88.0	84	32	10	F35321
TK TC-D1 KL - W	white*	clamping	46.3	96.3	-	-	10	F35322
TK TC-D1 KL - C	chromed	clamping	46.3	96.3	-	-	10	F35323


* similar to RAL 9016



Exclusive Thermostatic Head TC-E1

Thermostatic head with threaded connection M 30 x 1.5 or clamping connection, built-in fluid sensor, slide for setting the desired temperature, white model classified according to "TELL-Thermostatic Efficiency-Label". Non-rising spindle, so the length of the head does not change when actuated.



Type	Version	Connection (D)	Dimensions [mm]						Article no.
			A (Ø)	B	E (WS)	F	G (Ø)		
TK TC-E1 M30 x 1,5 - W	white*	M 30 x 1.5	59	86	32	81	46	10	F35330
TK TC-E1 M30 x 1,5 - C	chromed	M 30 x 1.5	59	86	32	81	46	10	F35331
TK TC-E1 KL - W	white*	clamping	59	94	-	-	46	10	F35332
TK TC-E1 KL - C	chromed	clamping	59	94	-	-	46	10	F35333


* similar to RAL 9016



Standard Thermostatic Head TC-S3

Thermostatic head in compact and robust design, with threaded connection M 30 x 1.5 or clamping connection, built-in fluid sensor, blocking and/or limitation of the adjustment range is simple and can be done on-site, white model classified according to "TELL-Thermostatic Efficiency-Label". Rising spindle, so the length of the head changes when actuated.



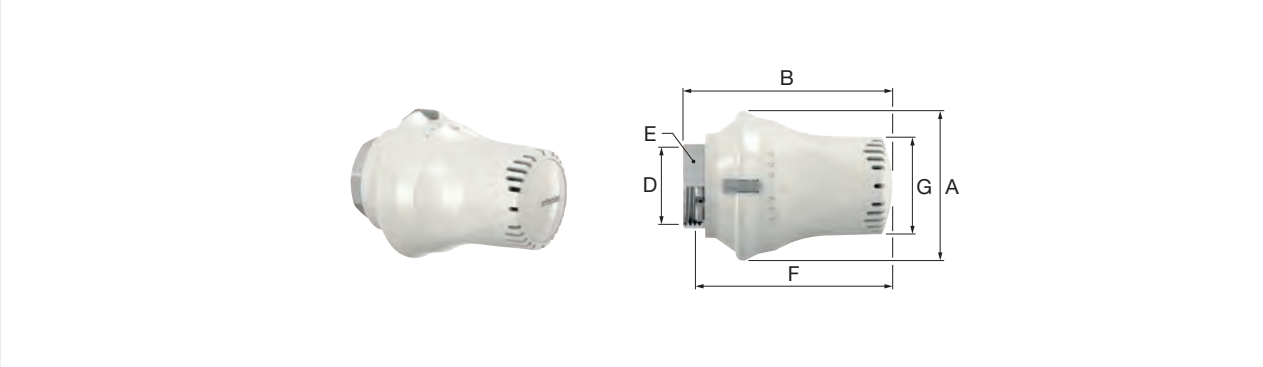
Type	Version	Connection (D)	Dimensions [mm]							Article no.
			A (Ø)	B ²	E (WS)	F ¹	F ²	G (Ø)		
TK TC-S3 M30 x 1,5 - W	white*	M 30 x 1.5	46.9	90	32	79	85	37.5	10	F35340
TK TC-S3 M30 x 1,5 - C	chromed	M 30 x 1.5	46.9	90	32	79	85	37.5	10	F35341
TK TC-S3 KL - W	white*	clamping	46.9	98	-	-	-	37.5	10	F35342
TK TC-S3 KL - C	chromed	clamping	46.9	98	-	-	-	37.5	10	F35343


¹ at position 0, ² at position 5, * similar to RAL 9016



Standard Thermostatic Head TC-S4

Thermostatic head with threaded connection M 30 x 1.5 or clamping connection and built-in fluid sensor, consistently homogeneous smooth surface, easy to operate and functionally reliable angle-of-rotation limiter, classified according to “TELL-Thermostatic Efficiency-Label”. Rising spindle, so the length of the head changes when actuated.



Type	Version	Con- nec- tion (D)	Dimensions [mm]							Article no.
			A (Ø)	B ²	E (WS)	F ¹	F ²	G (Ø)		
TK TC-S4 M30 x 1,5 - W	white*	M 30 x 1.5	60	91	32	77	83	39	10	F35309
TK TC-S4 KL - W	white*	clamping	60	97	-	-	-	39	10	F35310

¹ at position 0, ² at position 5, * similar to RAL 9016



RADIATOR LOCKSHIELD VALVES AND ACCESSORIES

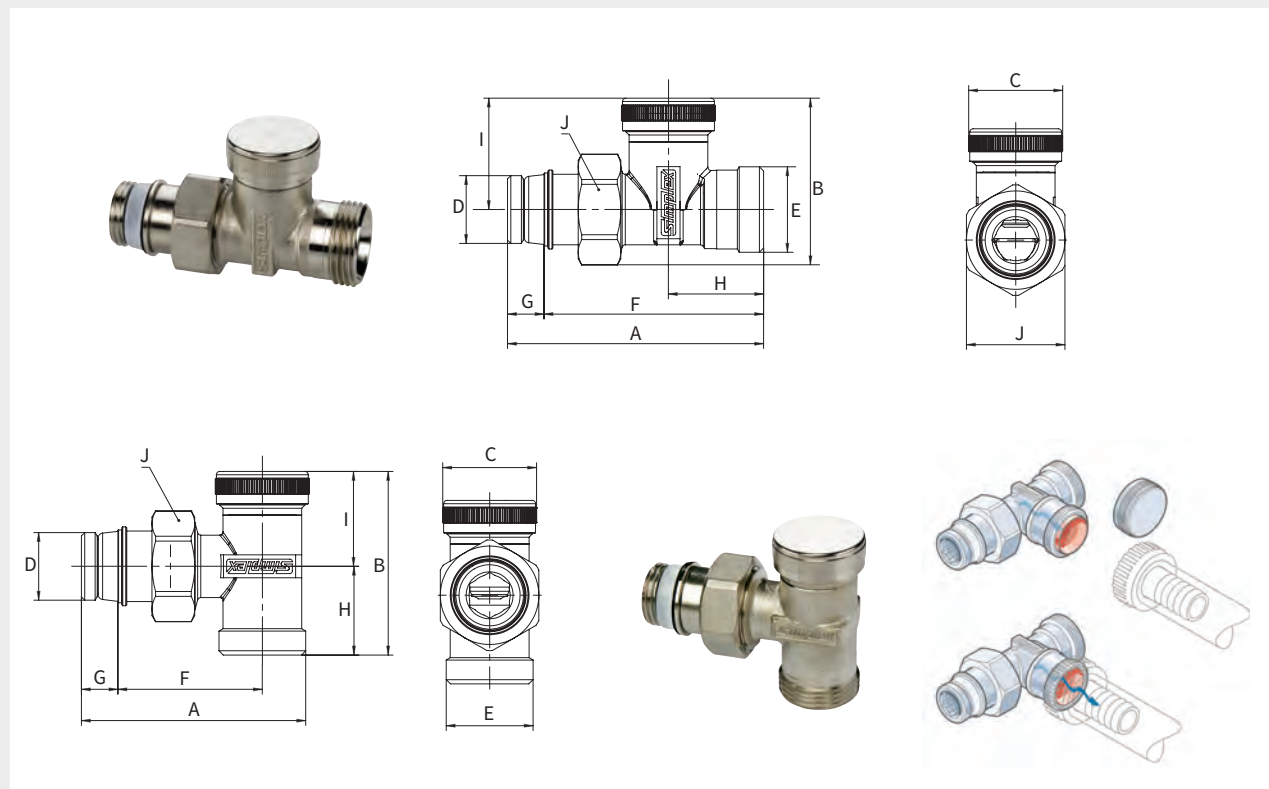
Radiator Lockshield Valve M with Drain and Male Thread

Shut-off and adjustable lockshield valve for use in heating systems, self-sealing with special thread seal, draining or filling without adapter by simply attaching a standard hose connection.

With G 3/4" M (Euro taper) for copper, carbon steel, stainless steel, plastic or multilayer composite pipes using a compression adapter.

- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

→ **Matching compression adapters available!**



Type	Version	Connection			Article no.
		D	E (ET)		
RV AG/M-D - 1/2 x 3/4	straight	G 1/2" M	G 3/4" M	10/50	F11910
RV AG/M-E - 1/2 x 3/4	angle	G 1/2" M	G 3/4" M	10/50	F11911



Dimensions

Type	Dimensions [mm]							
	A	B	C	F	G	H	I	J (WS)
RV AG/M-D - 1/2 x 3/4	78.0	50.7	29	67	11	29	34	30
RV AG/M-E - 1/2 x 3/4	68.3	56.0	29	44	11	27	29	30

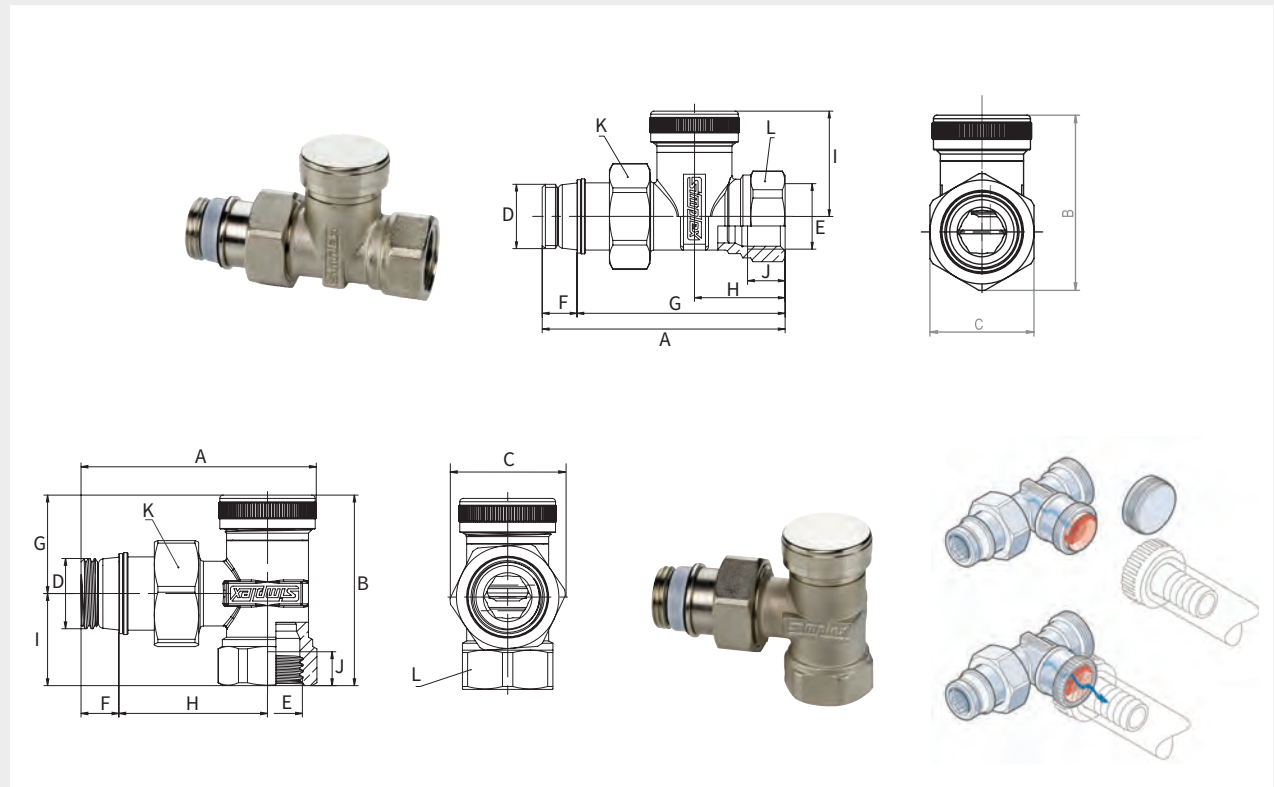
Radiator Lockshield Valve M with Drain and Female Thread


Shut-off and adjustable lockshield valve for use in heating systems, self-sealing with special thread seal, draining or filling without adapter by simply attaching a standard hose connection.

With female thread for threaded pipes or copper and steel pipes using a Simplex compression fitting and support sleeve.

- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

→ **Matching support sleeves available!**



Type	Version	Connection			Article no.
		D	E		
RV IG/M-D - 3/8 x 3/8	straight	G 3/8" M	Rp 3/8"	10/50	F11901
RV IG/M-D - 1/2 x 1/2	straight	G 1/2" M	Rp 1/2"	10/50	F11903
RV IG/M-E - 3/8 x 3/8	angle	G 3/8" M	Rp 3/8"	10/50	F11905
RV IG/M-E - 1/2 x 1/2	angle	G 1/2" M	Rp 1/2"	10/50	F11907



Dimensions

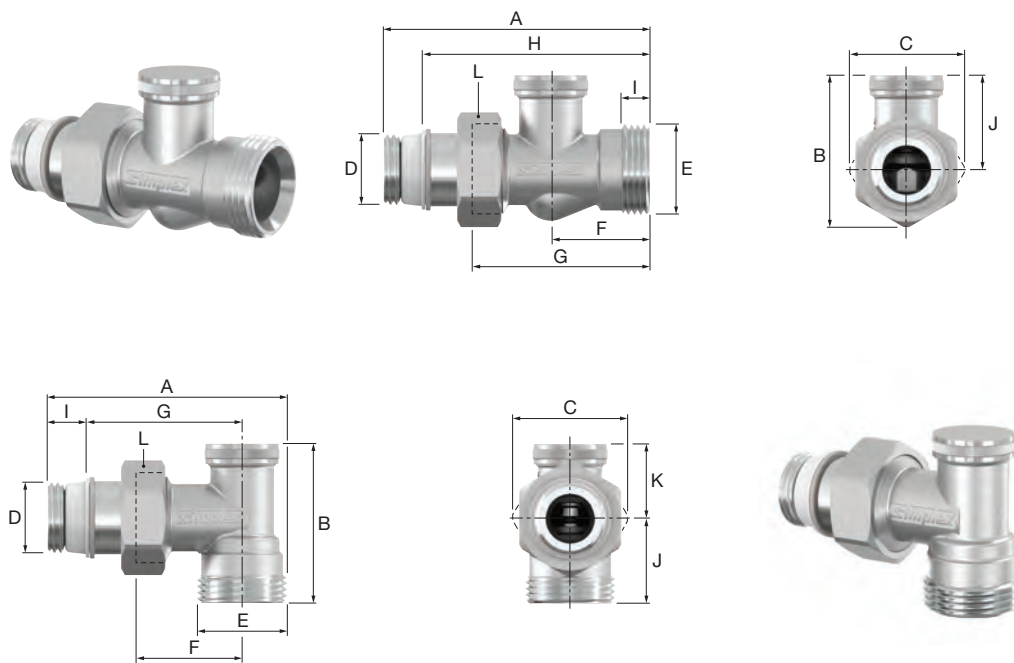
Type	Dimensions [mm]									
	A	B	C	F	G	H	I	J	K (WS)	L (WS)
RV IG/M-D - 3/8 x 3/8	78	50.5	30	11.0	67	29.0	34	12	30	27
RV IG/M-D - 1/2 x 1/2	78	55.5	30	11.0	67	29.0	34	12	30	27
RV IG/M-E - 3/8 x 3/8	64	52.0	30	9.5	29	41.5	23	10	27	22
RV IG/M-E - 1/2 x 1/2	69	56.0	34	11.0	29	43.6	27	10	30	27

Radiator Lockshield Valve N with Male Thread

Regelbare radiatorkoppeling voor gebruik in warmwater-verwarmingssystemen, zelfdichtend met speciale schroefdraadafdichting. Met G 3/4" M (Euro-conus) voor koper-, C-staal, roestvrijstalen, kunststof- of meerlagige composietbuizen met knelfittingen.

- Onderdelen vervaardigd uit vernikkeld messing
- Afdichtingsmaterialen: EPDM
- Max. bedrijfstemp.: 110 °C permanente temperatuur, 130 °C kortstondig
- Max. bedrijfsdruk: 10 bar

→ **Passende knelfittingen beschikbaar!**



Type	Version	Connection			Article no.
		D	E (ET)		
RV AG/N-D - 1/2 x 3/4	straight	G 1/2" M	G 3/4" M	10/50	F10374
RV AG/N-E - 1/2 x 3/4	angle	G 1/2" M	G 3/4" M	10/50	F10375



Dimensions

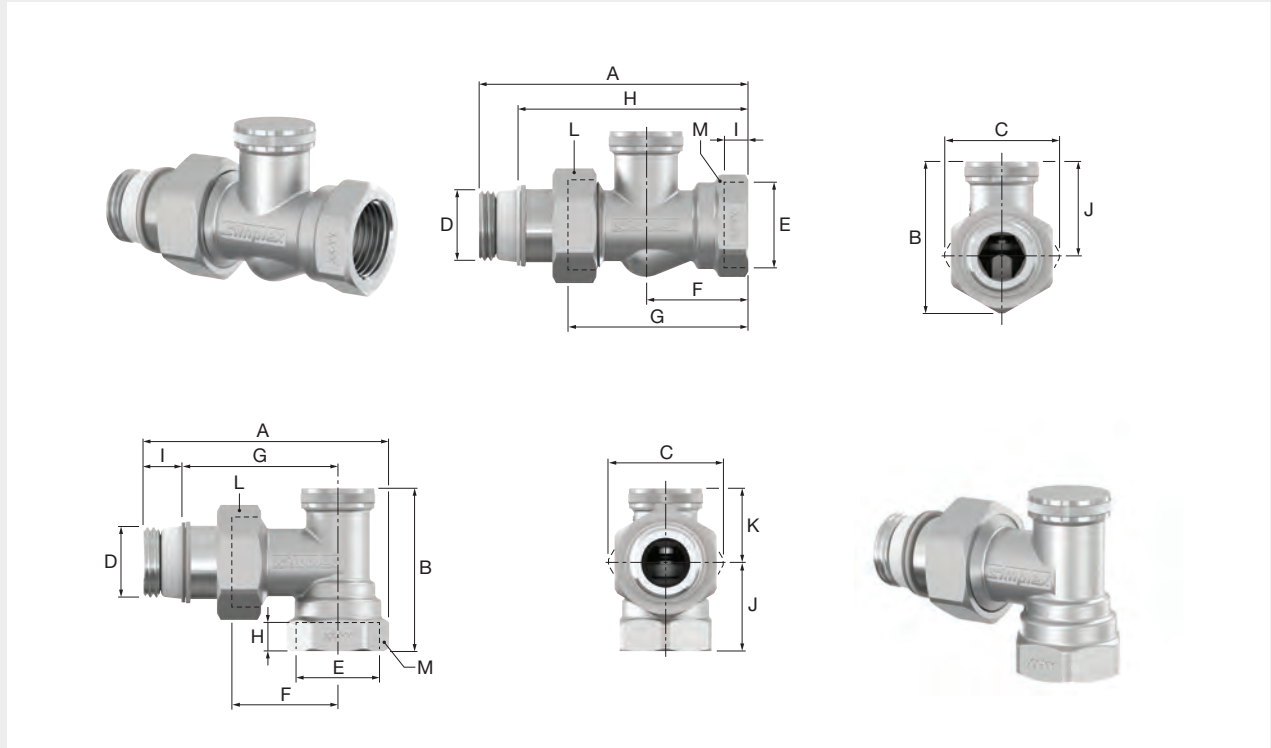
Type	Dimensions [mm]									
	A	B	C	F	G	H	I	J	K	L (WS)
RV AG/N-D - 1/2 x 3/4	78.7	44.6	33.7	29	50.0	67.6	7.5	27.7	-	30
RV AG/N-E - 1/2 x 3/4	70.9	46.7	33.7	29	46.6	-	11.1	25.0	21.7	30


Radiator Lockshield Valve N with Female Thread

Shut-off and adjustable lockshield valve for use in heating systems, self-sealing with special thread seal.
With female thread for threaded pipes or copper and steel pipes using a Simplex compression adapter and support sleeve.

- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

→ **Matching support sleeves available!**



Type	Version	Connection			Article no.
		D	E		
RV IG/N-D - 3/8 x 3/8	straight	G 3/8" M	Rp 3/8"	10/50	F10376
RV IG/N-D - 1/2 x 1/2	straight	G 1/2" M	Rp 1/2"	10/50	F10378
RV IG/N-D - 3/4 x 3/4	straight	G 3/4" M	Rp 3/4"	10/50	F10379
RV IG/N-E - 3/8 x 3/8	angle	G 3/8" M	Rp 3/8"	10/50	F10380
RV IG/N-E - 1/2 x 1/2	angle	G 1/2" M	Rp 1/2"	10/50	F10382
RV IG/N-E - 3/4 x 3/4	angle	G 3/4" M	Rp 3/4"	10/50	F10383



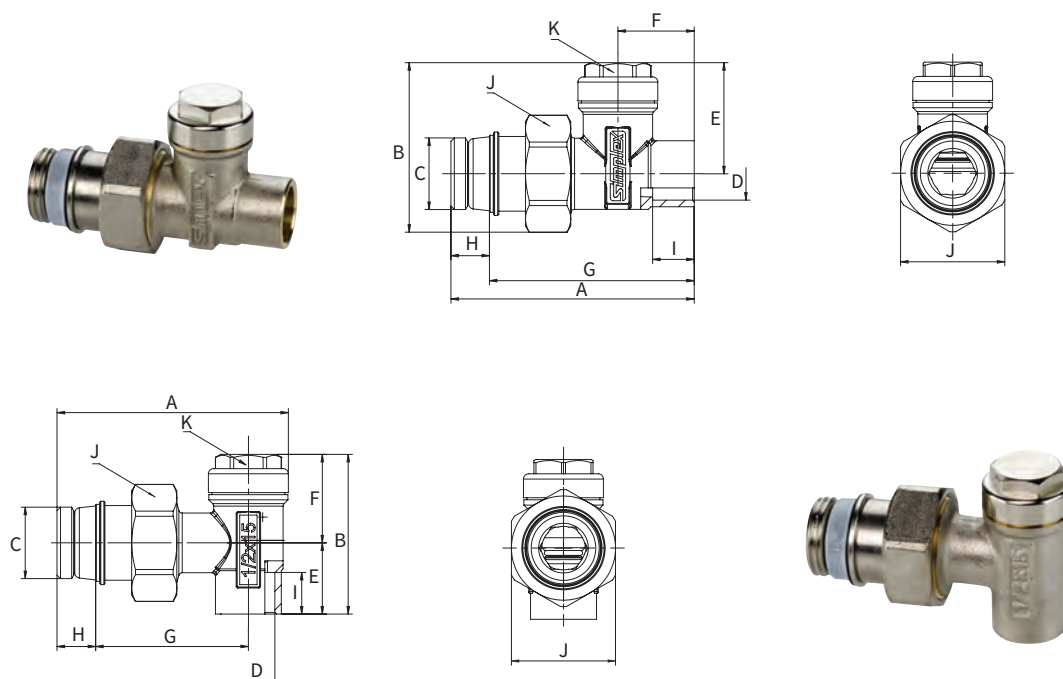
Dimensions

Type	Dimensions [mm]										
	A	B	C	F	G	H	I	J	K	L (WS)	M (WS)
RV IG/N-D - 3/8 x 3/8	74.7	42.2	29.0	24.0	49.0	66.3	10.1	27.7	-	26	22
RV IG/N-D - 1/2 x 1/2	79.7	44.6	33.7	30.0	51.0	68.6	13.2	27.7	-	30	27
RV IG/N-D - 3/4 x 3/4	91.6	47.8	40.2	30.0	59.0	81.2	14.5	27.7	-	37	32
RV IG/N-E - 3/8 x 3/8	64.0	43.7	29.0	26.0	43.3	10.1	8.4	22.0	21.7	26	22
RV IG/N-E - 1/2 x 1/2	72.8	47.7	33.7	29.0	46.6	13.2	11.1	26.0	21.7	30	27
RV IG/N-E - 3/4 x 3/4	84.5	52.2	40.2	34.0	56.2	14.5	10.4	29.5	22.7	37	32

Radiator Lockshield Valve L for Soldering

Shut-off and adjustable lockshield valve for use in heating systems, self-sealing with special thread seal.

- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



Type	Version	Connection			Article no.
		C	D (Ø) [mm]		
RV L-D - 1/2 x 15	straight	G 1/2" M	15	10/50	F11756
RV L-E - 1/2 x 15	angle	G 1/2" M	15	10/50	F11766



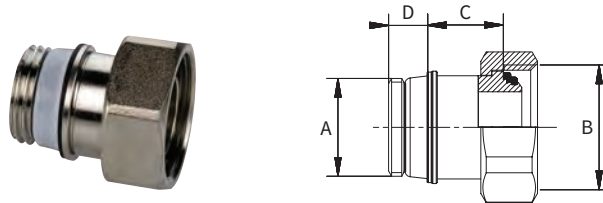
Dimensions


Type	Dimensions [mm]								
	A	B	E	F	G	H	I	J (WS)	K (WS)
RV L-D - 1/2 x 15	70.1	49	32.0	22.0	59	11	12	30	17
RV L-E - 1/2 x 15	66.6	46	20.5	26.5	44	11	12	30	17

Threaded Connection with Euro Taper

Threaded Connection for use in heating systems, self-sealing with special thread seal, taper elastically sealed.

- Components made of brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



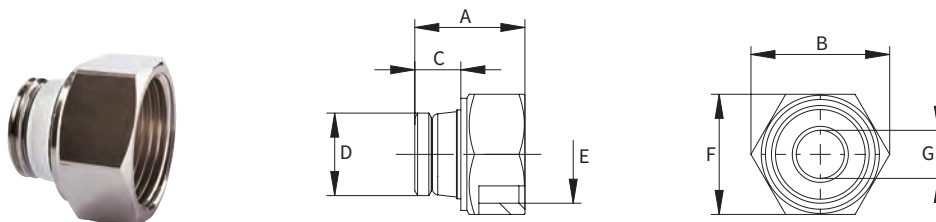
Type	Version	Connection		Dimensions [mm]			Article no.
		A	B (ET)	C	D		
Conn. ET Ni - 3/8 x 5/8	nickel-plated	G 3/8" M	G 5/8" F	16	9	25/200	F10316
Conn. ET Ni - 1/2 x 5/8	nickel-plated	G 1/2" M	G 5/8" F	14	11	25/200	F10317
Conn. ET bl. - 1/2 x 3/4	blank	G 1/2" M	G 3/4" F	16	11	25/100	F10314
Conn. ET Ni - 1/2 x 3/4	nickel-plated	G 1/2" M	G 3/4" F	16	11	25/200	F10318
Conn. ET bl. - 3/4 x 1	blank	G 3/4" M	G 1" F	15	11	10/100	F10315
Conn. ET Ni - 3/4 x 1	nickel-plated	G 3/4" M	G 1" F	20	11	10/100	F10319




Extension Plug

Extension plug for use in heating systems, self-sealing with special thread seal.

- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



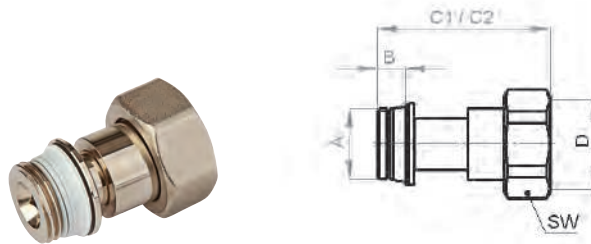
Type	Connection		Dimensions [mm]						Article no.
	D	E	A	B	C	F (WS)	G		
Extension Plug	G 1/2" M	G 3/4" F	28	35	12	30	12	25	F10822




Compensation Fitting for Radiator Connection

Sleeve for length compensation up to 20 mm, with union nut, self-sealing with special thread seal.

- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



Type	Connection		Dimensions [mm]			Telescope Displacement [mm]		Article no.
	A	D*	B	C1	C2			
Compensation - 1/2 x 3/4	G 1/2" M	G 3/4" F	10	40	59	4-20	10	F10511
Compensation - 3/4 x 1	G 3/4" M	G 1" F	10	44	63	0-20	10	F10512
Compensation - 1 x 1 1/4	G 1" M	G 1 1/4" F	14	50	69	0-20	10	F10513

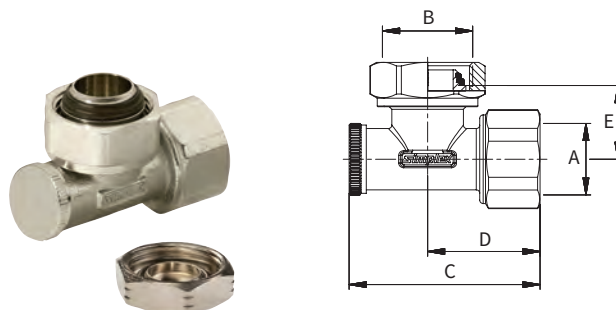
* Seal: F10511 with Euro taper, F10512 with cone, F10513 with flat seal.




DIN Adapter

Adapter for replacing DIN radiators with flat radiators with connections on bottom left or right, with shut-off, including additional blind cap G 3/4" F.

- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



Type	Connection		Dimensions [mm]				Article no.
	A	B (ET)	C	D	E		
DIN Adapter	G 1/2" F	G 3/4" M	56	33	22	1	F10550

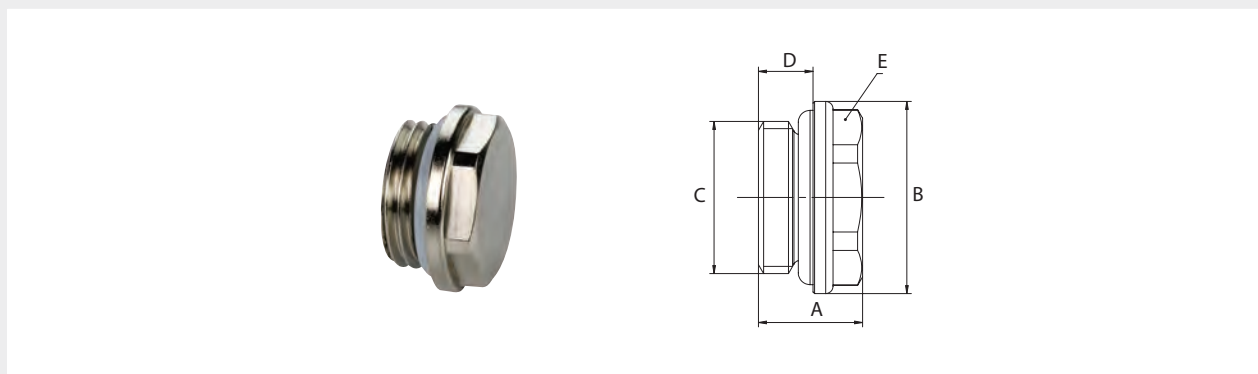



BLIND PLUGS

- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

STANDARD Blind Plug

Radiator plug with O-ring seal.

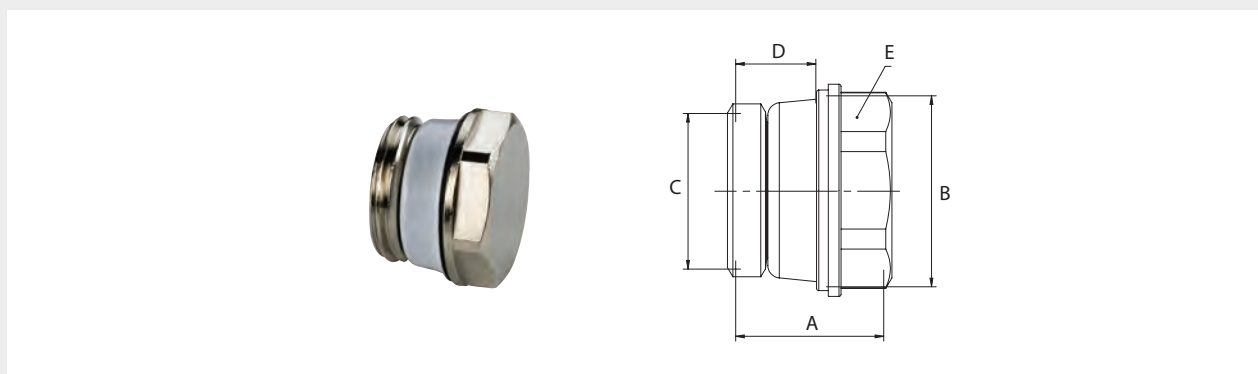



Type	Connection (C)	Dimensions [mm]					Article no.
		A	B	D	E (WS)		
BS - 3/8	G 3/8" M	13.5	26	7.4	17	10/100	F10702
BS - 1/2	G 1/2" M	14.0	26	7.4	22	10/100	F10703



EXCLUSIV Blind Plug

Radiator plug self-sealing with special thread seal.



Type	Connection (C)	Dimensions [mm]					Article no.
		A	B	D	E (WS)		
BS EXCLUSIV - 3/8	G 3/8" M	15.5	20	8.4	17	10/100	F10802
BS EXCLUSIV - 1/2	G 1/2" M	17.5	25	10.4	27	10/100	F10803
BS EXCLUSIV - 3/4	G 3/4" M	17.7	30	10.4	27	10/100	F10804

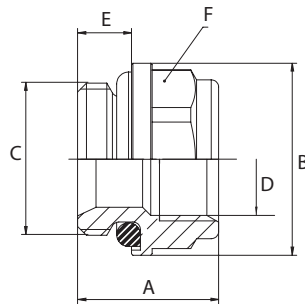



REDUCING PLUGS

- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

STANDARD Reducing Plug

Radiator plug with O-ring seal.

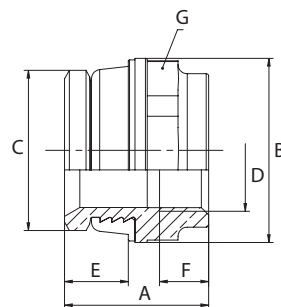



Type	Connection		Dimensions [mm]					Article no.
	C	D	A	B	E	F (WS)		
RS - 1/2 x 3/8	G 1/2" M	G 3/8" F	19	26	7.3	22	10/100	F10705



EXCLUSIV Reducing Plug

Radiator plug self-sealing with special thread seal.



Type	Connection		Dimensions [mm]						Article no.
	C	D	A	B	E	F	G (WS)		
RS EXCLUSIV - 1/2 x 1/8	G 1/2" M	G 1/8" F	20.5	25	10.4	10.0	22	10/100	F10805
RS EXCLUSIV - 1/2 x 3/8	G 1/2" M	G 3/8" F	23.5	25	11.5	8.5	22	10/100	F10807
RS EXCLUSIV - 3/4 x 3/8	G 3/4" M	G 3/8" F	17.9	30	11.5	16.0	27	10/100	F10808
RS EXCLUSIV - 3/4 x 1/2	G 3/4" M	G 1/2" F	23.5	30	10.4	8.0	27	10/100	F10809

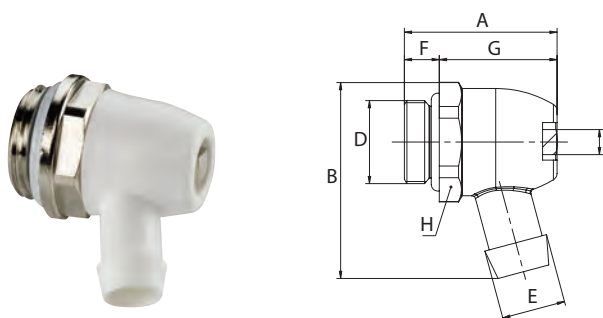



DRAIN PLUGS

- Components made of nickel-plated brass, partly with plastic (version STANDARD I)
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

STANDARD I Drain Plug with Swivelling Outlet in Plastic

Drain plug for radiators, outlet sleeve for plastic hose, with O-ring seal.

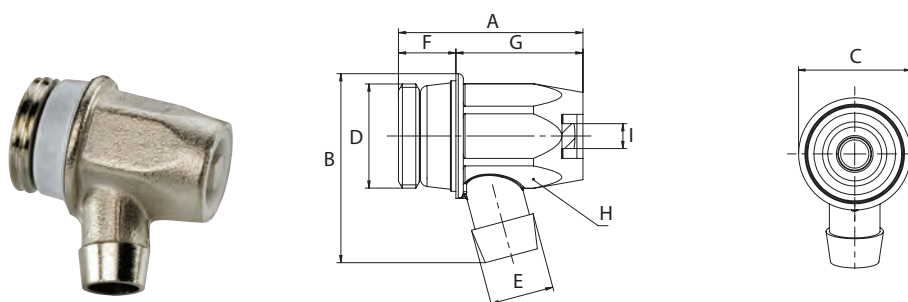



Type	Connection (D)	Dimensions [mm]									Article no.
		A	B	C	E (Ø)	F	G	H (WS)	I (WS)		
ES-I - 3/8	G 3/8" M	31.0	39.5	22	13	7.0	24.0	22	5	10/100	F10623
ES-I - 1/2	G 1/2" M	33.5	40.5	26	13	7.3	26.5	22	5	10/100	F10622



EXCLUSIV S Drain Plug in Metal with Outlet

Drain plug for radiators, outlet sleeve for plastic hose, self-sealing with special thread seal.

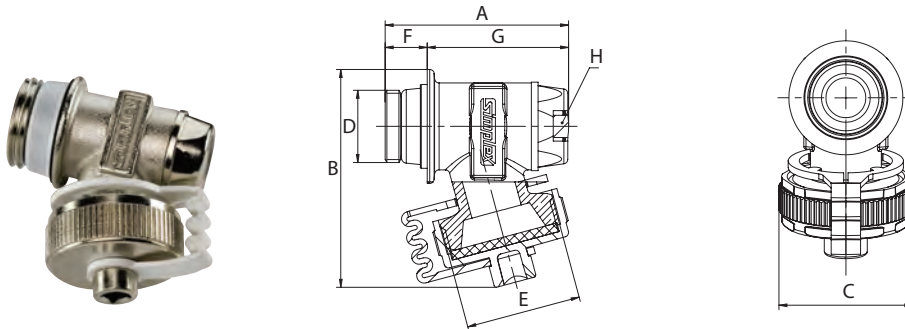



Type	Connection (D)	Dimensions [mm]									Article no.
		A	B	C	E (Ø)	F	G	H (WS)	I (WS)		
ES-S EXCLUSIV - 1/2	G 1/2" M	37	38	25	13	11.5	25.5	20	5	10/100	F10604



EXCLUSIV R Drain Plug in Metal with Hose Connection

Drain plug for radiators, blanking cap serves as operating key, self-sealing with special thread seal.

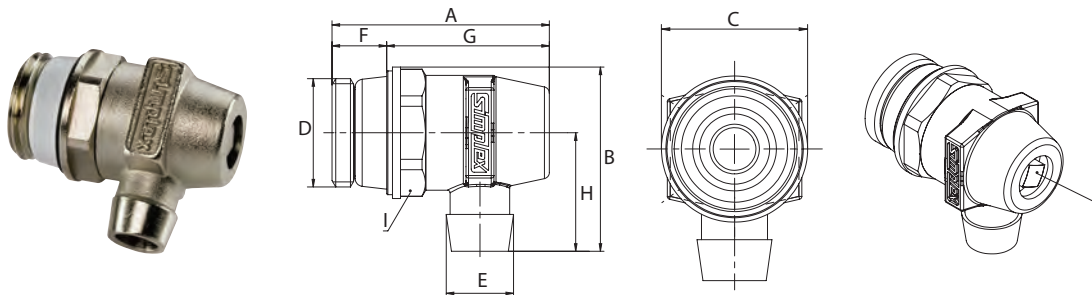



Type	Connection		Dimensions [mm]							Article no.
	D	E	A	B	C	F	G	H (WS)		
ES-R EXCLUSIV - 3/8 x 3/4	G 3/8" M	G 3/4" M	41.5	50	30.5	9.5	32.0	5	10/100	F10601
ES-R EXCLUSIV - 1/2 x 3/4	G 1/2" M	G 3/4" M	43.2	48	30.5	11.5	31.7	5	10/100	F10602



EXCLUSIV N Drain Plug with Swivelling Outlet in Metal

Drain plug for radiators, outlet sleeve for plastic hose, self-sealing with special thread seal.



Type	Connection (D)		Article no.
ES-N EXCLUSIV - 1/2	G 1/2" M	10/100	F10627

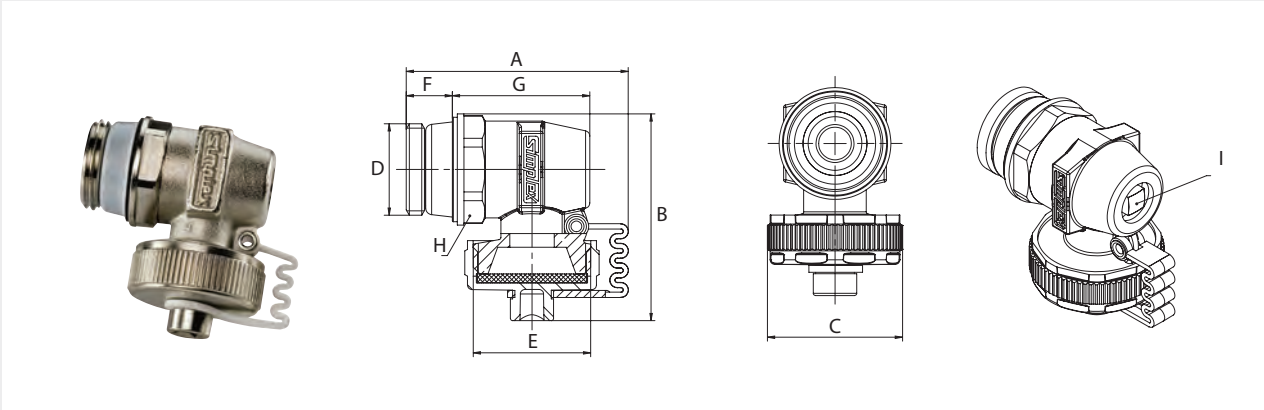



Dimensions

Type	Dimensions [mm]								
	A	B	C	E (Ø)	F	G	H	I (WS)	J (WS)
ES-N EXCLUSIV - 1/2	41.5	35	25	13	10.4	31.1	22.5	22	5

EXCLUSIV M Drain Plug with Swivelling Outlet in Metal with Hose Connection

Drain plug for radiators, blanking cap serves as operating key, self-sealing with special thread seal.



Type	Connection		Dimensions [mm]								Article no.
	D	E	A	B	C	F	G	H (WS)	I (WS)		
ES-M EXCLUSIV - 1/2 x 3/4	G 1/2" M	G 3/4" M	50	46.5	30.5	10.4	31	22	5	10/100	F10625

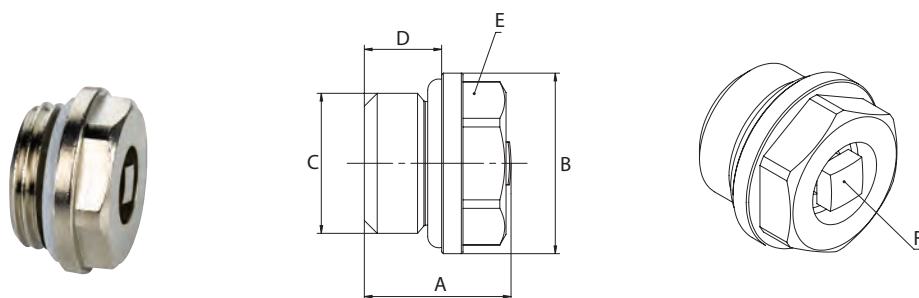



AIR PLUGS

- Components made of nickel-plated brass, partly with plastic (version STANDARD C)
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

STANDARD A Air Plug

Radiator plug with O-ring seal.

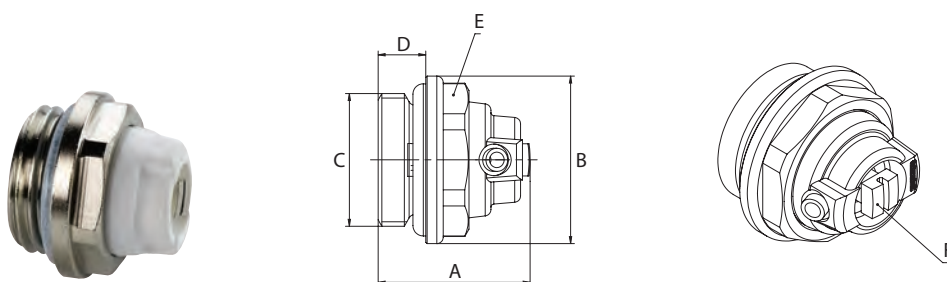



Type	Connection (C)	Dimensions [mm]							Article no.
		A	B	D	E (WS)	F (WS)			
LS-A - 3/8	G 3/8" M	16.5	21	9	17	5	10/100		F10710
LS-A - 1/2	G 1/2" M	16.3	26	8	22	5	10/100		F10711



STANDARD C Air Plug with Swivelling Outlet

Radiator plug with O-ring seal.

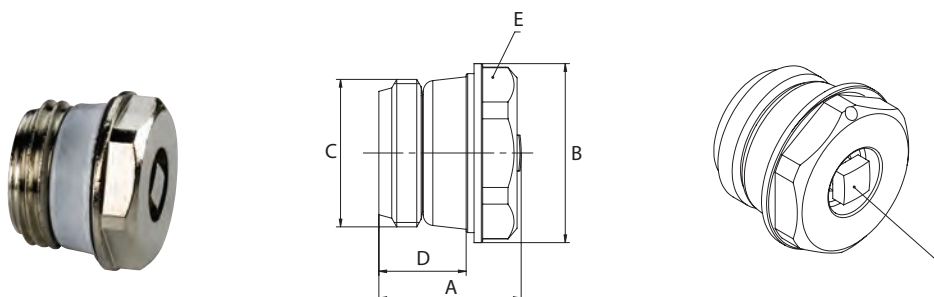



Type	Version	Connection (C)	Dimensions [mm]							Article no.
			A	B	D	E (WS)	F (WS)			
LS-C - 3/8	brass head	G 3/8" M	24	21	7.0	19	5	10/100		F10713
LS-C - 1/2	plastic head	G 1/2" M	25	26	7.4	22	5	10/100		F10714



EXCLUSIV A Air Plug

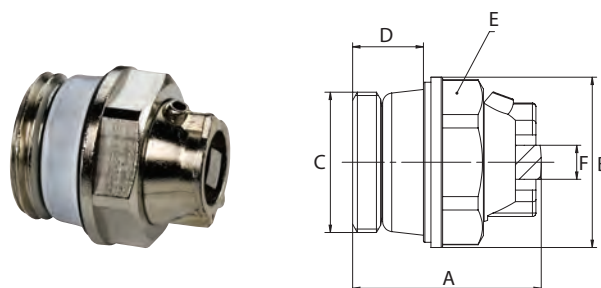
Radiator plug self-sealing with special thread seal.




Type	Connection (C)	Dimensions [mm]						Article no.
		A	B	D	E (WS)	F (WS)		
LS-A EXCLUSIV - 3/8	G 3/8" M	19.0	20	11.0	17	5	10/100	F10810
LS-A EXCLUSIV - 1/2	G 1/2" M	20.0	25	12.2	22	5	10/100	F10811
LS-A EXCLUSIV - 3/4	G 3/4" M	19.2	30	11.9	27	5	10/100	F10812

**EXCLUSIV C Air Plug with Swivelling Outlet in Metal**

Radiator plug self-sealing with special thread seal.



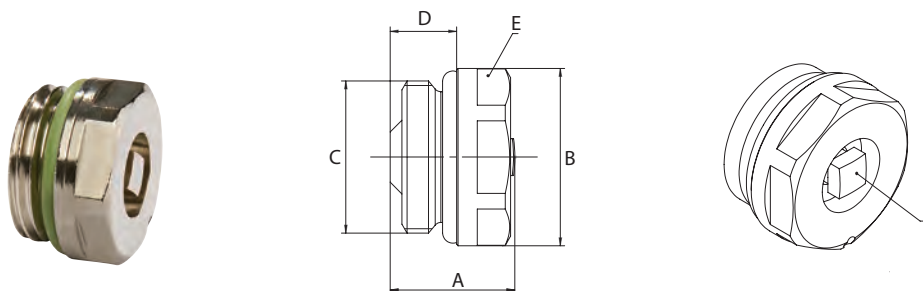
Type	Connection (C)	Dimensions [mm]						Article no.
		A	B	D	E (WS)	F (WS)		
LS-C EXCLUSIV - 3/8	G 3/8" M	25.5	21	8.4	19	5	10/100	F10813
LS-C EXCLUSIV - 1/2	G 1/2" M	28.0	25	10.4	22	5	10/100	F10814




Air Plug for Solar

Air plug for use in solar installations, heat-resistant FKM O-ring for water-glycol mixes up to 50%.

- Components made of nickel-plated brass
- Sealing materials: FKM
- Max. operating temperature: 180 °C permanent temperature, 200 °C short-term
- Max. operating pressure: 10 bar



Type	Connection (C)	Dimensions [mm]						Article no.
		A	B	D	E (WS)	F (WS)		
LS Solar - 1/2	G 1/2" M	17	24	9	22	5	50/250	F99099




Metal Ventilation Key

Square ventilation key for radiator plugs.

- Material: Nickel-plated metal



Type	Dimension [mm]		Article no.
Ventilation Key	5	100/1000	F11202

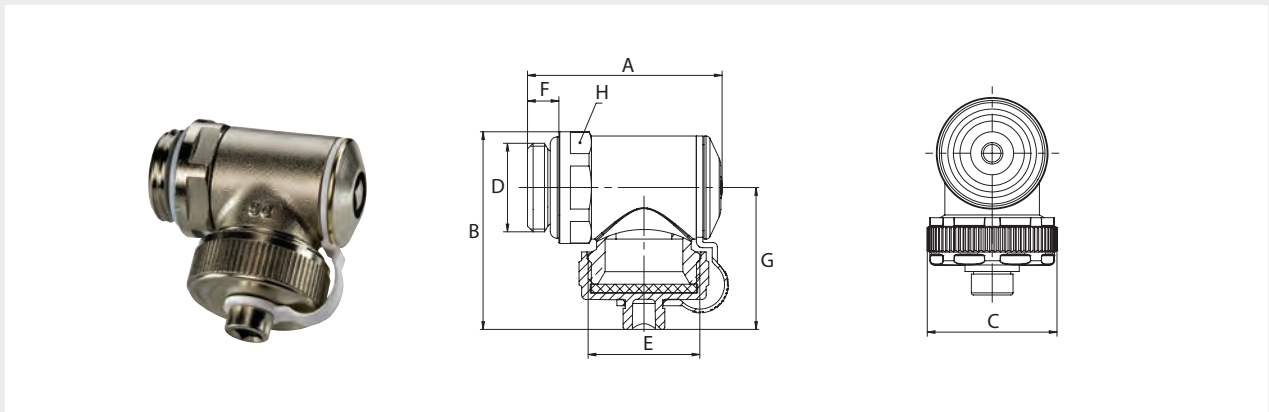



FILL AND DRAIN PLUGS

- Components made of brass, partly with plastic (version STANDARD V with plastic spout body)
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

STANDARD V Fill and Drain Plug, Spout Body in Metal

Fill and drain plug for radiators, blanking cap serves as operating key, with O-ring seal.

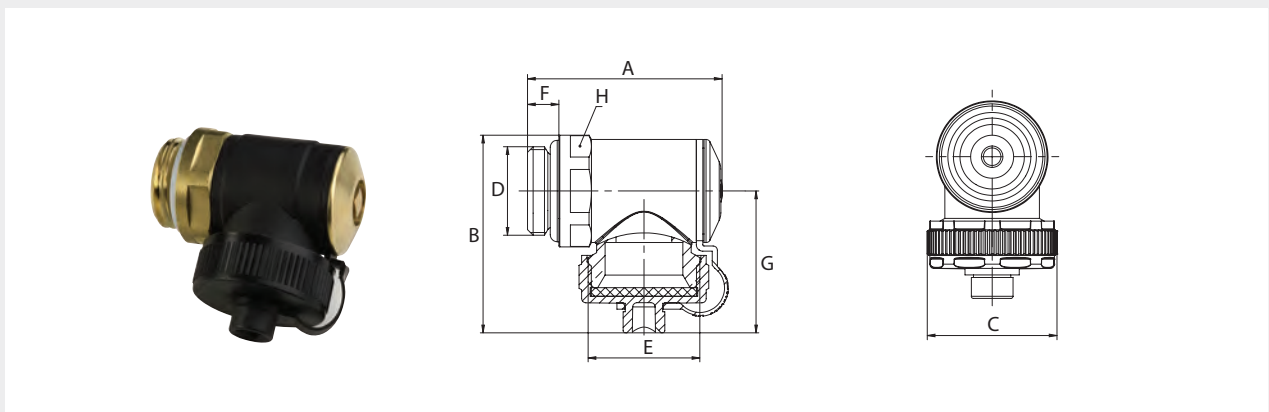



Type	Version	Connection		Dimensions [mm]							Article no.
		D	E	A	B	C	F	G	H (WS)		
FES-V bl. - 3/8 x 3/4	blank	G 3/8" M	G 3/4" M	43	46	30	7	33	24	10/100	F10605
FES-V Ni. - 3/8 x 3/4	nickel-plated	G 3/8" M	G 3/4" M	43	46	30	7	33	24	10/100	F10613
FES-V bl. - 1/2 x 3/4	blank	G 1/2" M	G 3/4" M	46	46	30	8	33	24	10/100	F10607
FES-V Ni. - 1/2 x 3/4	nickel-plated	G 1/2" M	G 3/4" M	46	46	30	8	33	24	10/100	F10608



STANDARD V Fill and Drain Plug, Spout Body in Plastic

Fill and drain plug for radiators, blanking cap serves as operating key, with O-ring seal.

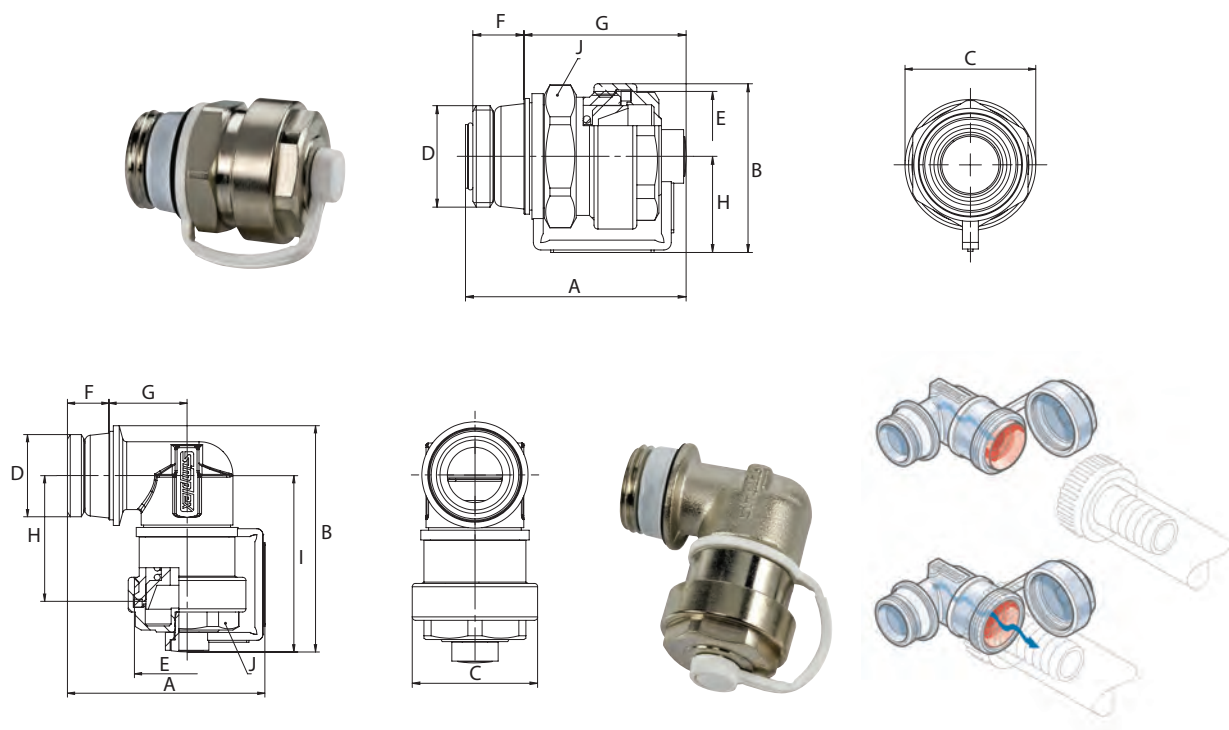


Type	Version	Connection		Dimensions [mm]							Article no.
		D	E	A	B	C	F	G	H (WS)		
FES-V K-Ni. - 1/2 x 3/4	nickel-plated	G 1/2" M	G 3/4" M	46	46	30	8	33	24	10/100	F10612



EXCLUSIV Fill and Drain Plug

Fill and drain plug for radiators, draining and filling by attaching a standard hose connection, self-sealing with special thread seal.



Type	Version	Connection			Article no.
		D	E		
FES EXCL. D - 1/2 x 3/4	straight	G 1/2" M	G 3/4" M	10/100	F10628
FES EXCL. E - 1/2 x 3/4	angle	G 1/2" M	G 3/4" M	10/100	F10629



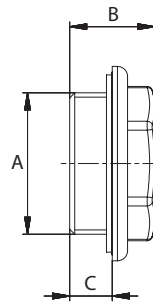
Dimensions


Type	Dimensions [mm]							
	A	B	C	F	G	H	I	J (WS)
FES EXCL. D - 1/2 x 3/4	45.0	34.5	29.5	10.4	33.0	19.5	-	26
FES EXCL. E - 1/2 x 3/4	49.5	57.0	29.5	10.4	19.6	31.5	44	24

RADIATOR PLUGS

Blind Plug for Steel and Cast Iron Radiators

- Light-weight, pressed version: with special flat seal EPDM 2.5 mm
- White coated version, with special flat seal
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



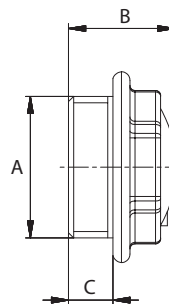
Type	Version	Connection (A)	Dimensions [mm]			Article no.
			B	C		
RBS-L - 1 1/4 R	light-weight	G 1 1/4" M (R)	27	13	10/100	F10901
RBS-L - 1 1/4 L	light-weight	G 1 1/4" M (L)	27	13	10/100	F10902
RBS-W - 1 1/4 R	white*	G 1 1/4" M (R)	27	13	10/100	F10951
RBS-W - 1 1/4 L	white*	G 1 1/4" M (L)	27	13	10/100	F10952


* similar to RAL 9016, (R) = right-handed thread, (L) = left-handed thread



Air Plug for Steel and Cast Iron Radiators

- Light-weight, pressed version: aluminium-coloured housing, rotatable outlet head in white* plastic, with special pressed seal
- White coated version: white housing, rotatable outlet head in white plastic, with special pressed seal
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



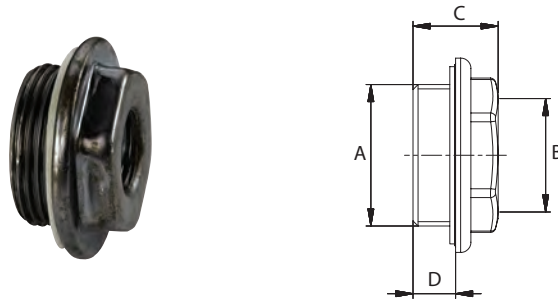
Type	Version	Connection (A)	Dimensions [mm]			Article no.
			B	C		
RLS-L - 1 1/4 R	light-weight	G 1 1/4" M (R)	28	13	10/100	F10909
RLS-L - 1 1/4 L	light-weight	G 1 1/4" M (L)	28	13	10/100	F10910


* similar to RAL 9016, (R) = right-handed thread, (L) = left-handed thread



Reducing Plug for Steel and Cast Iron Radiators

- Light-weight, pressed version: with special flat seal EPDM 2.5 mm
- White coated version, with special flat seal
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



Type	Version	Connection		Dimensions [mm]			Article no.
		A	B	C	D		
RRS-L - 1 1/4 R x 1/2	light-weight	G 1 1/4" M (R)	G 1/2" F	27	13	10/100	F10904
RRS-L - 1 1/4 R x 3/4	light-weight	G 1 1/4" M (R)	G 3/4" F	27	13	10/100	F10905
RRS-L - 1 1/4 L x 1/2	light-weight	G 1 1/4" M (L)	G 1/2" F	27	13	10/100	F10907
RRS-L - 1 1/4 L x 3/4	light-weight	G 1 1/4" M (L)	G 3/4" F	27	13	10/100	F10908
RRS-W - 1 1/4 R x 1/2	white*	G 1 1/4" M (R)	G 1/2" F	27	13	10/100	F10954
RRS-W - 1 1/4 R x 3/4	white*	G 1 1/4" M (R)	G 3/4" F	27	13	10/100	F10955
RRS-W - 1 1/4 L x 1/2	white*	G 1 1/4" M (L)	G 1/2" F	27	13	10/100	F10957
RRS-W - 1 1/4 L x 3/4	white*	G 1 1/4" M (L)	G 3/4" F	27	13	10/100	F10958

* similar to RAL 9016, (R) = right-handed thread, (L) = left-handed thread



Radiator Nipple for Steel and Cast Iron Radiators

Radiator nipple with right and left thread, HD seal 1 mm, non-stick coating.

- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



Type	Connection		Article no.
Radiator Nipple - 1 1/4 R+L	G 1 1/4" M (R+L)	10/100	F10913

(R) = right-handed thread, (L) = left-handed thread



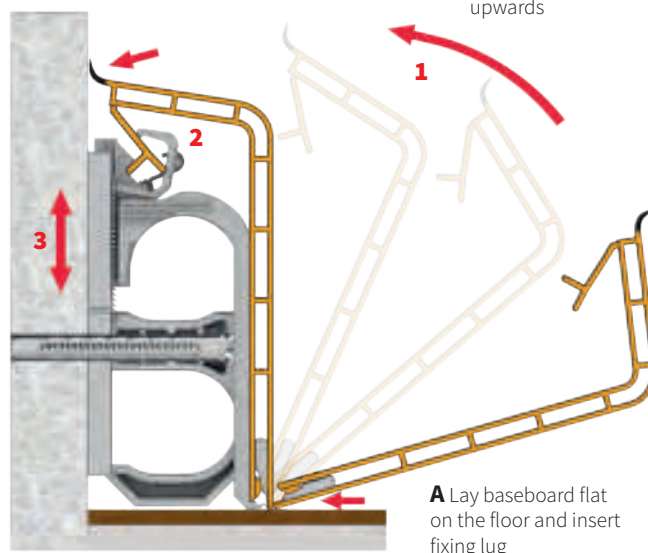
BASEBOARDS AND MOULDINGS

KOMFORT PLUS Mounting Bracket

- Bracket for new installations and retrofits
- Folding mechanism **1** and spring claw **2** for convenient installation
- Spring catch for convenient height adjustment **3** of up to 22 mm independently of the pipe system
- No need for angle or special brackets
- Use with pipe outer diameters up to 22 mm
- Wall-mounted using 8 mm impact anchors
- With additional corner cut-out for retrofit of low voltage cables (e.g. phone, IT cables)

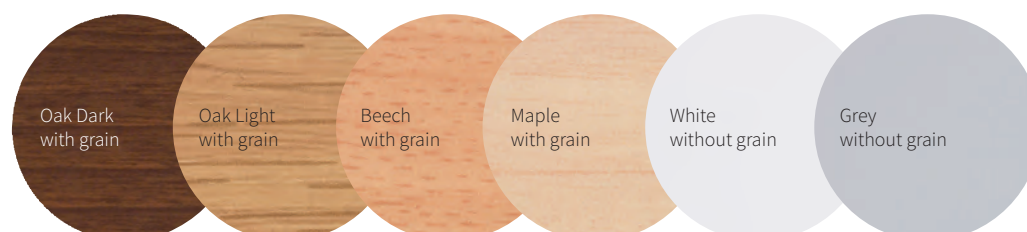
C Baseboard locks into place at top - sealing lip closes tightly against the wall

B Swivel baseboard upwards



A Lay baseboard flat on the floor and insert fixing lug

Decor Colours



Decor white and grey with a film to protect against dirt (remove after installation!)

Mouldings



Two plug connectors are included for each corner mould.

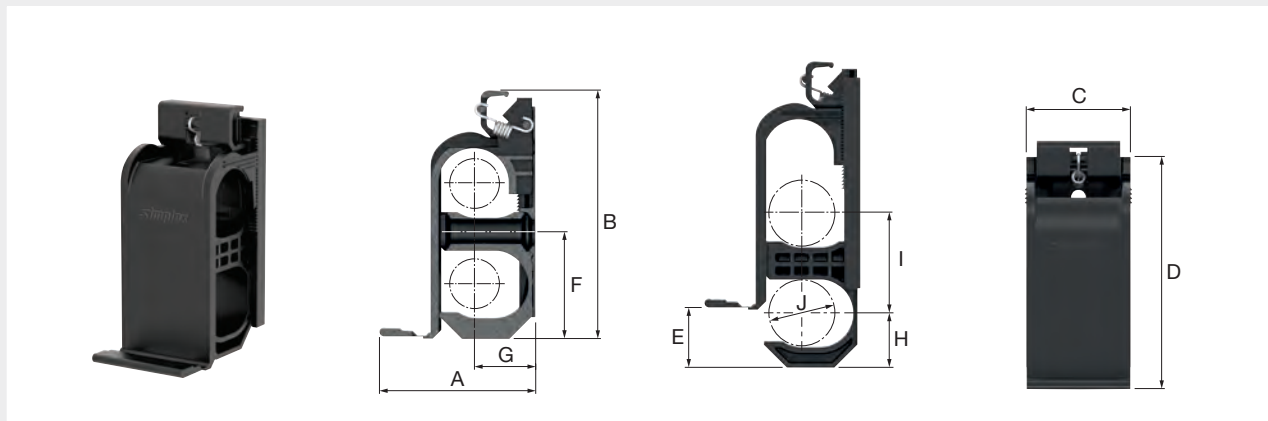
KOMFORT PLUS MOUNTING BRACKET


Mounting bracket for fixing the Simplex baseboards using a folding mechanisms, serves as pipe clamp and baseboard holder, suitable for pipe outside diameters up to 22 mm, with film hinge and spring clip for easy installation and even pressing of the baseboard against the wall, spring catch for convenient height adjustment, corner cut-out allows for additional installation of low voltage lines (e.g. telephone or computer lines) behind the baseboard, installation of mounting bracket possible using knock-in anchor D 8 mm or appropriate screws. Please order knock-in anchors separately (article no. F74068 or F74070).

- Components made of plastic
- For new installations or with existing pipe installation
- Folding mechanism and spring claw for convenient installation
- Spring catch for convenient height adjustment up to 22 mm
- No need for angle brackets or special brackets

→ A solution for the installation of low voltage cables in domestic installations see mounting bracket K!

KOMFORT PLUS Mounting Bracket



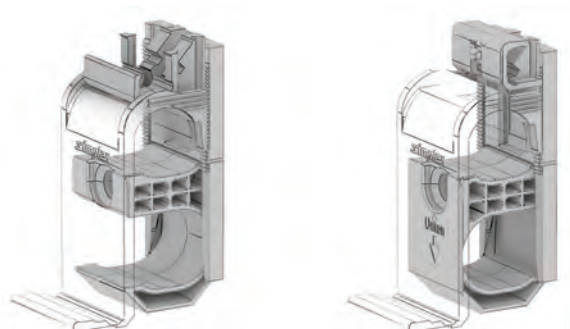
Type	Version		Article no.
KOMFORT PLUS Bracket	mounting before or after pipe installation	25	F72003



Dimensions

Type	Dimensions [mm]									
	A	B	C	D	E	F	G	H	I	J (Ø)
KOMFORT PLUS Bracket	54	86	36	80.3	-5 up to +17	37.5	21	19	35	12 - 22

Use prior to pipe installation or with existing pipe installation



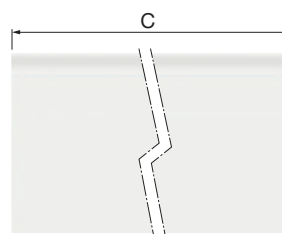
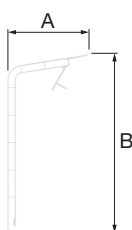
BASEBOARD N


Decorative PVC trims with adhesive decorative film, sturdy plastic hollow-chamber profile with soft sealing lip to the wall, white and grey baseboard with a protective film to protect against dirt (remove after installation!), profile length 4 m (F70101 profile length 2 m). Sold only as one colourway/style in the relevant box size!

- A variety of decor options
- Easy swivel mounting with spring lock
- Even long elements can be installed by one person
- Complete assortment
- Connection valves for all applications

- Components made of plastic
- Fire protection class 2

Baseboard N



Type	Version	Dimensions [mm]				Article no.
		A	B	C		
Baseboard - W	white ¹	44	97	4000	24 m	F70001.1
Baseboard - G	grey ²	44	97	4000	24 m	F70002.1
Baseboard - OL	oak light	44	97	4000	24 m	F70003.1
Baseboard - OD	oak dark	44	97	4000	24 m	F70004.1
Baseboard - B	beech	44	97	4000	24 m	F70005.1
Baseboard - M	maple	44	97	4000	24 m	F70008.1
Baseboard - W (2 m)	white ¹	44	97	2000	10 m	F70101

¹ similar to RAL 9016, ² similar to RAL 7035



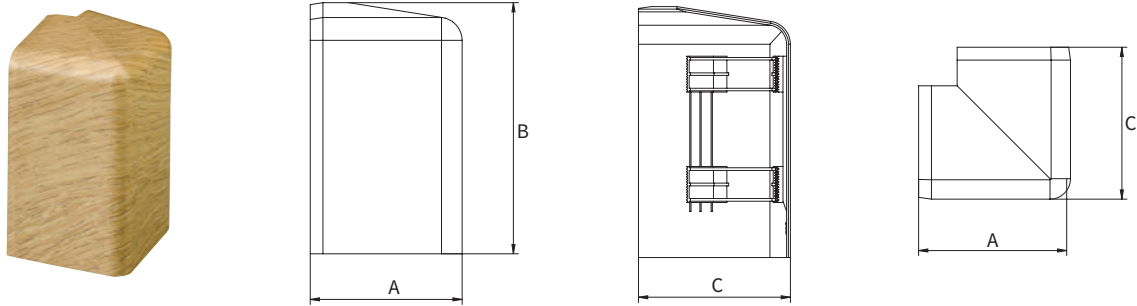
MOULDINGS FOR BASEBOARD N


- Components made of plastic

→ *Plug-in connectors for moduled corners can be reordered, see chapter Spare Parts!*

Outer Corner N

Outer corner for Simplex baseboard N.



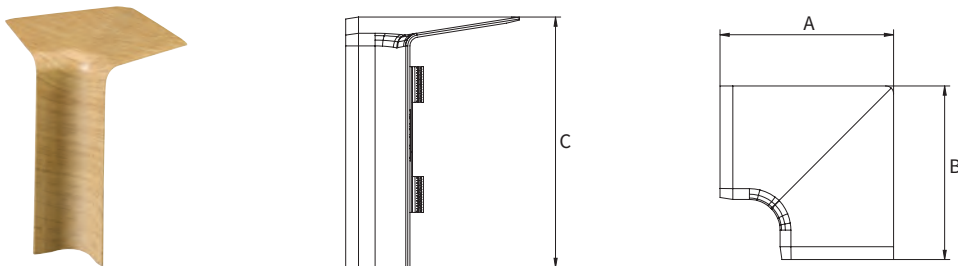
Type	Version	Dimensions [mm]				Article no.
		A	B	C		
Outer Corner - W	white ¹	59.2	98	59.2	10	F70015
Outer Corner - G	grey ²	59.2	98	59.2	10	F70016
Outer Corner - OL	oak light	59.2	98	59.2	10	F70017
Outer Corner - OD	oak dark	59.2	98	59.2	10	F70018
Outer Corner - B	beech	59.2	98	59.2	10	F70019
Outer Corner - M	maple ³	59.2	98	59.2	10	F70022


¹ similar to RAL 9016, ² similar to RAL 7035, ³ without grain



Inner Corner N

Inner corner for Simplex baseboard N.



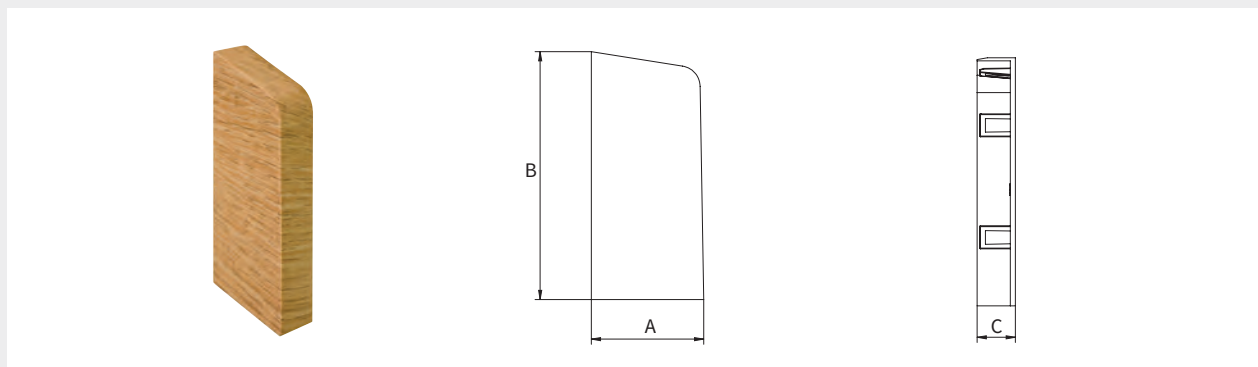
Type	Version	Dimensions [mm]				Article no.
		A	B	C		
Inner Corner - W	white ¹	68	68	98	10	F70031
Inner Corner - G	grey ²	68	68	98	10	F70032
Inner Corner - OL	oak light	68	68	98	10	F70033
Inner Corner - OD	oak dark	68	68	98	10	F70034
Inner Corner - B	beech	68	68	98	10	F70035
Inner Corner - M	maple ³	68	68	98	10	F70038


¹ similar to RAL 9016, ² similar to RAL 7035, ³ without grain



End Piece, Left N

End piece for Simplex baseboard N.



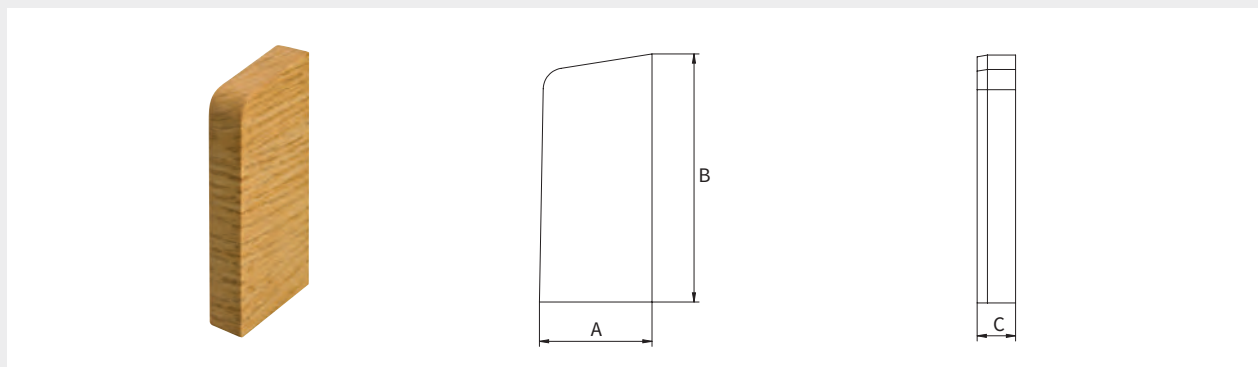
Type	Version	Dimensions [mm]				Article no.
		A	B	C		
End Piece left - W	white ¹	44	97	15	10	F70045
End Piece left - G	grey ²	44	97	15	10	F70046
End Piece left - OL	oak light	44	97	15	10	F70047
End Piece left - OD	oak dark	44	97	15	10	F70048
End Piece left - B	beech	44	97	15	10	F70049
End Piece left - M	maple ³	44	97	15	10	F70052


¹ similar to RAL 9016, ² similar to RAL 7035, ³ without grain



End Piece, Right N

End piece for Simplex baseboard N.



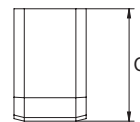
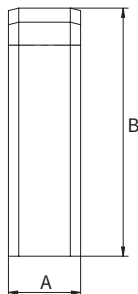
Type	Version	Dimensions [mm]				Article no.
		A	B	C		
End Piece right - W	white ¹	44	97	15	10	F70061
End Piece right - G	grey ²	44	97	15	10	F70062
End Piece right - OL	oak light	44	97	15	10	F70063
End Piece right - OD	oak dark	44	97	15	10	F70064
End Piece right - B	beech	44	97	15	10	F70065
End Piece right - M	maple ³	44	97	15	10	F70068


¹ similar to RAL 9016, ² similar to RAL 7035, ³ without grain



Butt Connector N

Butt connector for Simplex baseboard N.



Type	Version	Dimensions [mm]				Article no.
		A	B	C		
Butt Connector - W	white ¹	28.2	97	44	10	F70075
Butt Connector - G	grey ²	28.2	97	44	10	F70076
Butt Connector - OL	oak light	28.2	97	44	10	F70077
Butt Connector - OD	oak dark	28.2	97	44	10	F70078
Butt Connector - B	beech	28.2	97	44	10	F70079
Butt Connector - M	maple ³	28.2	97	44	10	F70082

¹ similar to RAL 9016, ² similar to RAL 7035, ³ without grain

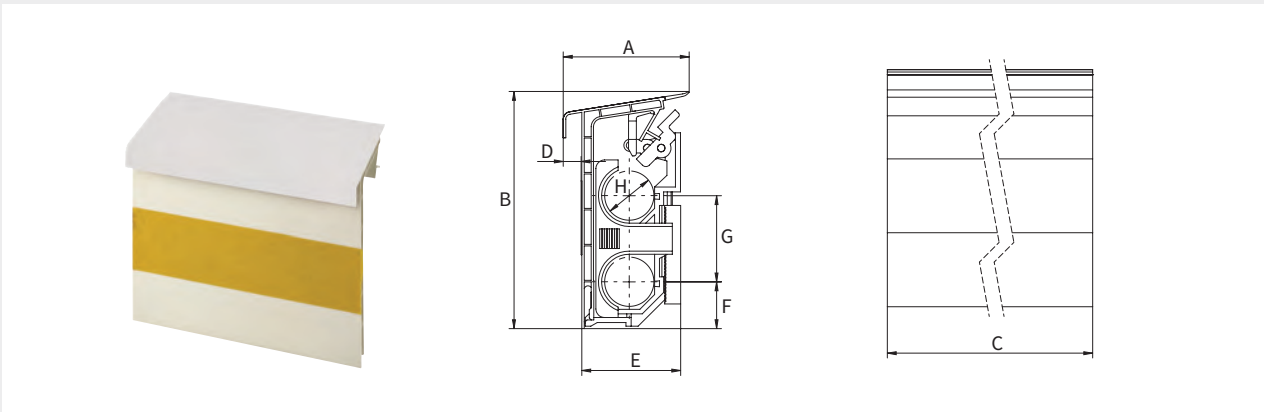



BASEBOARD T WITH ADHESIVE STRIPS FOR CARPETS

Decorative PVC trims with adhesive decorative film and adhesive strip for fixing the carpet, sturdy plastic hollow-chamber profile with soft sealing lip to the wall, white baseboard with a protective film to protect against dirt (remove after installation!), profile length 4 m.

- Easy swivel mounting with spring lock
- Even long elements can be installed by one person
- Complete assortment
- Connection valves for all applications
- Components made of plastic
- Fire protection class 2

Baseboard T with Adhesive Strips for Carpets



Type	Version	Dimensions [mm]									Article no.
		A	B	C	D	E	F	G	H		
Baseboard T - W	white ¹	51.1	96.4	4000	7.2	40.2	19	35	12 - 22	24 m	F71001.1

¹ similar to RAL 9016



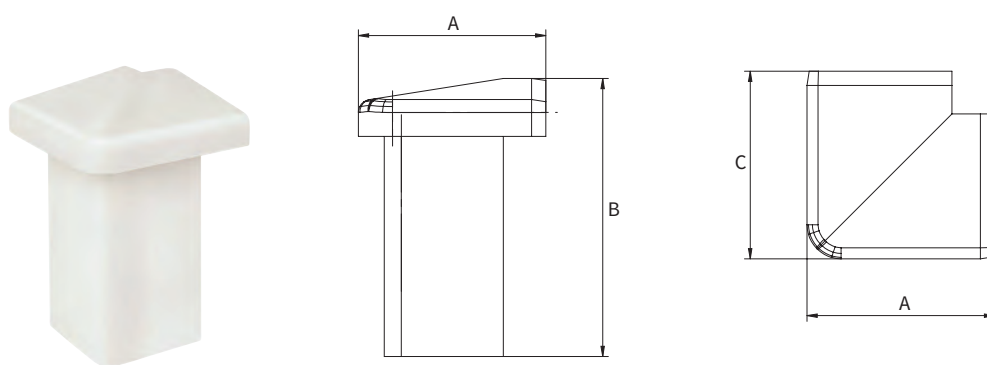
MOULDINGS FOR BASEBOARD T


- Components made of plastic

→ *Plug-in connectors for moduled corners can be reordered, see chapter Spare Parts!*

Outer Corner T

Outer corner for Simplex baseboard T.



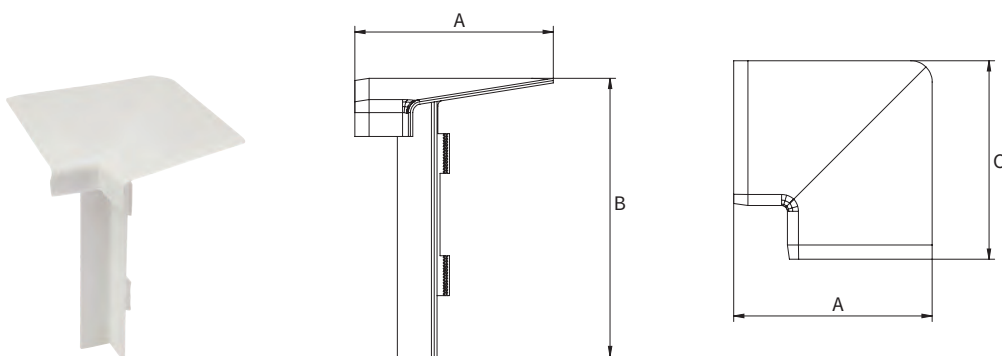
Type	Version	Dimensions [mm]				Article no.
		A	B	C		
Outer Corner T - W	white ¹	66	98	66	10	F71015


¹ similar to RAL 9016



Inner Corner T

Inner corner for Simplex baseboard T.



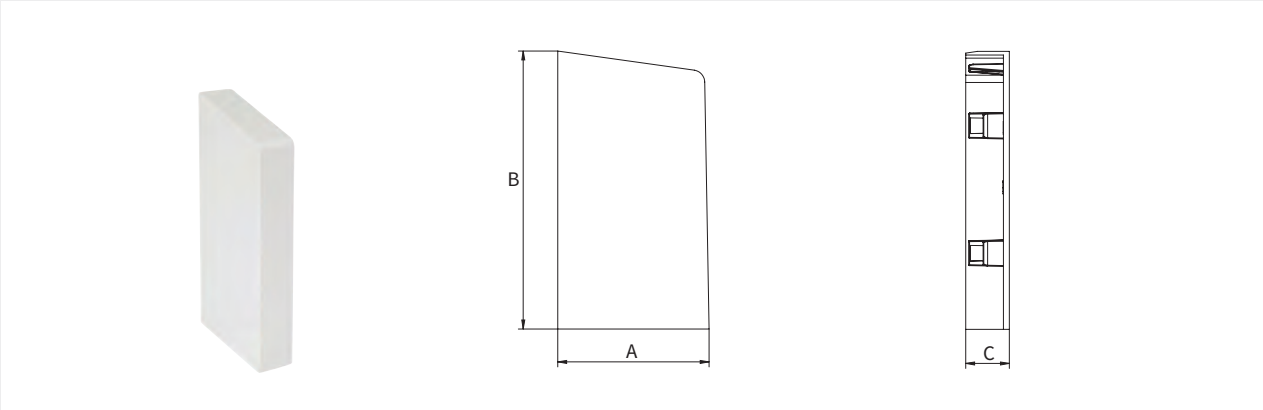
Type	Version	Dimensions [mm]				Article no.
		A	B	C		
Inner Corner T - W	white ¹	70	98	70	10	F71031


¹ similar to RAL 9016



End Piece, Left T

End piece for Simplex baseboard T.



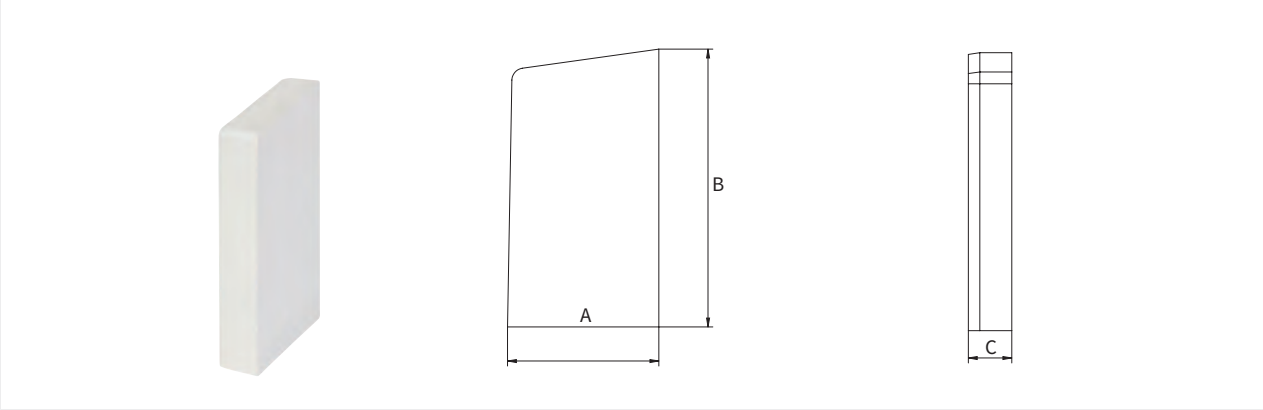
Type	Version	Dimensions [mm]				Article no.
		A	B	C		
End Piece left T - W	white ¹	52.2	96	15	10	F71045


¹ similar to RAL 9016



End Piece, Right T

End piece for Simplex baseboard T.



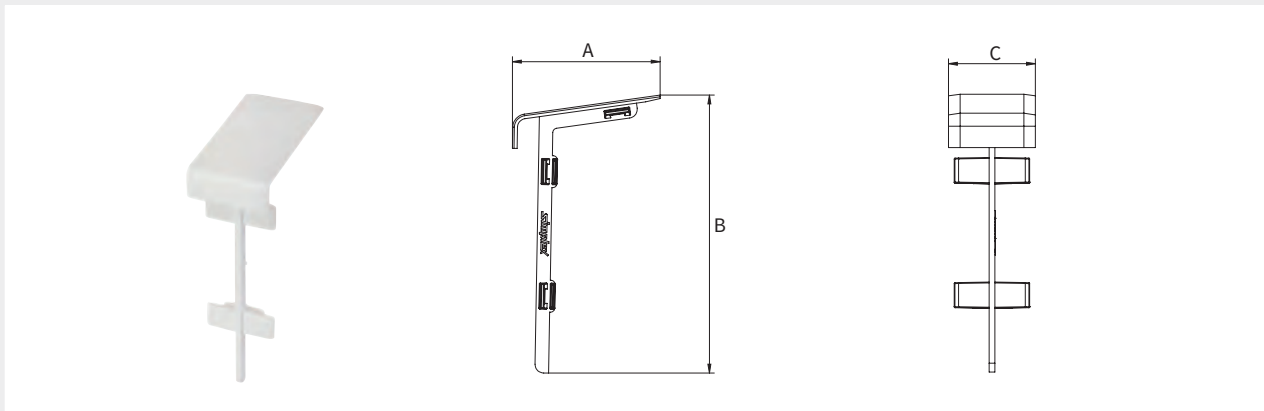
Type	Version	Dimensions [mm]				Article no.
		A	B	C		
End Piece right T - W	white ¹	52.2	96	15	10	F71061


¹ similar to RAL 9016



Butt Connector T

Butt connector for Simplex baseboard T.



Type	Version	Dimensions [mm]				Article no.
		A	B	C		
Knoopverbinder T - W	white ¹	51	96	30	10	F71075

¹ similar to RAL 9016



MOUNTING ACCESSORIES FOR BASEBOARD

Notching Pliers



Notching pliers for cutting the baseboard where the pipe passes through.

- Material: Steel


Type	Version		Article no.
Notching Pliers	for baseboards	1	F13982

Nail Anchor

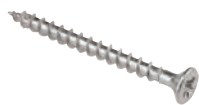


For fastening Simplex baseboard brackets and Simplex rising pipe profiles, with countersunk head and screw nail, required: 1 pc. per bracket.

- Material: Galvanised steel, plastic

Type	Dimension [mm]	Suitable for		Article no.
Nail Anchor - 50	6 x 50	mounting bracket K and rising pipe profile	50	F74079
Nail Anchor - 80	8 x 80	KOMFORT PLUS mounting bracket	50	F74068
Nail Anchor - 100	8 x 100	KOMFORT PLUS mounting bracket	50	F74070

Countersunk Head Screw



For fastening Simplex baseboard bracket K and Simplex rising pipe profiles, Phillips screw, used with anchor F74094, required: 1 pc. per bracket.

- Material: Galvanised steel



Type	Dimension [mm]	Suitable for		Article no.
Countersunk Head Screw	4.5 x 50	mounting bracket K and rising pipe profile	100	F74080

Anchor



For fastening Simplex baseboard bracket K and Simplex rising pipe profiles, used with countersunk head screw F74080.

- Material: Plastic



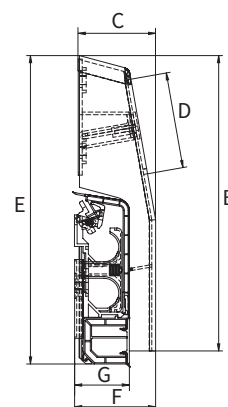
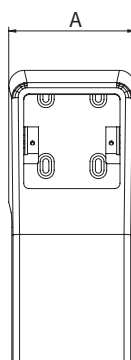
Type	Dimension [mm]	Suitable for		Article no.
Anchor	6 x 36	mounting bracket K and rising pipe profile	100	F74094

BASEBOARD SYSTEM WITH ELECTRIC CABLE CHANNEL

Electrical Socket Box for Baseboard System with Electric Cable Channel

Electrical socket box for conventional sockets with cable conduit for socket inserts.

- Components made of plastic



Type	Version	Dimensions [mm]								Article no.
		A	B	C	D	E	F	G		
Electrical Socket Box	white ¹	96.1	225	59	73	235	61.7	41.7	5	F72051

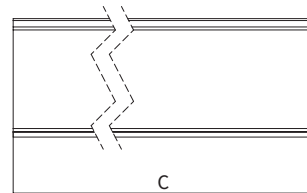
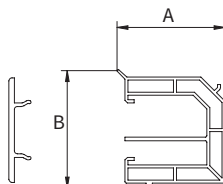
¹ similar to RAL 9016




Electric Cable Channel

Electric cable channel for Simplex baseboards, plastic hollow-chamber profile with soft sealing lip to the floor. Reduction of thermal load through double-walled plastic hollow chamber profile. Additional divider for low current or computer lines. Profile length 4 m.

- Components made of plastic



Type	Version	Dimensions [mm]				Article no.
		A	B	C		
Electric Cable Channel	white ¹	36	39	4000	32 m	F73001

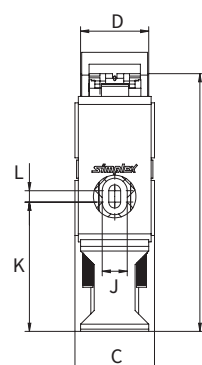
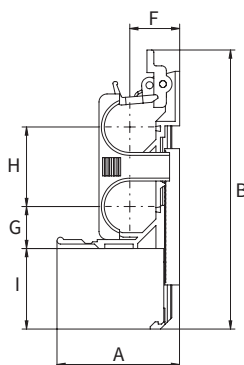
¹ similar to RAL 9016




Mounting Bracket K for Baseboard System with Electric Cable Channel

Combination baseboard holder for two pipes up to 22 mm outside diameter and electric cable channel, with spring clip and pipe lock, without fixing screw.

- Components made of plastic



Type	Version		Article no.
Mounting Bracket K	for pipes and electric cable channel	10	F72050

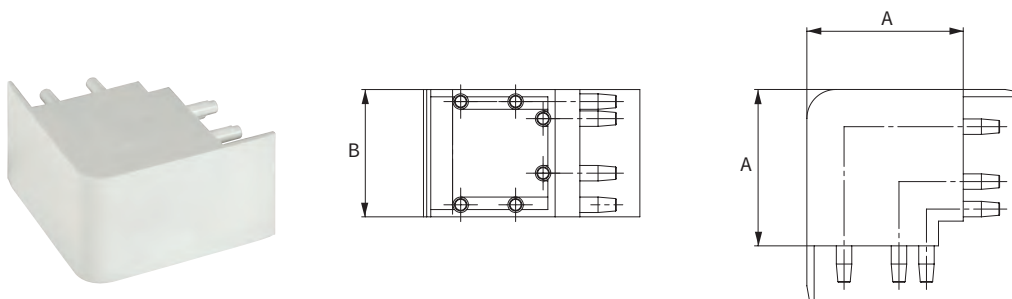



Dimensions

Type	Dimensions [mm]											
	A	B	C	D	E	F	G	H	I	J	K	L
Mounting Bracket K	54	123	35	30	114	23	18	35	36	11	57	5

Outer Corner K for Cable Channel

- Components made of plastic



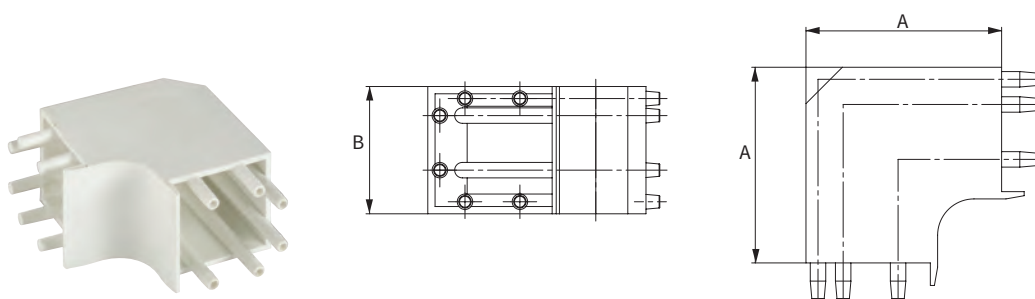
Type	Version	Dimensions [mm]			Article no.
		A	B		
Outer Corner K	white ¹	43	35	10	F73010


¹ similar to RAL 9016



Inner Corner K for Cable Channel

- Components made of plastic



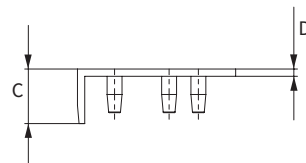
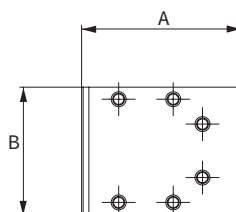
Type	Version	Dimensions [mm]			Article no.
		A	B		
Inner Corner K	white ¹	54	35	10	F73020


¹ similar to RAL 9016



End Piece K for Cable Channel

- Components made of plastic



Type	Version	Dimensions [mm]					Article no.
		A	B	C	D		
End Piece K	white ¹	44	35	15	2	10	F73030

¹ similar to RAL 9016



Butt Connector K for Cable Channel

- Components made of plastic



Type	Version		Article no.
Butt Connector K	white ¹	10	F73040

¹ similar to RAL 9016

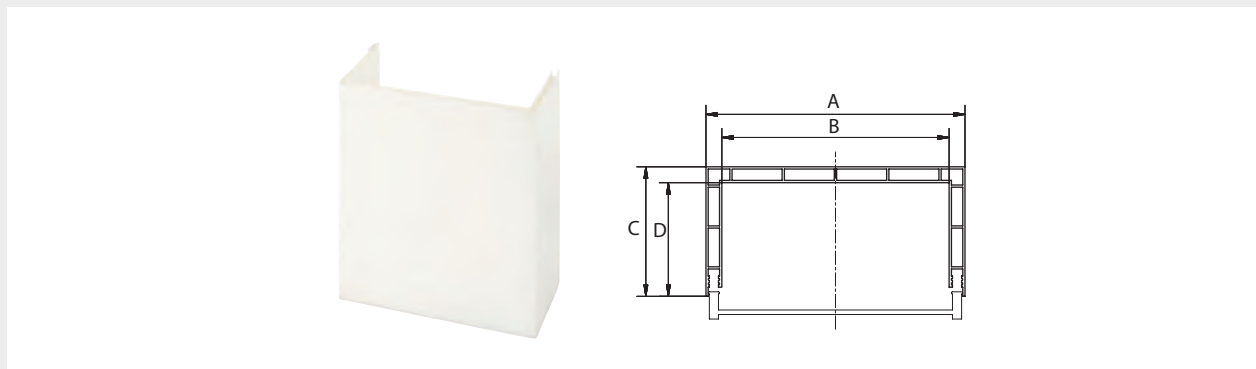



RISING PIPES PROFILES

Rising Pipes Profile 3-sided

For cladding rising pipes, made of plastic hollow-chamber profile, 3 m profile length.
Sold only as one style in the relevant box size!

- Components made of plastic



Type	Version	Dimensions [mm]					Article no.
		A	B	C	D		
3-SST - 100	white ¹	114	100	57	50	6 m	F75001
3-SST - 150	white ¹	164	150	82	75	24 m	F75002

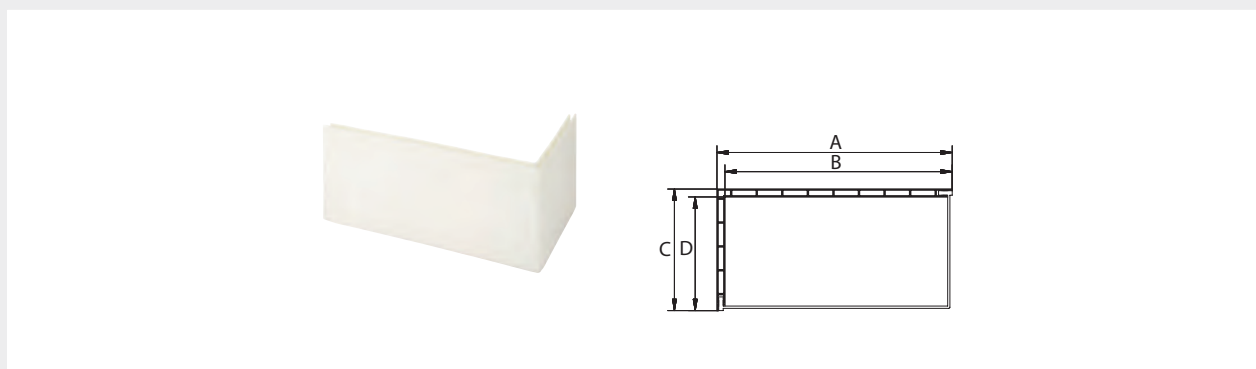
¹ similar to RAL 9016




Rising Pipes Profile 2-sided

For cladding rising pipes, made of plastic hollow-chamber profile, 3 m profile length.
Sold only as one style in the relevant box size!

- Components made of plastic



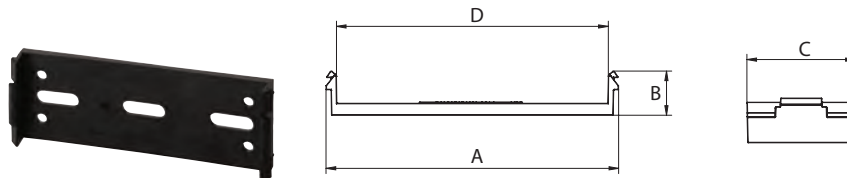
Type	Version	Dimensions [mm]					Article no.
		A	B	C	D		
2-SST - 200	white ¹	207	200	107	100	24 m	F75005


¹ similar to RAL 9016



Mounting Clip for 3-sided Rising Pipes Profile

- Components made of plastic

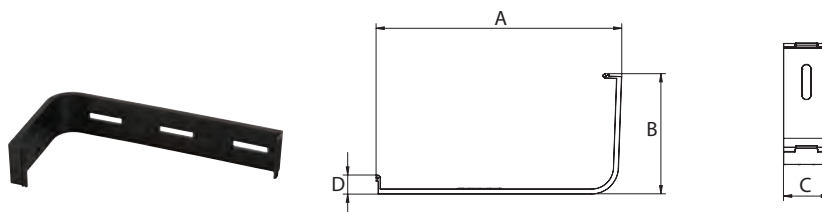



Type	Suitable for Rising Pipe Profile [mm]	Dimensions [mm]					Article no.
		A	B	C	D		
Clip 3-SST 100	100	110.3	16.7	45.5	102.5	1/100	F75090
Clip 3-SST 150	150	162.5	15.7	40.0	154.7	1/50	F75091
Clip 3-SST 200	200	211.6	15.7	40.0	204.0	1/50	F75092



Mounting Clip for 2-sided Rising Pipes Profile

- Components made of plastic




Type	Suitable for Rising Pipe Profile [mm]	Dimensions [mm]					Article no.
		A	B	C	D		
Clip 2-SST 200	200	216	106	40	17	1/50	F75093



Cover for Rising Pipes Profile

- Components made of plastic



Type	Version	Dimensions [mm]				Article no.
		A	B	C		
Cover SST 100	white ¹	50	100	50	10/50	F75784
Cover SST 150	white ¹	75	150	75	10/50	F75884
Cover SST 200	white ¹	100	200	100	10/50	F75984

¹ similar to RAL 9016




Soft Lip

For sticking on the rising pipes profile for wall and floor compensation.

- Components made of plastic



Type	Version	Dimension [mm]				Article no.
		A	B	C		
Soft Lip	white ¹	3000	20	12	3 m	F75085

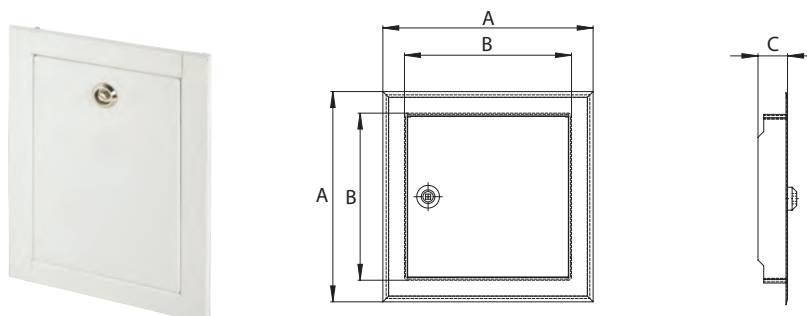
¹ similar to RAL 9016




Inspection Flap

Inspection flap with lock, powder coated, for installation in rising pipes profile.

- Components made of steel



Type	Version	Dimensions [mm]				Article no.
		A	B	C		
Inspection Flap	white ¹	185	147	26	1	F75095

¹ similar to RAL 9016



BASEBOARD CONNECTION VALVES

VK 31 Baseboard Connection Kits

- For radiators with integrated valve (two-pipe system)
- One valve set for 1-2-3-layer radiators with integrated valve with Rp 1/2" female thread or G 3/4" male thread
- With telescopic screw connection with shut off and height and depth adjustment
- Available in 6 versions:



with Euro taper



with press connection
for M and V profile



with press connection
for U, TH, F and H profile



with female thread



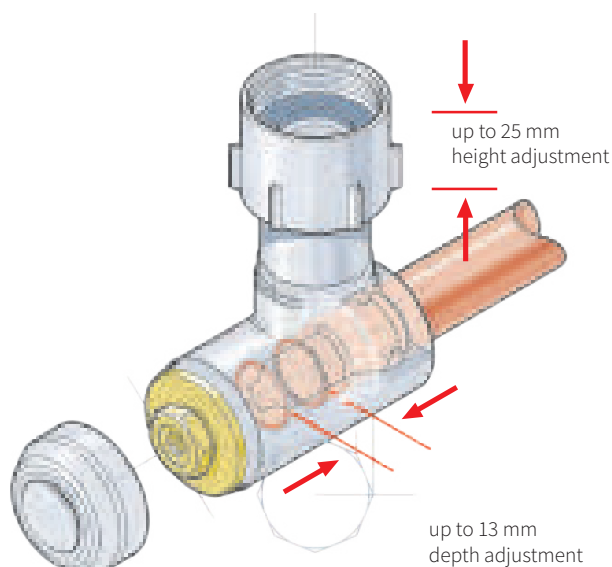
with TECTITE push-fit
technology



with SIROCON connection (in combination
with system adapters for various systems)

Telescopic Angle Valve

- With height and depth adjustment
- Self-sealing connection nipple for radiators with Rp 1/2" female thread and cone insert for radiators with G 3/4" male thread (Euro taper)
- Connecting nuts with axial tolerance compensation for stress-free installation
- Easy installation without chiselling
- Connection can be released at any time with little effort
- With nickel-coloured protective cap
- Rosettes provide clean finish to the baseboard



Telescopic screw connection:
Pipes are simply inserted into the valve and
locked with 13 mm open-end spanner

VK 31 EURO TAPER CONNECTION KIT

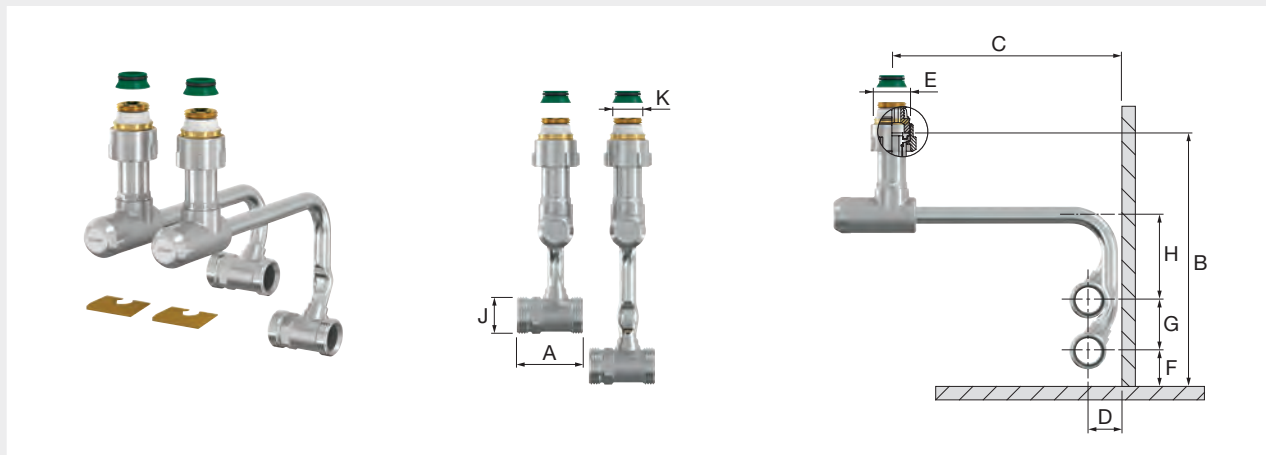
Baseboard connection kit for the installation of radiators with integrated valve (two-pipe system), with G $\frac{3}{4}$ " M Euro taper for the connection of copper, carbon steel, stainless steel, plastic and multilayer composite pipes in conjunction with Simplex compression adapters (F series).


Consisting of:

- 2 pcs. telescopic angle valves with height and depth adjustment
 - 1 pc. supply connection with soldered copper bow (nickel-plated) Ø 12 mm
 - 1 pc. return connection with soldered copper bow (nickel-plated) Ø 12 mm
 - 2 pcs. self-sealing connection nipples for radiators with Rp $\frac{1}{2}$ " female thread
 - 2 pcs. cone inserts for radiators with G $\frac{3}{4}$ " M male thread
 - 2 pcs. ea. covering rosettes in white, beech and oak dark
- Components made of nickel-plated brass
 - Sealing materials: EPDM
 - Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
 - Max. operating pressure: 10 bar

→ For blind caps see *Accessories for Baseboard Connection Valves!*

VK 31 Euro Taper Connection Kit



Type	E	Connection	J (ET)		Article no.
VK31 ET Connection	G $\frac{3}{4}$ " F	G $\frac{1}{2}$ " M	G $\frac{3}{4}$ " M	1 / 10	F13468



Dimensions

For radiators with integrated valve with connection	Dimensions [mm]								
	A	B (min.)	B (max.)	C (min.)	C (max.)	D	F	G	H
Rp $\frac{1}{2}$ "	46	175	200	50	175	21.5	19	35	59
G $\frac{3}{4}$ " M	46	164	189	50	175	21.5	19	35	59

VK 31 CONNECTION KIT WITH PRESS CONNECTION

Baseboard connection kit for the installation of radiators with integrated valve (two-pipe system), with press connection (M and V profile) for copper, carbon steel and stainless steel pipes.

Consisting of:

- 2 pcs. telescopic angle valves with height and depth adjustment
 - 1 pc. supply connection with soldered copper bow (nickel-plated) Ø 12 mm
 - 1 pc. return connection with soldered copper bow (nickel-plated) Ø 12 mm
 - 2 pcs. self-sealing connection nipples for radiators with Rp 1/2" female thread
 - 2 pcs. cone inserts for radiators with G 3/4" M male thread
 - 2 pcs. ea. covering rosettes in white, beech and oak dark
- Components made of nickel-plated brass
 - Sealing materials: EPDM
 - Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
 - Max. operating pressure: 10 bar

→ Matching end plug see Accessories for Baseboard Connection Valves!

VK 31 Connection Kit with Press Connection



Type	E	Connection	J [mm]		Article no.
VK31 Connection M/V - 15	G 3/4" F	G 1/2" M	15	1 / 10	F13469
VK31 Connection M/V - 18	G 3/4" F	G 1/2" M	18	1 / 10	F13470
VK31 Connection M/V - 22	G 3/4" F	G 1/2" M	22	1 / 10	F13479



Dimensions

For radiators with integrated valve with connection	Dimensions [mm]								
	A*	B (min.)	B (max.)	C (min.)	C (max.)	D	F	G	H
Rp 1/2"	58 - 68	175	200	50	175	21.5	19	35	59
G 3/4" M	58 - 68	164	189	50	175	21.5	19	35	59

* Dimensions 15 and 18 mm: A = 58 mm, Dimension 22 mm: A = 68 mm

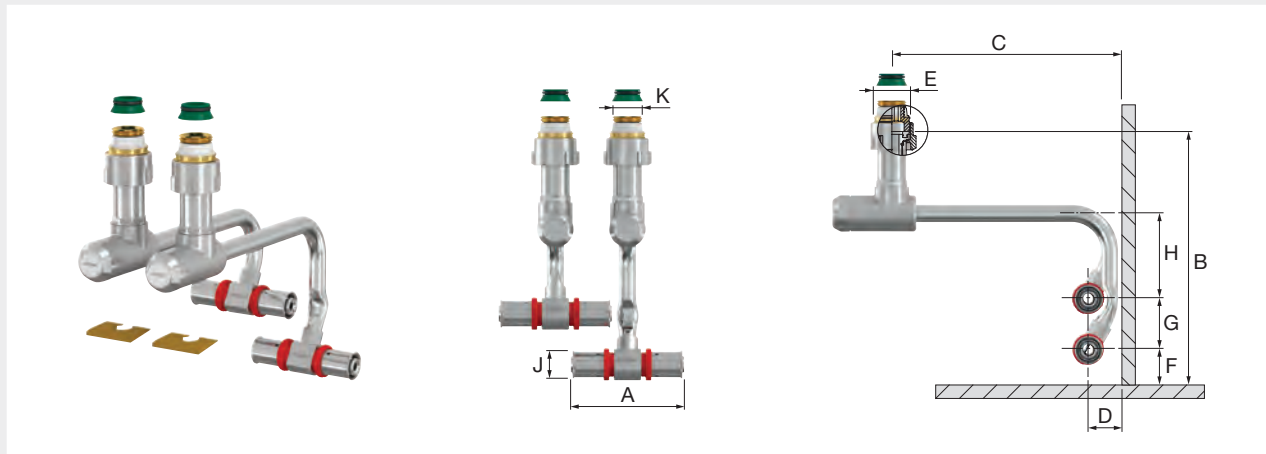
VK 31 UNI CONNECTION KIT U/TH/F/H


Baseboard connection kit for the installation of radiators with integrated valve (two-pipe system), with press connection (U, TH, F and H profile) for plastic and multilayer composite pipes.

Consisting of:

- 2 pcs. telescopic angle valves with height and depth adjustment
 - 1 pc. supply connection with soldered copper bow (nickel-plated) Ø 12 mm
 - 1 pc. return connection with soldered copper bow (nickel-plated) Ø 12 mm
 - 2 pcs. self-sealing connection nipples for radiators with Rp 1/2" female thread
 - 2 pcs. cone inserts for radiators with G 3/4" M male thread
 - 2 pcs. ea. covering rosettes in white, beech and oak dark
- Components made of nickel-plated brass
 - Sealing materials: EPDM
 - Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
 - Max. operating pressure: 10 bar

VK 31 UNI Connection Kit U/TH/F/H



Type	E	Connection K	J [mm]		Article no.
VK31 Connection U/TH/F/H - 16	G 3/4" F	G 1/2" M	16 x 2	1 / 10	F13482
VK31 Connection U/TH/F/H - 20	G 3/4" F	G 1/2" M	20 x 2	1 / 10	F13481



Dimensions

For radiators with integrated valve with connection	Dimensions [mm]								
	A	B (min.)	B (max.)	C (min.)	C (max.)	D	F	G	H
Rp 1/2"	78.8	175	200	50	175	21.5	19	35	59
G 3/4" M	78.8	164	189	50	175	21.5	19	35	59

VK 31 CONNECTION KIT WITH TECTITE PUSH-FIT CONNECTION

Baseboard connection kit for the installation of radiators with integrated valve (two-pipe system), with TECTITE push-fit connection for copper, carbon steel and stainless steel pipes.

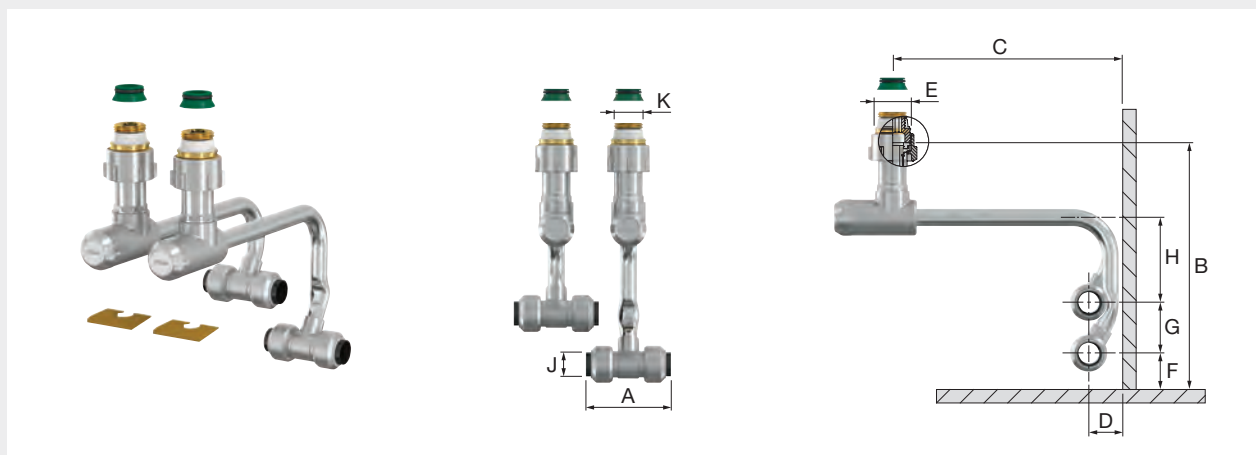
Consisting of:

- 2 pcs. telescopic angle valves with height and depth adjustment
 - 1 pc. supply connection with soldered copper bow (nickel-plated) Ø 12 mm
 - 1 pc. return connection with soldered copper bow (nickel-plated) Ø 12 mm
 - 2 pcs. self-sealing connection nipples for radiators with Rp 1/2" female thread
 - 2 pcs. cone inserts for radiators with G 3/4" M male thread
 - 2 pcs. ea. covering rosettes in white, beech and oak dark
 - 1 pc. TECTITE demounting tool
- Components made of nickel-plated brass
 - Sealing materials: EPDM
 - Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
 - Max. operating pressure: 10 bar

→ Matching end plug see *Accessories for Baseboard Connection Valves*, TECTITE universal tool see *Tools!*

- Direct insertion of connecting pipe using TECTITE push-fit connection without tools
- Connection rotatable and detachable with TECTITE demounting clip
- Practically proven push-fit technology

VK 31 Connection Kit with TECTITE Push-fit Connection



Type	E	Connection	J [mm]		Article no.
VK31 Connection TECTITE - 15	G 3/4" F	G 1/2" M	15	1 / 10	F13460
VK31 Connection TECTITE - 18	G 3/4" F	G 1/2" M	18	1 / 10	F13461



Dimensions

For radiators with integrated valve with connection	Dimensions [mm]								
	A	B (min.)	B (max.)	C (min.)	C (max.)	D	F	G	H
Rp 1/2"	60	175	200	50	175	21.5	19	35	59
G 3/4" M	60	164	189	50	175	21.5	19	35	59

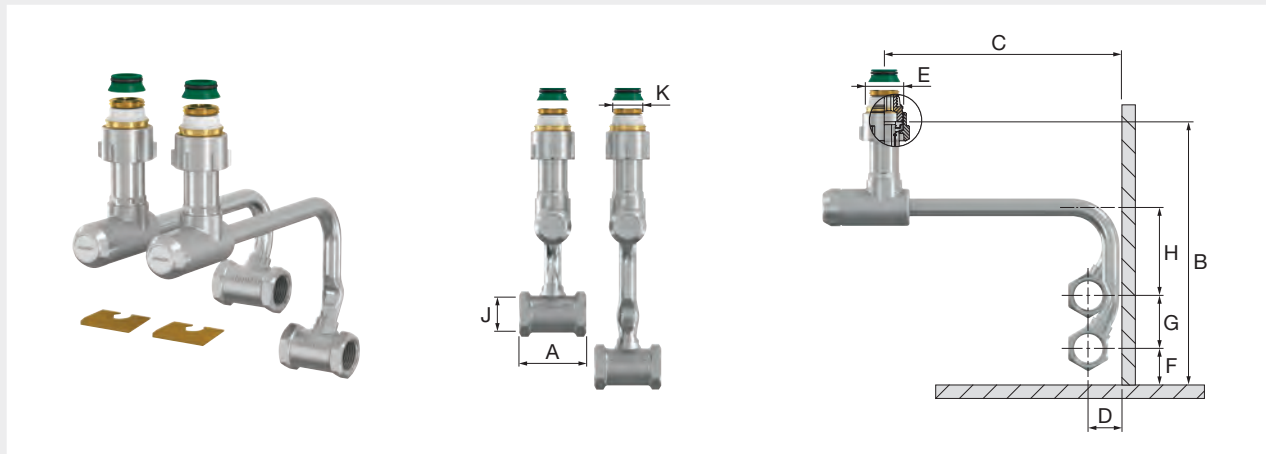
VK 31 CONNECTION KIT WITH FEMALE THREAD

Baseboard connection kit for the installation of radiators with integrated valves (two-pipe system), with G 1/2" female thread, with connection options for all current types of pipe (using transition adapters of the respective pipe manufacturer).

Consisting of:

- 2 pcs. telescopic angle valves with height and depth adjustment
 - 1 pc. supply connection with soldered copper bow (nickel-plated) Ø 12 mm
 - 1 pc. return connection with soldered copper bow (nickel-plated) Ø 12 mm
 - 2 pcs. self-sealing connection nipples for radiators with Rp 1/2" female thread
 - 2 pcs. cone inserts for radiators with G 3/4" M male thread
 - 2 pcs. ea. covering rosettes in white, beech and oak dark
- Components made of nickel-plated brass
 - Sealing materials: EPDM
 - Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
 - Max. operating pressure: 10 bar

VK 31 Connection Kit with Female Thread



Type	E	Connection	J		Article no.
VK31 Connection F	G 3/4" F	G 1/2" M	G 1/2" F	1 / 10	F13485



Dimensions

For radiators with integrated valve with connection	Dimensions [mm]								
	A	B (min.)	B (max.)	C (min.)	C (max.)	D	F	G	H
Rp 1/2"	45	175	200	50	175	21.5	19	35	59
G 3/4" M	45	164	189	50	175	21.5	19	35	59

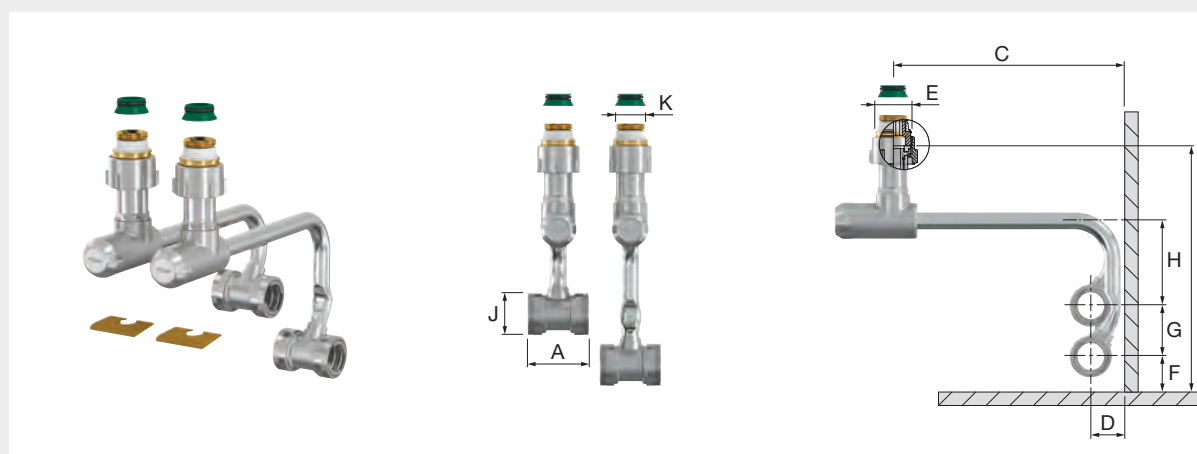
VK 31 SIROCON CONNECTION KIT

Baseboard connection kit for the installation of radiators with integrated valve (two-pipe system), with SIROCON connection.
Consisting of:

- 2 pcs. telescopic angle valves with height and depth adjustment
 - 1 pc. supply connection with soldered copper bow (nickel-plated) Ø 12 mm
 - 1 pc. return connection with soldered copper bow (nickel-plated) Ø 12 mm.
 - 2 pcs. self-sealing connection nipples for radiators with Rp 1/2" female thread
 - 2 pcs. cone inserts for radiators with G 3/4" M male thread
 - 2 pcs. ea. covering rosettes in white, beech and oak dark
- Components made of nickel-plated brass
 - Sealing materials: EPDM
 - Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
 - Max. operating pressure: 10 bar
- Dimensionless push-fit fittings
 - Easy installation due to plug adapter for screwing and pressing
 - Universal connection for different pipe materials and dimensions

→ Matching adapters see **Accessories for Baseboard Connection Valves!**

VK 31 SIROCON Connection Kit



Type	E	Connection	J		Article no.
VK31 SIROCON Connection	G 3/4" F	G 1/2" M	SIROCON	1 / 10	F13450



Dimensions

For radiators with integrated valve with connection	Dimensions [mm]								
	A	B (min.)	B (max.)	C (min.)	C (max.)	D	F	G	H
Rp 1/2"	42.6	175	200	50	175	21.5	19	35	59
G 3/4" M	42.6	164	189	50	175	21.5	19	35	59

SIROCON System Adapters

The crucial technical and financial advantages

- Press anywhere

Press connections are even possible in narrow and hard to reach places. Quick and easy work. Assembly and pressing mistakes are largely avoided.

- Dimensionless push-fit fittings

Low stock time. Extensive applications.

- Wide system range

Adapters for copper, carbon steel, stainless steel, plastic and multilayer composite pipes, transitions to male thread, female thread and Euro taper.

- Frictional, detachable connection

Press connection with frictional push-fit connector. Detachable connection secured against unintentional disassembly. Double O-ring seal.

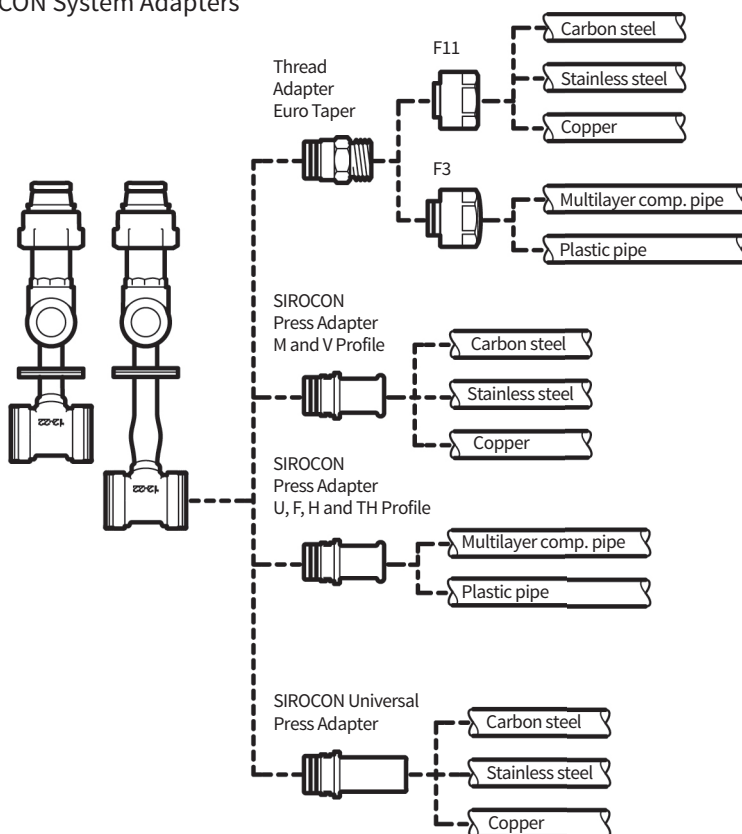
- System adaptations

The SIROCON press/push-fit system can be ideally combined with existing systems. For this purpose Simplex provides system adapters for different systems, thus saving storage capacity and the variety may be used optimally.

- Guarantee

When using system adapters, Simplex assumes the guarantee obligation for push-fit connection parts. A guarantee obligation for the pipe press connections is handled by the respective system manufacturer according to their guarantee agreements. The system manufacturer's installation instructions must be observed.

Connection Possibilities with SIROCON System Adapters



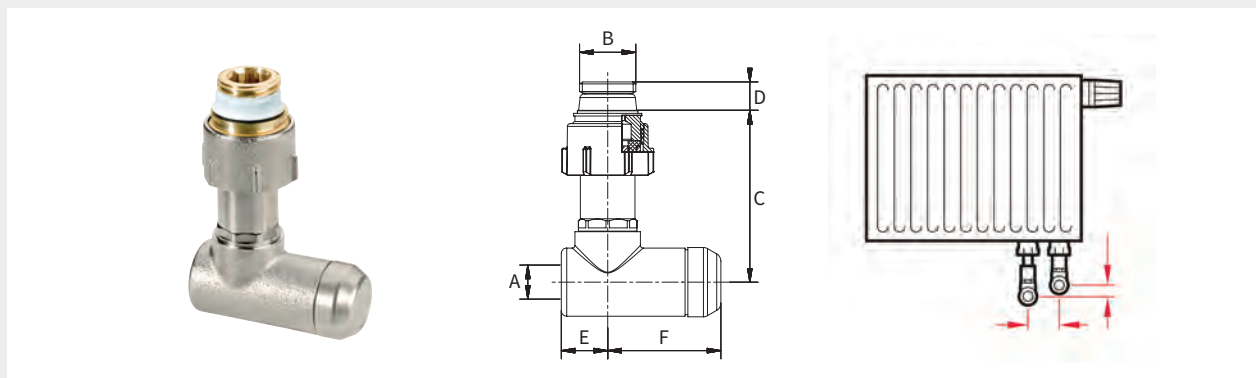
TELESCOPIC ANGLE VALVES


- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

Telescopic Angle Valve Type EV1

Adjustable shut-off connection, suitable for Simplex baseboard connections 12 mm, height adjustment (25 mm), depth adjustment (13 mm), integrated compression adapter 12 x 1 mm.

With self-sealing connection nipples for radiators with integrated valve with Rp 1/2" connection.



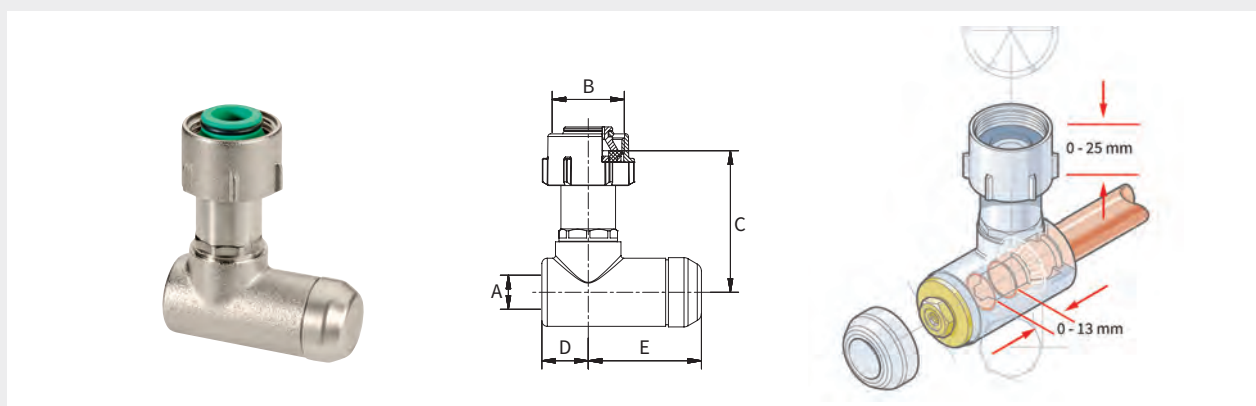
Type	Connection		Dimensions [mm]						Article no.
	B	A (Ø) [mm]	C (min.)	C (max.)	D	E	F		
TELE-EV EV1	G 1/2" M	12	63	88	11	17	42	1 / 5	F13427




Telescopic Angle Valve Type EV2

Adjustable shut-off connection, suitable for Simplex baseboard connections 12 mm, height adjustment (25 mm), depth adjustment (13 mm), integrated compression adapter 12 x 1 mm.

With cone inserts for radiators with integrated valve with G 3/4" M (Euro taper) connection.

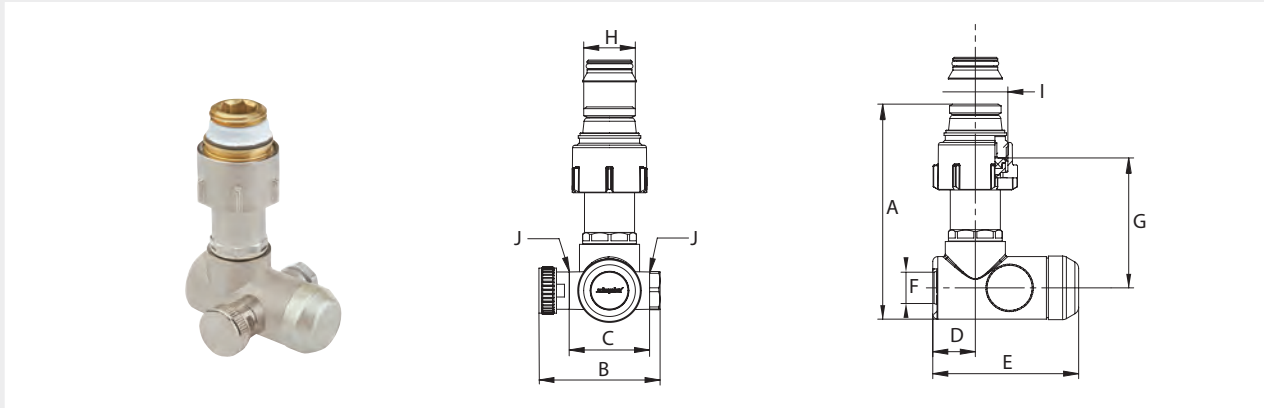


Type	Connection		Dimensions [mm]					Article no.
	B	A (Ø) [mm]	C (min.)	C (max.)	D	E		
TELE-EV EV2	G 3/4" F	12	63	88	17	42	1 / 5	F13428



Telescopic Angle Valve with Drain

Adjustable shut-off connection with drain, suitable for Simplex baseboard connections 12 mm, height adjustment (25 mm), depth adjustment (13 mm), integrated compression adapter 12 x 1 mm, drain can be installed on the right or left, incl. drain plug and blind plug. With self-sealing connection nipples and cone inserts for radiator connections with Rp 1/2" or G 3/4" M (Euro taper) connection.



Type	Connection					Article no.
	H	I	F (Ø) [mm]	J		
TELE-EV Drain	G 1/2" M	G 3/4" F	12	G 3/4" F	1 / 5	F13445



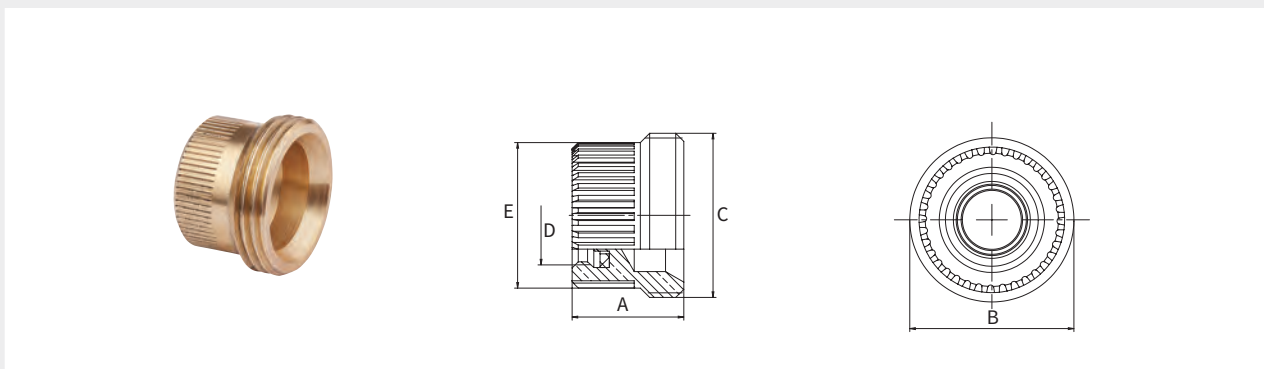
Dimensions

Type	Dimensions [mm]							
	A (min.)	A (max.)	B	C	D	E	G (min.)	G (max.)
TELE-EV Drain	76	101	49	32.5	17	59	63	88

Adapter for Fill and Drain Plug

Adapter voor aansluiting van een standaard slangaansluiting op het telescopisch haaks ventiel met aftapper F13445.

- Onderdelen vervaardigd uit messing



Type	Connection		Dimensions [mm]				Article no.
	C (ET)	D	A	B	E		
Adapter FES	G 3/4" M	G 3/8" F	18	26.5	23.5	1 / 10	F13447

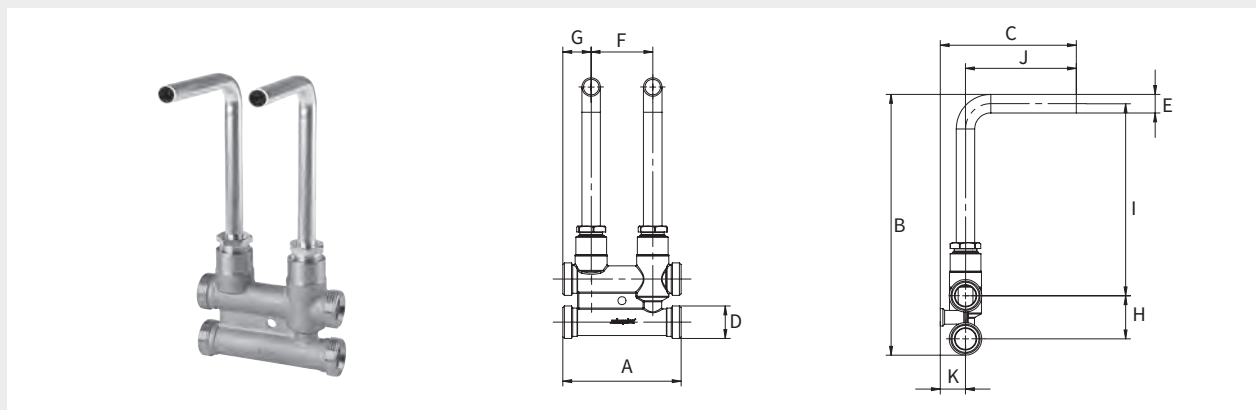


SL-MULTI CONNECTION KIT

SL-MULTI Connection Kit

Baseboard connection kit for the installation of radiators with integrated valves (two-pipe system), with galvanised carbon steel connection elbows, radiator-side connection with Simplex connection valves as angle versions (except H-module for one-pipe system), e.g. MULTIGRIP H-module F13424 or EXCLUSIV H-module F10012, universal connection for copper, carbon steel, plastic and multilayer composite pipes in conjunction with Simplex compression adapters (F11 and F3 series).

- Components made of nickel-plated brass and galvanised carbon steel
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar
- Quick and easy wall installation, no need to chisel walls



Type	Connection			Article no.
	D (ET)	E (Ø) [mm]		
SL-MULTI Connection	G 3/4" M	15	1 / 5	F10050

Dimensions




Type	Dimensions [mm]									
	A	B	C	F	G	H	I	J	K	
SL-MULTI Connection	96	212	110.5	50	23	35	156	90	20.5	

Covering Rosettes for SL-MULTI Baseboard Cut-out

Covering rosette for Simplex baseboards.

- Material: Plastic



Type	Colour	Dimensions [mm]		Article no.
Rosette SL-MULTI - W	white*	15	10	F72074
Rosette SL-MULTI - G	grey	15	10	F72075
Rosette SL-MULTI - B	light brown	15	10	F72076

* similar to RAL 9016



ACCESSORIES FOR BASEBOARD CONNECTION VALVES

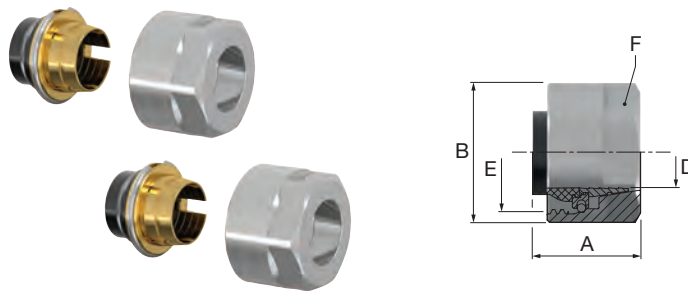
F11 Compression Adapter Set


2 pcs. compression adapters for use behind Simplex baseboards in heating systems, for blank, nickel- and chrome-plated copper pipes, carbon steel pipes and stainless steel pipes, suitable for G $\frac{3}{4}$ " M Euro taper, elastic seal, extended clamp rings for high pull forces, no support sleeves required, ribbed nut (wrench size 27 mm), with fixed stop, 2-step function: sealing - clamping.

- High pulling forces specifically with hard pipe surfaces
- No torque specifications
- Gentle pipe connection without deformation of the connecting pipe
- Detachable connection
- Permanent seal thanks to uniquely developed raw material formula for sealing element
- Components made of nickel-plated brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

Appropriate pipes

- Copper pipes (blank, nickel-plated, chromed*) according to DIN EN 1057 (soft, semi-hard, hard)
 - Carbon steel pipes (blank, galvanised) according to DIN EN 10305
 - Stainless steel pipes according to DIN EN 10312
- * Limitations for chrome-plated copper pipes: Dimension 14-18 mm for semi-hard and hard copper pipes



Type	Connection		Dimensions			 [Set]	Article no.
	E (ET)	D [mm]	A [mm]	B [mm]	F (WS) [mm]		
KV F11 - 12 x 1	G $\frac{3}{4}$ " F	12 x 1	23.1	Ø 30	27	20	F11121
KV F11 - 14 x 1	G $\frac{3}{4}$ " F	14 x 1	23.1	Ø 30	27	20	F11122

F11124 with fixed stop, without 2-step technology.



F3 Compression Adapter Set

2 pcs. compression adapters for use behind Simplex baseboards in heating systems, for plastic and multilayer composite pipes, suitable for G 3/4" M Euro taper, consisting of nut (wrench size 27 mm), plastic clamp ring and sleeve, O-ring seal on the sleeve, with fixed stop.

- Components made of nickel-plated brass
- Sealing materials: EPDM
- Pressure or temperature stress according to pipe manufacturer specifications

→ **Calibration arbor see Tools!**

Appropriate pipes

The Simplex Armaturen & Systeme GmbH has no access to technical modifications by the pipe manufacturer and therefore reserves the right make adjustments and technical amendments to the compression adapters.

For material specifications please refer to the relevant pipe manufacturer's specifications. Pipes which meet the following technical requirements are generally suitable.

DIN 16833/16834 - Pipes made of Polyethylene with raised temperature resistance (PE-RT) - general quality requirements and testing, dimensions

DIN 16892 - Pipes of cross-linked high density Polyethylene (PE-X) - general quality requirements and testing

DIN 16893 - Pipes of cross-linked high density Polyethylene (PE-X) - dimensions

DIN 16894 - Pipes of cross-linked medium density Polyethylene (PE-MDX) - general quality requirements and testing

DIN EN ISO 15875 - Plastic piping systems for cold and hot water systems - cross-linked Polyethylene (PE-X)

DIN EN ISO 15874 - Plastic piping systems for cold and hot water systems - Polypropylene (PP)

DIN EN ISO 15876 - Plastic piping systems for cold and hot water systems - Polybutylene (PB)

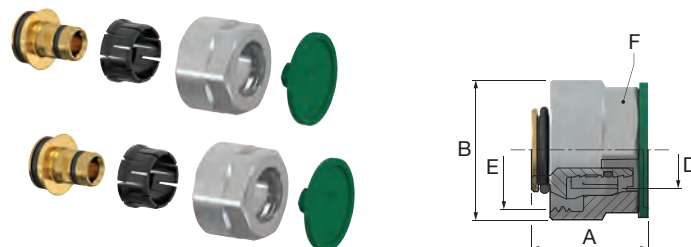
DIN EN ISO 15877 - Plastic piping systems for cold and hot water systems - Chlorinated Polyvinyl Chloride (CPVC)


DIN 16836 - Multilayer composite pipes - Polyolefin-aluminum composite pipes

DIN 16837 - Multilayer composite pipes - multilayer plastic composite pipes

DIN EN ISO 21003-2 - Multilayer piping systems for hot and cold water systems inside of buildings - Part 2: Pipes (ISO 21003-2:2008); German version EN ISO 21003-2:2008

Version 2011 - Changes, mistakes and additions reserved



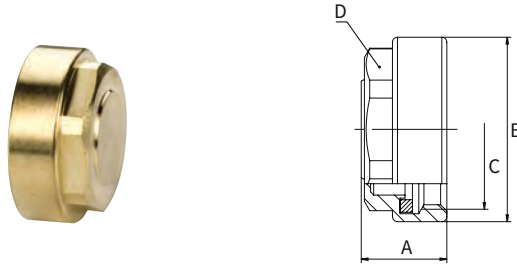
Type	Connection		Dimensions			 [Set]	Article no.
	E (ET)	D [mm]	A [mm]	B [mm]	F (WS) [mm]		
KV F3 - 12 x 2.0	G 3/4" F	12 x 2.0	24.5	30	27	20	F11460
KV F3 - 14 x 2.0	G 3/4" F	14 x 2.0	24.5	30	27	20	F11461
KV F3 - 16 x 1.5	G 3/4" F	16 x 1.5	24,5	30	27	20	F11467
KV F3 - 16 x 2.0	G 3/4" F	16 x 2.0	25.0	30	27	20	F11462




Blind Cap DN 20

Blind cap for closing the VK 31 Euro taper connection kit and the SL-MULTI connection kit on the loop end.

- Components made of brass
- Sealing materials: SBR
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



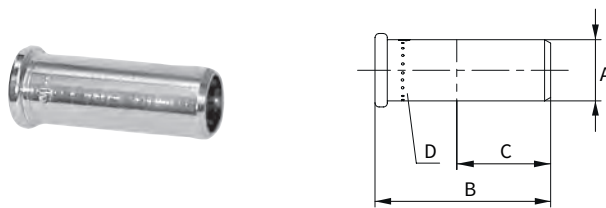
Type	Connection C (ET)	Dimensions [mm]				Article no.
		A	B	D (WS)		
Blind Cap DN 20	G 3/4" F	13.7	29.5	24	2 / 10	F10399




End Plug for VK 31 Connection Kits with Push-fit and Press Connection

End plug for closing the last radiator valve on the run of pipes.

- Components made of nickel-plated brass
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



Type	Dimensions [mm]					Article no.
	A (Ø)	B	C*	D		
End Plug VK31 - 15	15	43	23	15	10	F13466
End Plug VK31 - 18	18	45	24	18	2	F13467

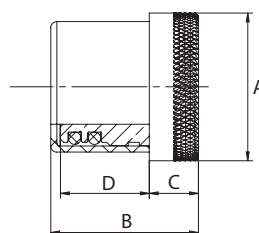
* Insertion depth




SIROCON Blind Plug

Blind plug for closing the SIROCON connections on the loop end.

- Components made of brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



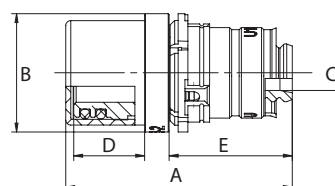
Type	Dimensions [mm]					Article no.
	A (Ø)	B	C	D		
SIROCON Blind Plug	24	24	8	14	10	F13425




SIROCON Press Adapter for Unipipe U Profile

Adapter for Unipipe pipes with system guarantee.

- Components made of brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



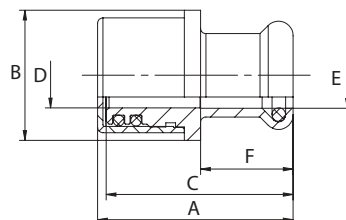
Type	Connection [mm]	Dimensions [mm]						Article no.
		A	B (Ø)	C (Ø)	D	E		
SIROCON Adapter U - 16	16 x 2	46	24	7	14	25	10	F13201




SIROCON Press Adapter for M and V Profile

Adapter for copper, carbon steel and stainless steel pipes.

- Components made of gun metal
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



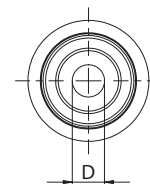
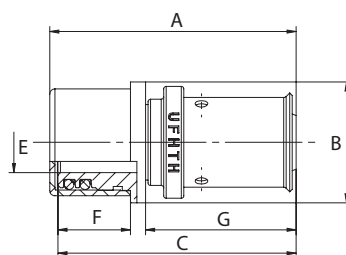
Type	Connection E (Ø) [mm]	Dimensions [mm]							Article no.
		A	B (Ø)	C	D (Ø)	F			
SIROCON Adapter M/V - 12	12	36.0	24	34.5	12	17	10		F13111
SIROCON Adapter M/V - 15	15	36.0	24	34.5	12	17	10		F13112
SIROCON Adapter M/V - 18	18	39.5	26	38.0	12	20	10		F13113
SIROCON Adapter M/V - 22	22	46.0	28	44.0	12	24	10		F13114




SIROCON Press Adapter for U, F, H and TH Profile

Adapter for plastic and multilayer composite pipes.

- Components made of brass and stainless steel
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar
- For more technical information about suitable pipes see the installation instructions



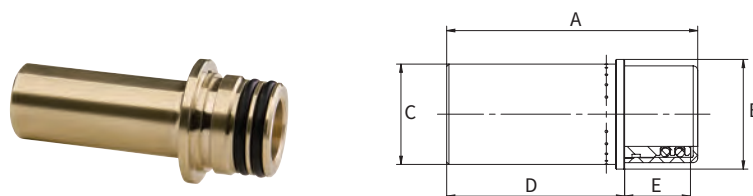
Type	Connection [mm]	Dimensions [mm]								Article no.
		A	B (Ø)	C	D (Ø)	E (Ø)	F	G		
SIROCON Adapter U/F/H/ TH - 16	16 x 2	49	24	47.3	6.4	12	14.4	30	10	F13313
SIROCON Adapter U/F/H/ TH - 20	20 x 2	49	27	47.3	10.0	12	14.4	30	10	F13314




SIROCON Universal Press Adapter

Adapter for copper, carbon steel and stainless steel fittings.

- Components made of brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



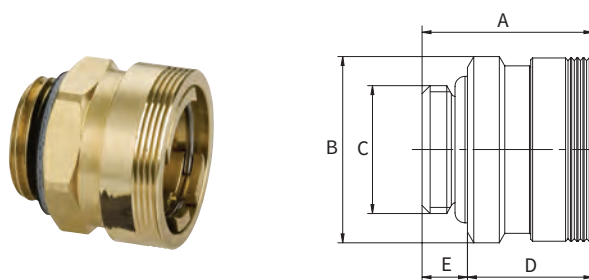
Type	Connection C (Ø pipe end) [mm]	Dimensions [mm]					Article no.
		A	B (Ø)	D	E		
SIROCON Uni Adapter - 15	15	53	24	37	14.4	10/50	F13315
SIROCON Uni Adapter - 18	18	53	24	37	14.4	10/50	F13316
SIROCON Uni Adapter - 22	22	55	24	39	14.4	10/50	F13317




SIROCON Thread Coupling with Self-sealing Male Thread

Coupling with SIROCON push-fit connection.

- Components made of brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



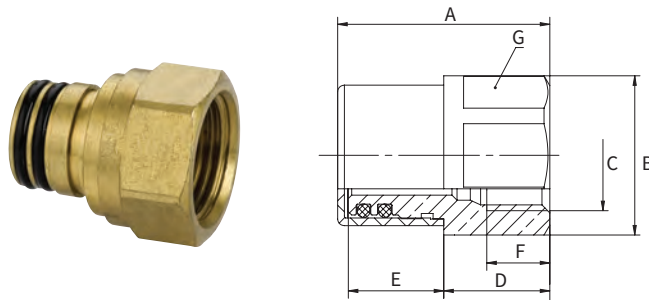
Type	Connection (C)	Dimensions [mm]					Article no.
		A	B (Ø)	D	E		
SIROCON Coupling - G 1/2	G 1/2" M	27.5	30	20.2	7.3	10/200	F13840




SIROCON Thread Adapter with Female Thread

Adapter with SIROCON push-fit connection.

- Components made of brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



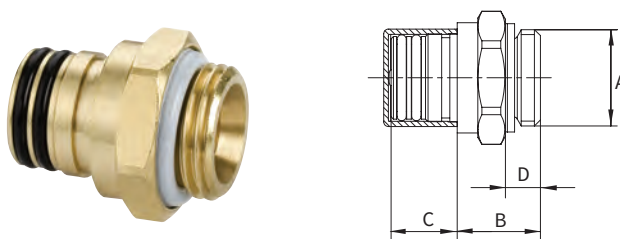
Type	Connection (C)	Dimensions [mm]							Article no.
		A	B (Ø)	D	E	F	G (WS)		
SIROCON Adapter - Rp 3/8	Rp 3/8"	32.0	24	16.0	14.4	9.5	22	10/200	F13101
SIROCON Adapter - Rp 1/2	Rp 1/2"	37.5	30	21.5	14.4	12.0	27	10/200	F13102
SIROCON Adapter - Rp 3/4	Rp 3/4"	39.0	35	22.6	14.4	11.5	32	10/200	F13103




SIROCON Thread Adapter with Self-sealing Male Thread

Adapter with SIROCON push-fit connection.

- Components made of brass
- Sealing materials: EPDM with slide coating
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



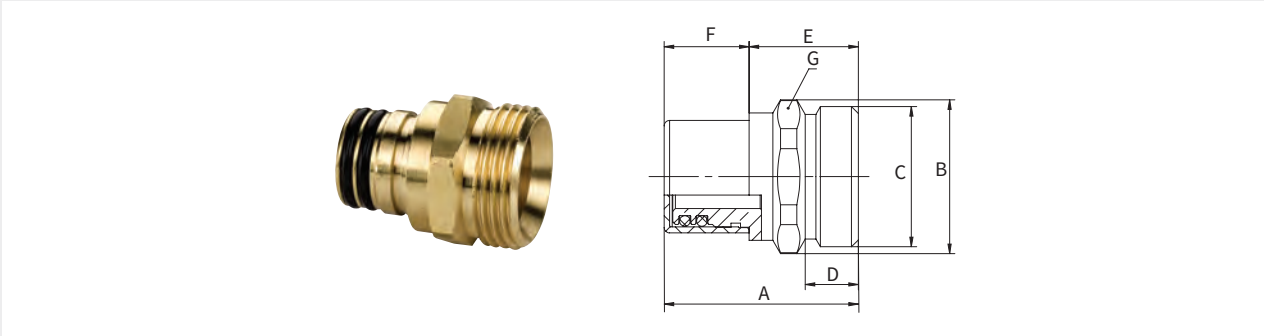
Type	Connection (A)	Dimensions [mm]				Article no.
		B	C	D		
SIROCON Adapter - G 3/8	G 3/8" M	19	14	7	10/200	F13106
SIROCON Adapter - G 1/2	G 1/2" M	18	14	8	10/200	F13107
SIROCON Adapter - G 3/4	G 3/4" M	24	14	10	10/200	F13108




SIROCON Thread Adapter with Euro Taper

Adapter with SIROCON push-fit connection.

- Components made of brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



Type	Connection C (ET)	Dimensions [mm]							Article no.
		A	B (Ø)	D	E	F	G (WS)		
SIROCON Adapter - G 3/4 ET	G 3/4" M	36.6	29	10	20.6	16	27	10/200	F13170



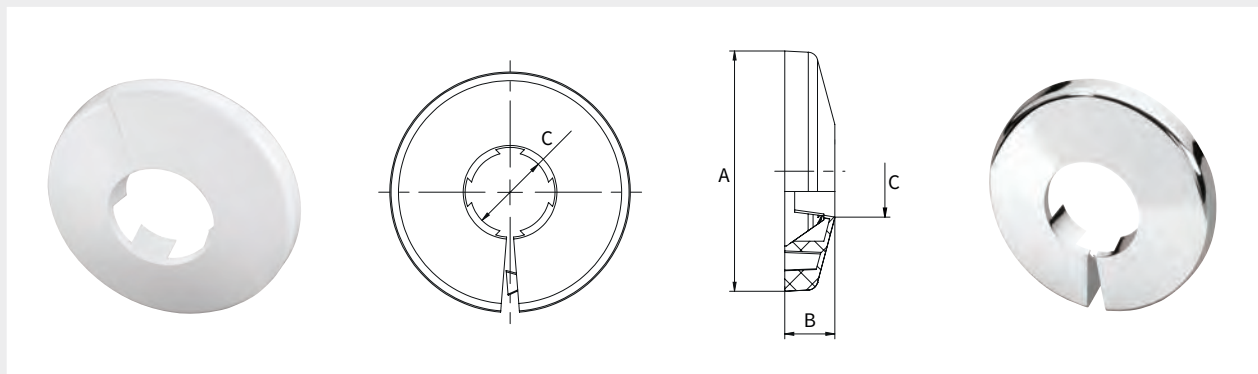
WALL ROSETTES


Wall rosette with dovetail fastener, one-piece.

- Components made of plastic

Wall Rosette

PG = 740



Type	Colour	Dimensions [mm]				Article no.
		A (Ø)	B	C (Ø)		
Wall Rosette - W12	white*	48	10	12	10/100	F44001
Wall Rosette - W15	white*	48	10	15	10/100	F44002
Wall Rosette - W18	white*	48	10	18 - $\frac{3}{8}$ "	10/100	F44003
Wall Rosette - W22	white*	53	10	22 - $\frac{1}{2}$ "	10/100	F44004
Wall Rosette - W28	white*	60	12	28 - $\frac{3}{4}$ "	10/100	F44005
Wall Rosette - W33	white*	66	12	33 - 1"	10/100	F44006
Wall Rosette - C12	chrome	48	10	12	10/100	F44031
Wall Rosette - C15	chrome	48	10	15	10/100	F44032
Wall Rosette - C18	chrome	48	10	18 - $\frac{3}{8}$ "	10/100	F44033
Wall Rosette - C22	chrome	53	10	22 - $\frac{1}{2}$ "	10/100	F44034
Wall Rosette - C28	chrome	60	12	28 - $\frac{3}{4}$ "	10/100	F44035
Wall Rosette - C33	chrome	66	12	33 - 1"	10/100	F44036

* similar to RAL 9016



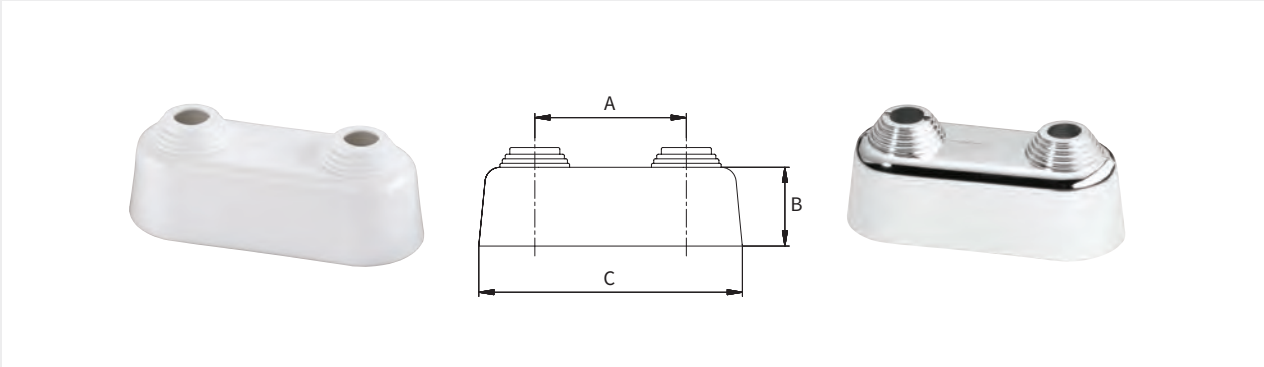
DOUBLE ROSETTE


Double rosette, two-piece, for pipes Ø 10 - 22 mm.
The stepped pipe bushings can be easily cut off with the pocket knife and made to fit the respective pipe diameter (10-22 mm).

- Components made of plastic

Double Rosette, High Version

PG = 740



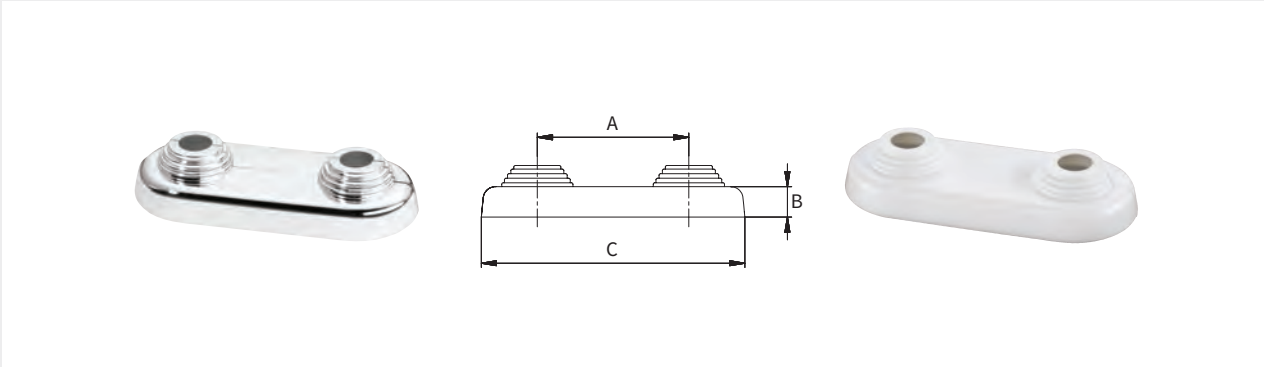
Type	Colour	Pipe (Ø) [mm]	Dimensions [mm]				Article no.
			A	B	C		
Double Rosette - W35	white*	10 - 22	35	26	72	10/50	F44201
Double Rosette - W40	white*	10 - 22	40	26	77	10/50	F44202
Double Rosette - W45	white*	10 - 22	45	26	82	10/50	F44203
Double Rosette - W50	white*	10 - 22	50	26	87	10/50	F44204
Double Rosette - C50	chrome	10 - 22	50	26	87	10/50	F44224


* similar to RAL 9016



Double Rosette, Flat Version

PG = 740



Type	Colour	Pipe (Ø) [mm]	Dimensions [mm]				Article no.
			A	B	C		
Double Rosette Flat - W50	white*	10 - 22	50	10	87	10/50	F44214
Double Rosette Flat - C50	chrome	10 - 22	50	10	87	10/50	F44234

* similar to RAL 9016



DESIGN COVERS FOR VALVES


Design cover made of plastic with polished optics, to clip on.

- Components made of plastic

Design Cover for Simplex H-Module

For H-modules with 50 mm axial distance.



Type	Version	Colour		Article no.
Cover HB - DW	straight	white*	1 / 20	F10093
Cover HB - EW	angle	white*	1 / 20	F10094
Cover HB - DC	straight	chrome	1 / 20	F10095
Cover HB - EC	angle	chrome	1 / 20	F10096


* similar to RAL 9016



Design Cover for VARIODESIGN Regulator Valve

For left and right connection, suitable for F12060, F12061, F12065 and F12066 for installation on bathroom radiators.



Type	Version	Colour		Article no.
Cover VA VARIODESIGN - W	right or left	white*	1 / 10	F12070
Cover VA VARIODESIGN - C	right or left	chrome	1 / 10	F12071


* similar to RAL 9016



Design Cover for VARIOCON Regulator Valve

For angle or straight connection, suitable for F12020 and F12018 for installation on bathroom radiators.



Type	Version	Colour		Article no.
Cover VA VARIOCON - WR	right	white*	1 / 10	F12034
Cover VA VARIOCON - CR	right	chrome	1 / 10	F12035
Cover VA VARIOCON - WL	left	white*	1 / 10	F12036
Cover VA VARIOCON - CL	left	chrome	1 / 10	F12037


* similar to RAL 9016



Design Cover for Actuator

Suitable for VARIOCON regulator valves with actuator F12018 (in conjunction with the VARIOCON design cover).



Type	Colour		Article no.
Cover STA VARIOCON - W	white*	1 / 20	F12041
Cover STA VARIOCON - C	chrome	1 / 20	F12042

* similar to RAL 9016



Universal Clips



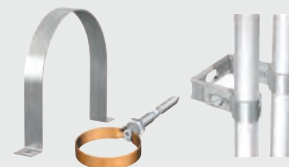
P. 724

Insulation Clips



P. 752

Wall Mounted Clips



P. 777

Pipe Hangers and Sprinkler Clips



P. 786

Rail and Rail Accessories



P. 790

Mounting Accessories



P. 816

Hot-Dip Galvanized Mounting Material



P. 847

Stainless Steel Mounting Material



P. 855

Pipe Escutcheons



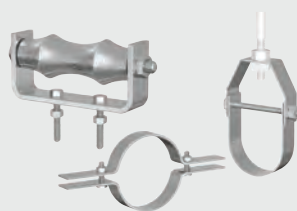
P. 864

FlamcoFix Falx



P. 868

Clevis Hangers



P. 871



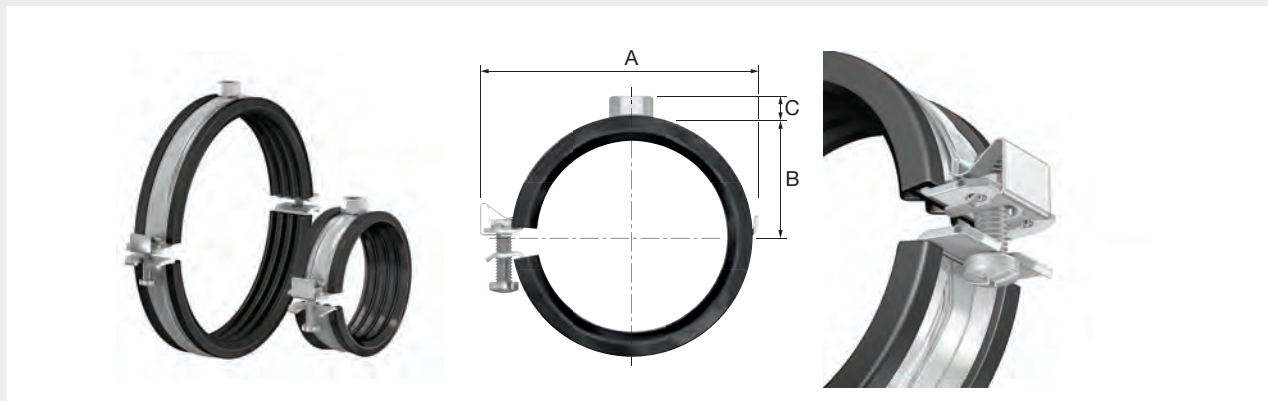
With FlamcoFix mounting materials, we offer an extensive range of clips, rails and mounting accessories for pipe fixing. Flamco provides a suitable solution for fixing a wide range of installations on floors, walls, ceilings or roofs. The FlamcoFix mounting materials stand for Safety, Quality and Efficiency.


FOR ALL TYPES OF PIPE

BSA M 8 Clips

BSA clips are rubber lined universal clips for mounting pipes to the wall or ceiling. Thanks to the unique locking system, the pipe can be pre-mounted without the use of tools. This means that the pipe's position can be adjusted afterwards if necessary, and the position of a bend or a T joint determined more accurately. At this stage the fixing bolt can be tightened, so that the pipe is held and installation completed.

- With handy and quick 'click-spring' closure.
- Makes pre-mounting without tools possible.
- Noise suppressing rubber strip: 19 dB(A) according to ISO 3822-1.
To achieve maximum sound suppression do not overload the fitting.
- Clip: Electrolytically zinc plated.
- Suitable for temperatures from -40 °C up to +120 °C.
- BSA clips are compatible with pipe sizes as per DIN 2448 and DIN EN 1057.
- The EPDM rubber inlay is halogen-free.



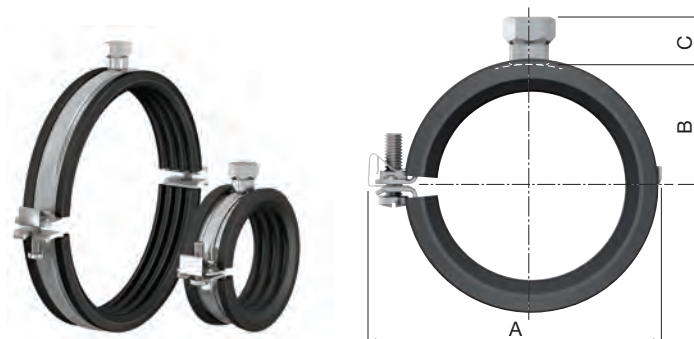
Type	Ø Pipe		Strip dimensions [mm]	Max. working load [N]	Dimensions				Order Code
	Ext. dia. [mm]	Nom. ["]			A [mm]	B [mm]	C [mm]		
BSA M 8 x 12 - 13.5	12 - 13.5	1/4	25 x 1.75	1300	45	14	8	100	39200
BSA M 8 x 14 - 16	14 - 16	-	25 x 1.75	1300	47	15	8	100	39201
BSA M 8 x 17 - 19	17 - 19	3/8	25 x 1.75	1300	50	17	8	100	39202
BSA M 8 x 20 - 24	20 - 24	1/2	25 x 1.75	1300	54	19	8	100	39203
BSA M 8 x 25 - 28	25 - 28	3/4	25 x 1.75	1300	59	21	8	100	39204
BSA M 8 x 29 - 33	29 - 33	-	25 x 1.75	1300	63	23	8	100	39205
BSA M 8 x 33 - 37	33 - 37	1	25 x 1.75	1300	70	27	8	100	39206
BSA M 8 x 38 - 42	38 - 42	1 1/4	25 x 1.75	1300	78	31	8	100	39207
BSA M 8 x 44.5 - 49	44.5 - 49	1 1/2	25 x 1.75	1300	83	34	8	50	39208
BSA M 8 x 50 - 54	50 - 54	-	25 x 1.75	1300	90	37	8	50	39209
BSA M 8 x 56 - 60	56 - 60	2	25 x 1.75	1300	96	40	8	50	39210
BSA M 8 x 62 - 64 *	62 - 64	-	25 x 2.75	2000	119	43	8	25	39550
BSA M 8 x 68 - 73 *	68 - 73	-	25 x 2.75	2000	126	46	8	25	39551
BSA M 8 x 75 - 80 *	75 - 80	2 1/2	25 x 2.75	2000	133	50	8	25	39552
BSA M 8 x 82 - 86 *	82 - 86	-	25 x 2.75	2000	139	53	8	25	39553
BSA M 8 x 89 - 91 *	89 - 91	3	25 x 2.75	2000	145	56	8	25	39554
BSA M 8 x 95 - 102 *	95 - 102	3 1/2	25 x 2.75	2000	157	62	8	25	39556
BSA M 8 x 108 - 116 *	108 - 116	4	25 x 2.75	2000	168	67	8	25	39558


* Closing system provided with 2 closing screws.



BSA M 8/10 Clips

- Similar to the BSA M 8 clips, but with a combined M 8/10 connection.
- The EPDM rubber inlay is halogen-free.



Type	Ø Pipe		Strip dimensions [mm]	Max. working load [N]	Dimensions				Order Code
	Ext. dia. [mm]	Nom. ["]			A [mm]	B [mm]	C [mm]		
BSA M 8/10 x 12 - 13.5	12 - 13.5	1/4	25 x 1.75	1300	45	14	16	100	39300
BSA M 8/10 x 14 - 16	14 - 16	-	25 x 1.75	1300	47	15	16	100	39301
BSA M 8/10 x 17 - 19	17 - 19	3/8	25 x 1.75	1300	50	17	16	100	39302
BSA M 8/10 x 20 - 24	20 - 24	1/2	25 x 1.75	1300	54	19	16	100	39303
BSA M 8/10 x 25 - 28	25 - 28	3/4	25 x 1.75	1300	59	21	16	100	39304
BSA M 8/10 x 29 - 33	29 - 33	-	25 x 1.75	1300	63	23	16	100	39305
BSA M 8/10 x 33 - 37	33 - 37	1	25 x 1.75	1300	70	27	16	100	39306
BSA M 8/10 x 38 - 42	38 - 42	1 1/4	25 x 1.75	1300	78	31	16	100	39307
BSA M 8/10 x 44.5 - 49	44.5 - 49	1 1/2	25 x 1.75	1300	83	34	16	50	39308
BSA M 8/10 x 50 - 54	50 - 54	-	25 x 1.75	1300	90	37	16	50	39309
BSA M 8/10 x 56 - 60	56 - 60	2	25 x 1.75	1300	96	40	16	50	39310
BSA M 8/10 x 62 - 64 *	62 - 64	-	25 x 2.75	2000	119	43	16	25	39311
BSA M 8/10 x 68 - 73 *	67 - 73	-	25 x 2.75	2000	126	46	16	25	39312
BSA M 8/10 x 75 - 80 *	75 - 80	2 1/2	25 x 2.75	2000	133	50	16	25	39313
BSA M 8/10 x 82 - 86 *	82 - 86	-	25 x 2.75	2000	139	53	16	25	39314
BSA M 8/10 x 89 - 91 *	89 - 91	3	25 x 2.75	2000	145	56	16	25	39315
BSA M 8/10 x 95 - 102 *	95 - 102	3 1/2	25 x 2.75	2000	157	62	16	25	39317
BSA M 8/10 x 108 - 116 *	108 - 116	4	25 x 2.75	2000	168	67	16	25	39318
BSA M 8/10 x 121 - 127 *	121 - 127	-	25 x 2.75	2000	184	71	16	25	39320
BSA M 8/10 x 133 - 141 *	133 - 141	5	25 x 2.75	2000	195	78	16	25	39321
BSA M 8/10 x 159 - 162 *	159 - 162	-	25 x 2.75	2000	220	93	16	25	39323
BSA M 8/10 x 165 - 168 *	165 - 168	6	25 x 2.75	2000	227	97	16	25	39324

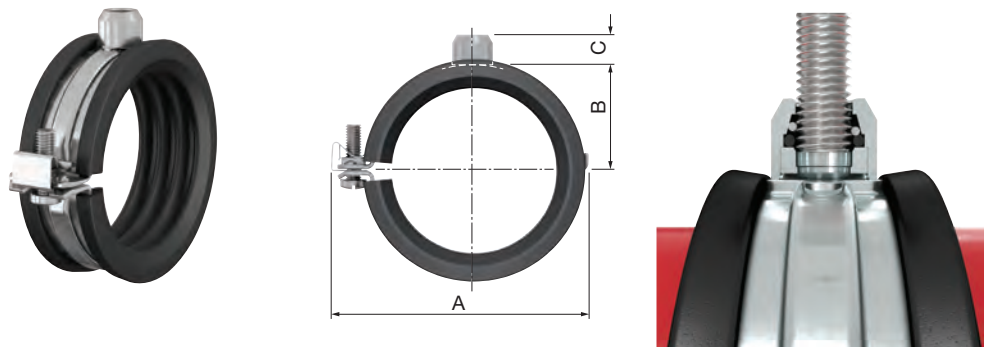
* Closing system provided with 2 closing screws.




BSA-C M 8 Clips

With M 8 'click' connection for quick mounting.

- Deburring of threaded rod is not necessary.
- Reduced installation time.
- The correct position can be set by turning the clip.
- Clip: Electrolytically zinc plated.
- Suitable for thread in accordance with ISO 965-2.
- Safety margin for minimum breaking load (V) = 3.
- To obtain the maximum noise reduction, the insert of the bracket must not be overloaded.
- The EPDM rubber inlay is halogen-free.

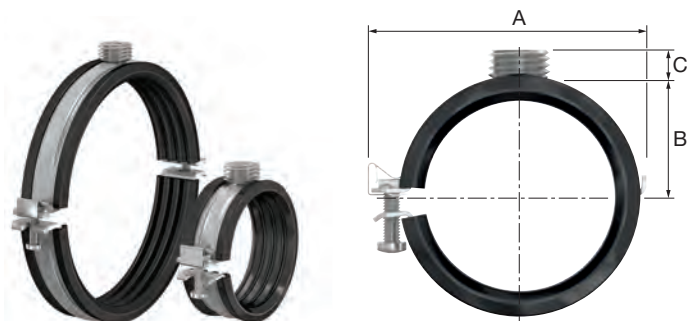



Type	Ø Pipe		Ext. dia. [mm]	Nom. ["]	Strip dimen- sions [mm]	Max. working load [N]	Dimensions				Order Code
							A [mm]	B [mm]	C [mm]		
BSA-C M 8 x 12 - 13.5			12 - 13.5	1/4	25 x 1.75	600	45	14	12	100	39170
BSA-C M 8 x 14 - 16			14 - 16	-	25 x 1.75	600	47	15	12	100	39171
BSA-C M 8 x 17 - 19			17 - 19	3/8	25 x 1.75	600	50	17	12	100	39172
BSA-C M 8 x 20 - 24			20 - 24	1/2	25 x 1.75	600	54	19	12	100	39173
BSA-C M 8 x 25 - 28			25 - 28	3/4	25 x 1.75	600	59	21	12	100	39174
BSA-C M 8 x 29 - 33			29 - 33	-	25 x 1.75	600	63	23	12	100	39175
BSA-C M 8 x 33 - 37			33 - 37	1	25 x 1.75	600	70	27	12	100	39176
BSA-C M 8 x 38 - 42			38 - 42	1 1/4	25 x 1.75	600	78	31	12	100	39177
BSA-C M 8 x 44.5 - 49			44.5 - 49	1 1/2	25 x 1.75	600	83	34	12	50	39178
BSA-C M 8 x 50 - 54			50 - 54	-	25 x 1.75	600	90	37	12	50	39179
BSA-C M 8 x 56 - 60			56 - 60	2	25 x 1.75	600	96	40	12	50	39180



BSA ½ M / M 10 Clips

- Similar to the BSA M 8 clips, but with a combined G ½" M (BSP) / M 10 connection.
- The EPDM rubber inlay is halogen-free.



Type	Ø Pipe		Strip dimensions [mm]	Max. working load [N]	Dimensions				Order Code
	Ext. dia. [mm]	Nom. ["]			A [mm]	B [mm]	C [mm]		
BSA ½ M / M 10 x 12 - 13,5	12 - 13,5	1/4	25 x 1.75	1300	45	14	10	50	51900
BSA ½ M / M 10 x 14 - 16	14 - 16	-	25 x 1.75	1300	47	15	10	50	51901
BSA ½ M / M 10 x 17 - 19	17 - 19	3/8	25 x 1.75	1300	50	17	10	50	51902
BSA ½ M / M 10 x 20 - 24	20 - 24	1/2	25 x 1.75	1300	54	19	10	50	51903
BSA ½ M / M 10 x 25 - 28	25 - 28	3/4	25 x 1.75	1300	59	21	10	50	51904
BSA ½ M / M 10 x 29 - 33	29 - 33	-	25 x 1.75	1300	63	23	10	50	51905
BSA ½ M / M 10 x 33 - 37	33 - 37	1	25 x 1.75	1300	70	27	10	50	51906
BSA ½ M / M 10 x 38 - 42	38 - 42	1 1/4	25 x 1.75	1300	78	31	10	50	51907
BSA ½ M / M 10 x 44,5 - 49	44,5 - 49	1 1/2	25 x 1.75	1300	83	34	10	50	51908
BSA ½ M / M 10 x 50 - 54	50 - 54	-	25 x 1.75	1300	90	37	10	50	51909
BSA ½ M / M 10 x 56 - 60	56 - 60	2	25 x 1.75	1300	96	40	10	50	51910
BSA ½ M / M 10 x 62 - 64 *	62 - 64	-	25 x 2.75	2000	119	43	10	25	51920
BSA ½ M / M 10 x 68 - 73 *	67 - 73	-	25 x 2.75	2000	126	46	10	25	51921
BSA ½ M / M 10 x 75 - 80 *	75 - 80	2 1/2	25 x 2.75	2000	133	50	10	25	51922
BSA ½ M / M 10 x 82 - 86 *	82 - 86	-	25 x 2.75	2000	139	53	10	25	51923
BSA ½ M / M 10 x 89 - 91 *	89 - 91	3	25 x 2.75	2000	145	56	10	25	51924
BSA ½ M / M 10 x 95 - 102 *	95 - 102	3 1/2	25 x 2.75	2000	157	62	10	25	51926
BSA ½ M / M 10 x 108 - 116 *	108 - 116	4	25 x 2.75	2000	168	67	10	25	51927
BSA ½ M / M 10 x 121 - 127 *	121 - 127	-	25 x 2.75	2000	184	71	10	25	51929
BSA ½ M / M 10 x 133 - 141 *	133 - 141	5	25 x 2.75	2000	195	78	10	25	51930
BSA ½ M / M 10 x 159 - 162 *	159 - 162	-	25 x 2.75	2000	220	93	10	25	51932
BSA ½ M / M 10 x 165 - 168 *	165 - 168	6	25 x 2.75	2000	227	97	10	25	51933
BSA ½ M+F / M 8/10 x 165 - 168 ***	165 - 168	6	25 x 2.75	2000	227	97	19	25	39330

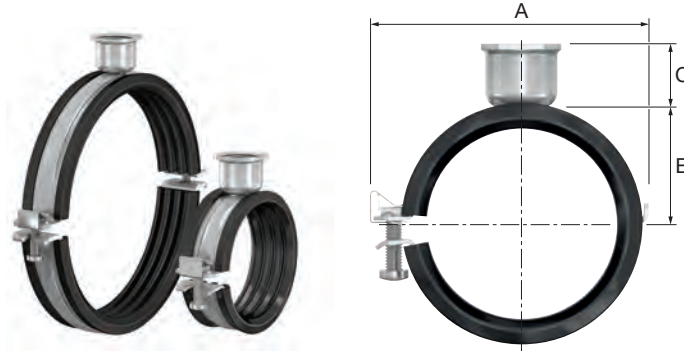
* Closing system provided with 2 closing screws.


** With a combined G ½" M (BSP) / M 8/10 connection + G ½" F (BSP) sleeve.



BSA ½ F Clips

- Similar to the BSA M 8 clips, but with a G ½" F (BSP) connection.
- Designed for heavier installations.
- The EPDM rubber inlay is halogen-free.



Type	Ø Pipe		Strip dimensions [mm]	Max. working load [N]	Dimensions				Order Code
	Ext. dia. [mm]	Nom. ["]			A [mm]	B [mm]	C [mm]		
BSA ½ F x 20 - 24	20 - 24	½	25 x 1.75	1300	54	19	23	50	39223
BSA ½ F x 25 - 28	25 - 28	¾	25 x 1.75	1300	59	21	23	50	39224
BSA ½ F x 33 - 37	33 - 37	1	25 x 1.75	1300	70	27	23	50	39226
BSA ½ F x 38 - 42	38 - 42	1 ¼	25 x 1.75	1300	78	31	23	50	39227
BSA ½ F x 44,5 - 49	44,5 - 49	1 ½	25 x 1.75	1300	83	34	23	50	39228
BSA ½ F x 56 - 60	56 - 60	2	25 x 1.75	1300	96	40	23	50	39230
BSA ½ F x 75 - 80 *	75 - 80	2 ½	25 x 2.75	2000	133	50	23	25	39352
BSA ½ F x 89 - 91 *	89 - 91	3	25 x 2.75	2000	145	56	23	25	39354
BSA ½ F x 95 - 102 *	95 - 102	3 ½	25 x 2.75	2000	157	62	23	25	39355
BSA ½ F x 108 - 116 *	108 - 116	4	25 x 2.75	2000	168	67	23	25	39356
BSA ½ F x 133 - 141 *	133 - 141	5	25 x 2.75	2000	195	78	23	25	39360
BSA ½ F x 159 - 162 *	159 - 162	-	25 x 2.75	2000	220	93	23	25	39361
BSA ½ F x 165 - 168 *	165 - 168	6	25 x 2.75	2000	227	97	23	25	39362

* Closing system provided with 2 closing screws.



RSA Clips

RSA clips are rubber lined universal clips designed for heavy duty applications. The thickness of the strip material and the reinforcement ribs make the most rigid assemblies possible.

- With noise suppressing EPDM rubber strip.
- Suitable for temperatures from -40 °C up to +120 °C.
- Complete and comprehensive range.
- A special combinut with outer and inner thread makes a broad range of applications possible in combination with threaded rods and pipes.
- Clip: Electrolytically zinc plated.

Execution:

RSA G ½ M (BSP) / M 10, G ½ M (BSP) / M 12 and G ¾ M (BSP) / M 16:

Special welded-on nuts on the clip flanges allow high torque on the fixing bolts and permit heavy loads on the clip whilst easing installation.

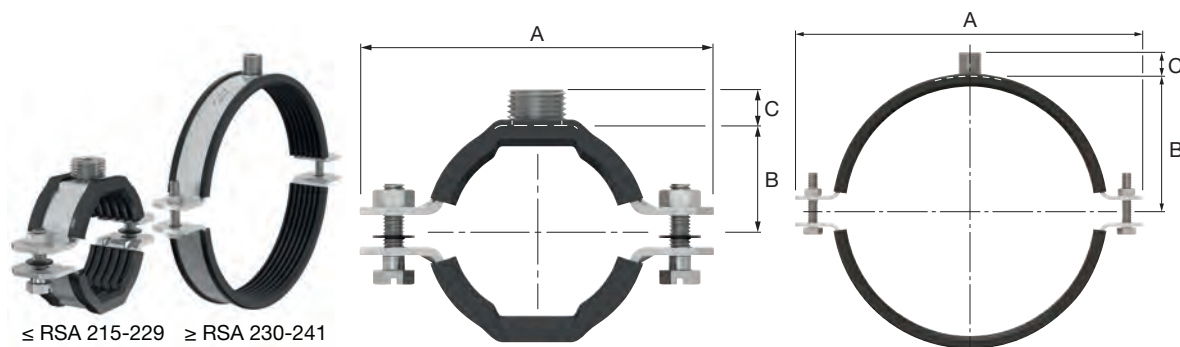
Bolts with retaining ring.


The head of the bolt has a slot, a Pozidriv 2 (PZ2) and hexagon for fast installation with a flat or cross-head screwdriver or a spanner.


RSA G ¾ M (BSP) / M 12/16:

Equipped with two hexagon bolts.

With halogen-free inlay.



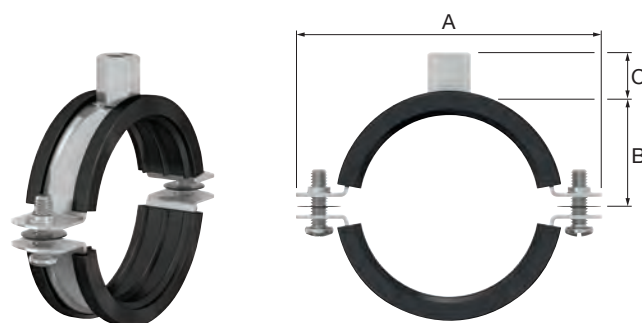
Type	Ø Pipe		Strip dimensions [mm]	Connection	Max. working load [N]	Dimensions				Order Code
	Ext. dia. [mm]	Nom. ["]				A [mm]	B [mm]	C [mm]		
RSA ½ M / M 10 x 13 - 17	13 - 17.9	1/4 + 3/8	30 x 3.0	G ½" M / M 10	4000	79	14.5	12	50	54301
RSA ½ M / M 10 x 18 - 22	18 - 22.9	1/2	30 x 3.0	G ½" M / M 10	4000	84	17.0	12	50	54302
RSA ½ M / M 10 x 23 - 27	23 - 27.9	3/4	30 x 3.0	G ½" M / M 10	4000	89	19.5	12	50	54303
RSA ½ M / M 10 x 28 - 33	28 - 33.9	1	30 x 3.0	G ½" M / M 10	4000	95	22.5	12	50	54304
RSA ½ M / M 10 x 34 - 38	34 - 38.9	-	30 x 3.0	G ½" M / M 10	4000	100	25.0	12	50	54305
RSA ½ M / M 10 x 39 - 43	39 - 43.9	1 1/4	30 x 3.0	G ½" M / M 10	4000	105	27.5	12	50	54306
RSA ½ M / M 10 x 44 - 49	44 - 49.9	1 1/2	30 x 3.0	G ½" M / M 10	4000	111	30.5	12	50	54307
RSA ½ M / M 10 x 50 - 55	50 - 55.9	-	30 x 3.0	G ½" M / M 10	4000	117	33.5	12	25	54308
RSA ½ M / M 10 x 56 - 62	56 - 62.9	2	30 x 3.0	G ½" M / M 10	4000	124	37.0	12	25	54309
RSA ½ M / M 10 x 63 - 70	63 - 70.9	-	30 x 3.0	G ½" M / M 10	4000	132	41.0	12	25	54310
RSA ½ M / M 10 x 71 - 78	71 - 78.9	2 1/2	30 x 3.0	G ½" M / M 10	4000	140	45.0	12	25	54311
RSA ½ M / M 10 x 79 - 85	79 - 85.9	-	40 x 4.0	G ½" M / M 10	5000	159	49.5	12	25	54312
RSA ½ M / M 10 x 86 - 92	86 - 92.9	3	40 x 4.0	G ½" M / M 10	5000	166	53.0	12	25	54313
RSA ½ M / M 10 x 93 - 99	93 - 99.9	-	40 x 4.0	G ½" M / M 10	5000	173	56.5	12	25	54314
RSA ½ M / M 10 x 100 - 108	100 - 108.9	-	40 x 4.0	G ½" M / M 10	5000	182	61.0	12	20	54315
RSA ½ M / M 10 x 109 - 116	109 - 116.9	4	40 x 4.0	G ½" M / M 10	5000	190	65.0	12	20	54316
RSA ½ M / M 12 x 117 - 124	117 - 124.9	-	40 x 4.0	G ½" M / M 12	5000	198	69.0	12	20	54317
RSA ½ M / M 12 x 125 - 133	125 - 133.9	-	40 x 4.0	G ½" M / M 12	5000	207	73.5	12	20	54318
RSA ½ M / M 12 x 134 - 142	134 - 142.9	5	40 x 4.0	G ½" M / M 12	5000	216	78.0	12	20	54319
RSA ½ M / M 12 x 143 - 151	143 - 151.9	-	40 x 4.0	G ½" M / M 12	5000	225	82.5	12	20	54320


Type	Ø Pipe		Strip dimen- sions [mm]	Connection	Max. working load [N]	Dimensions				Order Code
	Ext. dia. [mm]	Nom. ["]				A [mm]	B [mm]	C [mm]		
RSA ½ M / M 12 x 152 - 160	152 - 160.9	-	40 x 4.0	G ½" M / M 12	5000	234	87.0	12	20	54321
RSA ½ M / M 12 x 161 - 173	161 - 173.9	6	40 x 4.0	G ½" M / M 12	5000	247	93.5	12	20	54322
RSA ¾ M / M 16 x 174 - 186	174 - 186.9	-	40 x 4.0	G ¾" M / M 16	5000	260	100.0	16	10	54323
RSA ¾ M / M 16 x 187 - 199	187 - 199.9	-	40 x 4.0	G ¾" M / M 16	5000	273	106.5	16	10	54324
RSA ¾ M / M 16 x 200 - 214	200 - 214.9	-	40 x 4.0	G ¾" M / M 16	5000	288	114.5	16	10	54325
RSA ¾ M / M 16 x 215 - 229	215 - 229.9	8	40 x 4.0	G ¾" M / M 16	5000	303	121.5	16	10	54326
RSA ¾ M / M 12/16 x 230 - 241	230 - 241.9	-	50 x 5.0	G ¾" M / M 12/16	9000	330	133.0	26	1	54327
RSA ¾ M / M 12/16 x 242 - 260	242 - 260.9	-	50 x 5.0	G ¾" M / M 12/16	9000	348	142.0	26	1	54328
RSA ¾ M / M 12/16 x 261 - 273	261 - 273.9	10	50 x 5.0	G ¾" M / M 12/16	9000	361	148.0	26	1	54329
RSA ¾ M / M 12/16 x 274 - 292	274 - 292.9	-	50 x 5.0	G ¾" M / M 12/16	9000	380	158.0	26	1	54330
RSA ¾ M / M 12/16 x 293 - 310	293 - 310.9	-	50 x 5.0	G ¾" M / M 12/16	9000	399	167.0	26	1	54331
RSA ¾ M / M 12/16 x 311 - 324	311 - 324.9	12	50 x 5.0	G ¾" M / M 12/16	9000	412	174.0	26	1	54332
RSA ¾ M / M 12/16 x 325 - 343	325 - 343.9	-	50 x 5.0	G ¾" M / M 12/16	9000	431	183.0	26	1	54333
RSA ¾ M / M 12/16 x 344 - 356	344 - 356.9	14	50 x 5.0	G ¾" M / M 12/16	9000	444	190.0	26	1	54334
RSA ¾ M / M 12/16 x 357 - 374	357 - 374.9	-	50 x 5.0	G ¾" M / M 12/16	9000	462	199.0	26	1	54335
RSA ¾ M / M 12/16 x 375 - 393	375 - 393.9	-	50 x 5.0	G ¾" M / M 12/16	9000	481	208.0	26	1	54336
RSA ¾ M / M 12/16 x 394 - 406	394 - 406.9	16	50 x 5.0	G ¾" M / M 12/16	9000	494	215.0	26	1	54337

BSI Clips

BSI clips are rubber lined universal clips for mounting pipes to the wall or ceiling.

- Fitted with two bolts with anti-loss ring.
- Bolt with slot and cross head.
- Reinforcement grooves ensure that BSI clips maintain their shape.
- Noise suppressing rubber lining (EPDM): 17 dB(A) according to ISO 3822-1.
To achieve maximum sound suppression do not overload the fitting.
- Safety margin for minimal breaking load (V) = 3.
- Clip: Electrolytically zinc plated.
- Suitable for temperatures from -40 °C up to +120 °C.
- BSI clips are compatible with pipe sizes according to DIN 2448 and DIN EN 1057.
- With halogen-free inlay.
- Equipped with Philips / slotted head screws.

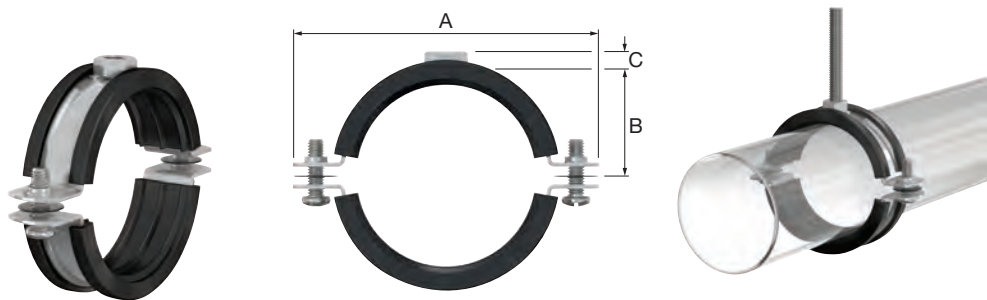



Type	Ø Pipe		Conne- ction	Strip dimen- sions [mm]	Max. working load [N]	Dimensions				Order Code
	Ext. dia. [mm]	Nom. ["]				A [mm]	B [mm]	C [mm]		
BSI M8/10 x 8 - 10	8 - 10	1/8	M8/10	20 x 1.5	1000	53	13	16	50	39023
BSI M8/10 x 12 - 14	12 - 14	1/4	M8/10	20 x 1.5	1000	58	15	16	50	39000
BSI M8/10 x 15 - 19	15 - 19	3/8	M8/10	20 x 1.5	1000	62	18	16	50	39001
BSI M8/10 x 20 - 25	20 - 25	1/2	M8/10	20 x 1.5	1000	69	21	16	50	39002
BSI M8/10 x 26 - 30	26 - 30	3/4	M8/10	20 x 1.5	1000	74	23	16	50	39003
BSI M8/10 x 32 - 36	32 - 36	1	M8/10	20 x 1.5	1000	81	26	16	50	39004
BSI M8/10 x 38 - 43	38 - 43	1 1/4	M8/10	20 x 1.5	1000	87	30	16	50	39005
BSI M8/10 x 44 - 49	44 - 49	1 1/2	M8/10	20 x 1.5	1000	94	33	16	50	39006
BSI M8/10 x 50 - 55	50 - 55	-	M8/10	20 x 1.5	1000	103	36	16	50	39007
BSI M8/10 x 56 - 61	56 - 61	2	M8/10	20 x 1.5	1000	106	39	16	50	39008
BSI M8/10 x 62 - 67	62 - 67	-	M8/10	20 x 2.0	1300	113	42	16	50	39009
BSI M8/10 x 68 - 73	68 - 73	-	M8/10	20 x 2.0	1300	123	45	16	50	39010
BSI M8/10 x 75 - 80	75 - 80	2 1/2	M8/10	20 x 2.0	1300	128	48	16	50	39011
BSI M8/10 x 82 - 86	82 - 86	-	M8/10	20 x 2.0	1300	134	51	16	50	39012
BSI M8/10 x 87 - 92	87 - 92	3	M8/10	20 x 2.0	1300	141	54	16	50	39013
BSI M8/10 x 95 - 102	95 - 102	3 1/2	M8/10	20 x 2.5	2150	158	58	16	50	39014
BSI M8/10 x 108 - 116	108 - 116	4	M8/10	20 x 2.5	2150	170	65	16	25	39015
BSI M10/12 x 108 - 116	108 - 116	4	M10/12	20 x 2.5	2150	170	65	18	25	39035
BSI M8/10 x 121 - 127	121 - 127	-	M8/10	20 x 2.5	2150	185	70	16	25	39016
BSI M8/10 x 131 - 141	131 - 141	5	M8/10	20 x 2.5	2150	195	77	16	25	39017
BSI M8/10 x 159 - 163	159 - 163	-	M8/10	20 x 2.5	2150	215	88	16	25	39018
BSI M10/12 x 159 - 163	159 - 163	-	M10/12	20 x 2.5	2150	215	88	18	25	39038
BSI M8/10 x 165 - 169	165 - 169	6	M8/10	20 x 2.5	2150	226	91	16	25	39019
BSI M8/10 x 192 - 202	192 - 202	-	M8/10	20 x 3.0	3000	265	107	16	25	39020
BSI M8/10 x 210 - 220	210 - 220	8	M8/10	20 x 3.0	3000	274	117	16	25	39022

BSI-L Clips

BSI-L clips are rubber lined universal clips for mounting pipes to the wall or ceiling.

- Fitted with two bolts with anti-loss ring.
- Bolt with slot and cross head.
- Reinforcement grooves ensure that BSI-L clips maintain their shape.
- With noise suppressing rubber lining (EPDM).
- Safety margin for minimal breaking load (V) = 3.
- Clip: Electrolytically zinc plated.
- Suitable for temperatures from -40 °C up to +120 °C.
- BSI-L clips are compatible with pipe sizes according to DIN 2448 and DIN EN 1057.
- With halogen-free inlay.
- Equipped with Philips / slotted head screws.




Type	Ø Pipe		Connec- tion	Strip dimen- sions [mm]	Max. working load [N]	Dimensions				Order Code
	Ext. dia. [mm]	Nom. ["]				A [mm]	B [mm]	C [mm]		
BSI-L M 8 x 8 - 10	8 - 10	1/8	M 8	18 x 1.0	500	53.7	8.5	8	50	39040
BSI-L M 8 x 12 - 14	12 - 14	1/4	M 8	18 x 1.0	500	57.8	10.5	8	50	39041
BSI-L M 8 x 15 - 19	15 - 19	3/8	M 8	18 x 1.0	500	62.5	13.0	8	50	39042
BSI-L M 8 x 20 - 25	20 - 25	1/2	M 8	18 x 1.0	500	68.4	16.0	8	50	39043
BSI-L M 8 x 26 - 30	26 - 30	3/4	M 8	18 x 1.0	500	73.3	18.5	8	50	39044
BSI-L M 8 x 32 - 36	32 - 36	1	M 8	18 x 1.0	750	79.8	21.5	8	50	39045
BSI-L M 8 x 38 - 43	38 - 43	1 1/4	M 8	18 x 1.0	750	86.7	25.0	8	50	39046
BSI-L M 8 x 44 - 49	44 - 49	1 1/2	M 8	18 x 1.0	750	92.8	28.0	8	50	39047
BSI-L M 8 x 50 - 55	50 - 55	-	M 8	18 x 1.0	750	98.8	31.0	8	50	39048
BSI-L M 8 x 56 - 61	56 - 61	2	M 8	18 x 1.0	750	104.9	34.0	8	50	39049
BSI-L M 8/10 x 62 - 67	62 - 67	-	M 8/10	18 x 1.5	1000	110.9	36.5	16	50	39050
BSI-L M 8/10 x 68 - 73	68 - 73	-	M 8/10	18 x 1.5	1000	116.9	39.5	16	50	39051
BSI-L M 8/10 x 75 - 80	75 - 80	2 1/2	M 8/10	18 x 1.5	1000	124.0	43.0	16	50	39052
BSI-L M 8/10 x 82 - 86	82 - 86	-	M 8/10	18 x 1.5	1000	130.0	46.0	16	50	39053
BSI-L M 8/10 x 87 - 92	87 - 92	3	M 8/10	18 x 1.5	1000	136.0	49.0	16	50	39054
BSI-L M 8/10 x 95 - 102	95 - 102	3 1/2	M 8/10	18 x 1.5	1500	145.7	54.0	16	50	39055
BSI-L M 8/10 x 108 - 116	108 - 116	4	M 8/10	18 x 1.5	1500	159.6	61.0	16	25	39056



BSI-WH M 8/10 Clips

- Bolt with slot and cross head.
- Noise suppressing rubber lining: 17 dB(A) according to ISO 3822-1.
To achieve maximum sound suppression do not overload the fitting.
- Clip: Electrolytically zinc plated.
- Suitable for temperatures from -40 °C up to +120 °C.
- With halogen-free inlay.
- Equipped with Philips / slotted head screws.



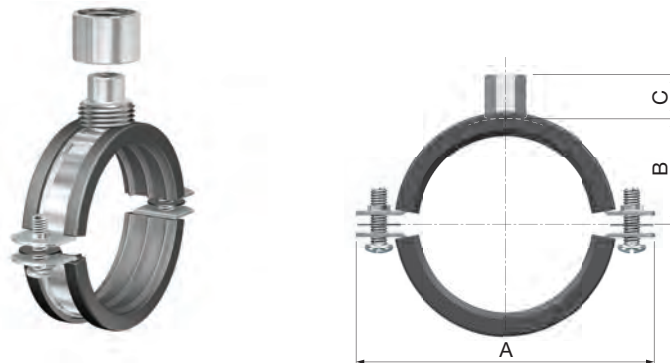
Type	Ø Pipe		Conne- ction	Strip dimen- sions [mm]	Max. working load [N]	Dimensions				Order Code
	Ext. dia. [mm]	Nom. ["]				A [mm]	B [mm]	C [mm]		
BSI-WH M 8/10 x 12 - 14	12 - 14	1/4	M 8/10	20 x 1.5	600	58	15	16	50	39025
BSI-WH M 8/10 x 15 - 19	15 - 19	3/8	M 8/10	20 x 1.5	600	62	18	16	50	39026
BSI-WH M 8/10 x 20 - 25	20 - 25	1/2	M 8/10	20 x 1.5	600	69	21	16	50	39027
BSI-WH M 8/10 x 26 - 30	26 - 30	3/4	M 8/10	20 x 1.5	600	74	23	16	50	39028
BSI-WH M 8/10 x 32 - 36	32 - 36	1	M 8/10	20 x 1.5	600	81	26	16	50	39029
BSI-WH M 8/10 x 38 - 43	38 - 43	1 1/4	M 8/10	20 x 1.5	600	87	30	16	50	39030
BSI-WH M 8/10 x 44 - 49	44 - 49	1 1/2	M 8/10	20 x 1.5	600	94	33	16	50	39031
BSI-WH M 8/10 x 50 - 55	50 - 55	-	M 8/10	20 x 1.5	600	103	36	16	50	39032
BSI-WH M 8/10 x 56 - 61	56 - 61	2	M 8/10	20 x 1.5	600	106	39	16	50	39033
BSI-WH M 8/10 x 62 - 67	62 - 67	-	M 8/10	20 x 2.0	1000	113	42	16	50	38930
BSI-WH M 8/10 x 68 - 73	68 - 73	2 1/4	M 8/10	20 x 2.0	1000	123	45	16	50	38931
BSI-WH M 8/10 x 75 - 80	75 - 80	2 1/2	M 8/10	20 x 2.0	1000	128	48	16	50	38932
BSI-WH M 8/10 x 82 - 86	82 - 86	2 3/4	M 8/10	20 x 2.0	1000	134	51	16	50	38933
BSI-WH M 8/10 x 87 - 92	87 - 92	3	M 8/10	20 x 2.0	1000	141	54	16	50	38934
BSI-WH M 8/10 x 95 - 102	95 - 102	3 1/2	M 8/10	20 x 2.5	1500	158	58	16	50	38935
BSI-WH M 8/10 x 108 - 116	108 - 116	4	M 8/10	20 x 2.5	1500	170	65	16	25	38936




BSI ½ M+F / M 8/10 clips

BSI clips are universal clips with rubber strips for mounting pipes to the wall or ceiling.

- Close fitting possible.
- Bolt with slot and cross head.
- Noise-suppressing rubber strip: 17 dB(A) according to ISO 3822-1.
To achieve maximum sound suppression do not overload the fitting.
- Safety margin for minimum breaking load (V) = 3.
- Clip: electrolytically zinc plated.
- Suitable for temperatures from -40 °C up to +120 °C.
- BSI clips are compatible with pipe sizes according to DIN 2448 and DIN EN 1057.
- Equipped with Philips / slotted head screws.

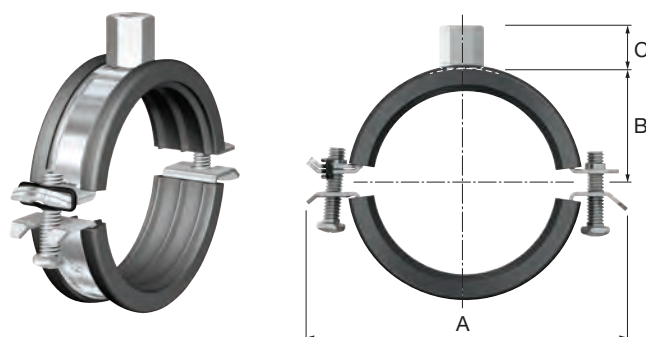



Type	Ø Pipe		Connection	Strip dimensions [mm]	Max. working load [N]	Dimensions				Order Code
	Ext. dia. [mm]	Nom. ["]				A [mm]	B [mm]	C [mm]		
BSI ½ M+F / M 8/10 x 15 - 19	15 - 19	3/8	G ½" M / M 8/10 + ½"	20 x 1.5	1000	62	18	20.5	50	59001
BSI ½ M+F / M 8/10 x 20 - 25	20 - 25	1/2	G ½" M / M 8/10 + ½"	20 x 1.5	1000	69	21	20.5	50	59002
BSI ½ M+F / M 8/10 x 26 - 30	26 - 30	3/4	G ½" M / M 8/10 + ½"	20 x 1.5	1000	74	23	20.5	50	59003
BSI ½ M+F / M 8/10 x 32 - 36	32 - 36	1	G ½" M / M 8/10 + ½"	20 x 1.5	1000	81	26	20.5	50	59004
BSI ½ M+F / M 8/10 x 38 - 43	38 - 43	1 ¼	G ½" M / M 8/10 + ½"	20 x 1.5	1000	81	26	20.5	50	59005
BSI ½ M+F / M 8/10 x 44 - 49	44 - 49	1 ½	G ½" M / M 8/10 + ½"	20 x 1.5	1000	94	33	20.5	50	59006
BSI ½ M+F / M 8/10 x 50 - 55	50 - 55	1 ¾	G ½" M / M 8/10 + ½"	20 x 1.5	1000	103	36	20.5	50	59007
BSI ½ M+F / M 8/10 x 56 - 61	56 - 61	2	G ½" M / M 8/10 + ½"	20 x 1.5	1000	106	39	20.5	50	59008
BSI ½ M+F / M 8/10 x 62 - 67	62 - 67	-	G ½" M / M 8/10 + ½"	20 x 2.0	1300	113	42	20.5	50	59009
BSI ½ M+F / M 8/10 x 75 - 80	75 - 80	2 ½	G ½" M / M 8/10 + ½"	20 x 2.0	1300	128	48	20.5	50	59011
BSI ½ M+F / M 8/10 x 87 - 92	87 - 92	3	G ½" M / M 8/10 + ½"	20 x 2.0	1300	134	51	20.5	50	59013
BSI ½ M+F / M 8/10 x 108 - 116	108 - 116	4	G ½" M / M 8/10 + ½"	20 x 2.5	2150	170	65	20.5	25	59015
BSI ½ M+F / M 8/10 x 121 - 127	121 - 127	-	G ½" M / M 8/10 + ½"	20 x 2.5	2150	185	70	20.5	25	59016

BSM Clips

BSM clips are rubber lined universal clips for vertical and horizontal mounting.

- Large clamping capacity (2 bolts).
- Quick closing facility and turnable underneath the pipe.
- Inlay with better gliding properties.
- Screws are secured for turning out (vibration/shaking).
- Noise suppression: 17 dB(A) according to ISO 3822-1.
To achieve maximum sound suppression do not overload the fitting.
- Clip: Electrolytically zinc plated.
- Connection: M 8/10.
- Suitable for temperatures from -40 °C up to +120 °C.
- Independently tested and certified according to the high safety and quality standards of the RAL Quality Assurance Association for pipe supports (RAL Gütegemeinschaft Rohrbefestigung).
- With halogen-free inlay.
- Equipped with Philips / slotted head screws.



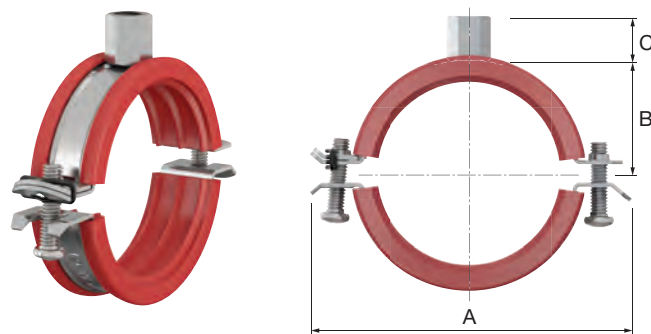
Type	Ø Pipe		Max. working load [N]	Strip dimen- sions [mm]	Dimensions				Order Code
	Ext. dia [mm]	Nom. ["]			A [mm]	B [mm]	C [mm]		
BSM M 8/10 x 12 - 14	12 - 14	1/4	600	1.5 x 20	60	15.0	14	50	38170
BSM M 8/10 x 15 - 18	15 - 18	3/8	750	1.5 x 20	64	17.0	14	50	38171
BSM M 8/10 x 19 - 22	19 - 22	1/2	750	1.5 x 20	68	19.0	14	50	38172
BSM M 8/10 x 23 - 26	23 - 26	-	750	1.5 x 20	72	21.0	14	50	38173
BSM M 8/10 x 27 - 30	27 - 30	3/4	750	1.5 x 20	76	23.0	14	50	38174
BSM M 8/10 x 32 - 35	32 - 35	1	750	1.5 x 20	81	25.5	14	50	38175
BSM M 8/10 x 36 - 39	36 - 39	-	750	1.5 x 20	85	27.5	14	50	38176
BSM M 8/10 x 40 - 44.5	40 - 44.5	1 1/4	750	1.5 x 20	90	30.0	14	50	38177
BSM M 8/10 x 48 - 52	48 - 52	1 1/2	750	1.5 x 20	98	34.0	14	50	38178
BSM M 8/10 x 54 - 58	54 - 58	1 3/4	750	1.5 x 20	104	37.0	14	50	38179
BSM M 8/10 x 58 - 61	58 - 61	2	850	1.5 x 20	107	38.5	14	50	38180
BSM M 8/10 x 63 - 67	63 - 67	-	850	2.0 x 20	113	41.5	14	50	38181
BSM M 8/10 x 75 - 80	75 - 80	2 1/2	850	2.0 x 20	126	48.0	14	50	38183
BSM M 8/10 x 88 - 92	88 - 92	3	850	2.0 x 20	138	54.0	14	50	38185
BSM M 8/10 x 108 - 116	108 - 116	4	1500	2.5 x 20	162	66.0	14	25	38187
BSM M 8/10 x 121 - 127	121 - 127	-	1500	2.5 x 20	173	71.5	14	25	38188




BSM-S Clips

BSM-S clips are silicon rubber lined universal clips for use in high temperature applications and usable for vertical and horizontal mounting.

- Suitable for temperatures from -60 °C up to +250 °C.
- Large clamping capacity (2 bolts).
- Quick closing facility and turnable underneath the pipe.
- Inlay with better gliding properties.
- Screws are secured for turning out (vibration/shaking).
- Noise suppression: 17 dB(A) according to ISO 3822-1.
To achieve maximum sound suppression do not overload the fitting.
- Clip: Electrolytically zinc plated.
- Connection: M 8/10.
- Equipped with Philips / slotted head screws.

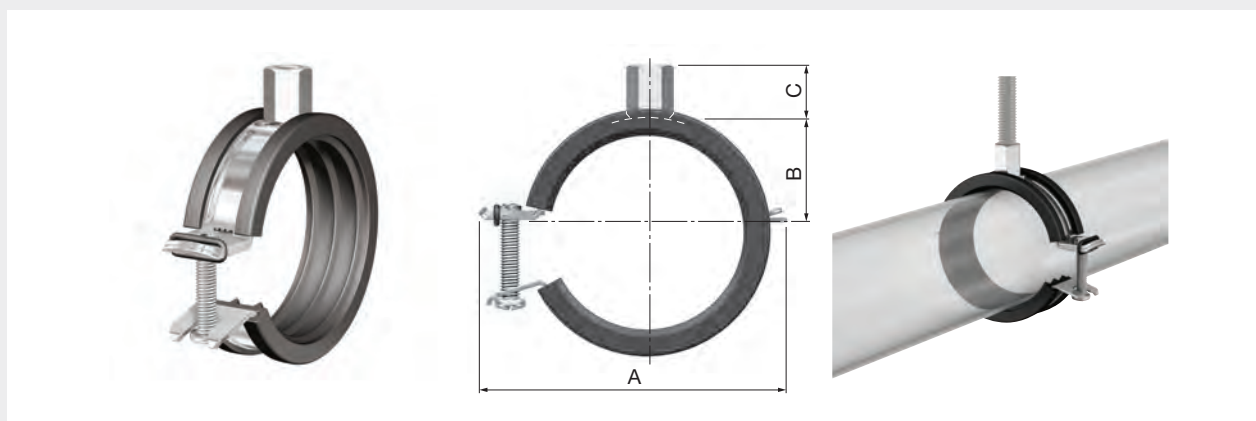



Type	Ø Pipe		Strip dimensions [mm]	Max. working load [N]	Dimensions				Order Code
	Ext. dia. [mm]	Nom. ["]			A [mm]	B [mm]	C [mm]		
BSM-S M 8/10 x 12 - 14	12 - 14	1/4	1.5 x 20	600	60	15.0	14	50	38300
BSM-S M 8/10 x 15 - 18	15 - 18	3/8	1.5 x 20	750	64	17.0	14	50	38301
BSM-S M 8/10 x 19 - 22	19 - 22	1/2	1.5 x 20	750	68	19.0	14	50	38302
BSM-S M 8/10 x 23 - 26	23 - 26	-	1.5 x 20	750	72	21.0	14	50	38303
BSM-S M 8/10 x 27 - 30	27 - 30	3/4	1.5 x 20	750	76	23.0	14	50	38304
BSM-S M 8/10 x 32 - 35	32 - 35	1	1.5 x 20	750	81	25.5	14	50	38305
BSM-S M 8/10 x 36 - 39	36 - 39	-	1.5 x 20	750	85	27.5	14	50	38306
BSM-S M 8/10 x 40 - 44,5	40 - 44.5	1 1/4	1.5 x 20	750	90	30.0	14	50	38307
BSM-S M 8/10 x 48 - 52	48 - 52	1 1/2	1.5 x 20	750	98	34.0	14	50	38308
BSM-S M 8/10 x 54 - 58	54 - 58	1 3/4	1.5 x 20	750	104	37.0	14	50	38309
BSM-S M 8/10 x 58 - 61	58 - 61	2	1.5 x 20	850	107	38.5	14	50	38310
BSM-S M 8/10 x 63 - 67	63 - 67	-	2.0 x 20	850	113	41.5	14	50	38311
BSM-S M 8/10 x 75 - 80	75 - 80	2 1/2	2.0 x 20	850	126	48.0	14	50	38313
BSM-S M 8/10 x 88 - 92	88 - 92	3	2.0 x 20	850	138	54.0	14	50	38315
BSM-S M 8/10 x 108 - 116	108 - 116	4	2.5 x 20	1500	162	66.0	14	25	38317
BSM-S M 8/10 x 121 - 127	121 - 127	-	2.5 x 20	1500	173	71.5	14	25	38318

BSH Clips

BSH clips are rubber lined universal clips for mounting pipes to the wall or ceiling.

- Clip with handy, quick closing mechanism.
- Close fitting possible.
- Bolt with slot and cross head.
- Suitable for high loads and temperatures.
- Noise suppressing rubber lining: 15 dB(A) according to ISO 3822-1.
To achieve maximum sound suppression do not overload the fitting.
- Safety margin for minimal breaking load (V) = 3.
- Clip: electrolytically zinc plated.
- With halogen-free inlay.
- BSH clips are compatible with pipe sizes as per DIN 2448 and DIN EN 1057.
- Equipped with Philips / slotted head screws.



Type	Ø Pipe		Conne- ction	Strip dimen- sions [mm]	Max. working load [N]	Dimensions				Order Code
	Ext. dia. [mm]	Nom. ["]				A [mm]	B [mm]	C [mm]		
BSH M 8/10 12 - 14	12 - 14	1/4	M 8/10	20 x 1.5	1000	50	7.0	15	50	38360
BSH M 8/10 15 - 18	15 - 18	3/8	M 8/10	20 x 1.5	1000	54	9.0	15	50	38361
BSH M 8/10 19 - 22	19 - 22	1/2	M 8/10	20 x 1.5	1000	58	11.0	15	50	38362
BSH M 8/10 23 - 26	23 - 26	-	M 8/10	20 x 1.5	1000	62	13.0	15	50	38363
BSH M 8/10 27 - 30	27 - 30	3/4	M 8/10	20 x 1.5	1000	66	15.0	15	50	38364
BSH M 8/10 32 - 35	32 - 35	1	M 8/10	20 x 1.5	1000	71	17.5	15	50	38365
BSH M 8/10 36 - 39	36 - 39	-	M 8/10	20 x 1.5	1000	75	19.5	15	50	38366
BSH M 8/10 40 - 44	40 - 44	1 1/4	M 8/10	20 x 1.5	1000	80	22.0	15	50	38367
BSH M 8/10 48 - 52	48 - 52	1 1/2	M 8/10	20 x 1.5	1000	88	26.0	15	50	38368
BSH M 8/10 53 - 58	53 - 58	-	M 8/10	20 x 1.5	1000	94	29.0	15	50	38369
BSH M 8/10 58 - 61	58 - 61	2	M 8/10	20 x 1.5	1000	97	30.0	15	50	38370
BSH M 8/10 62 - 67	62 - 67	-	M 8/10	20 x 2.0	1300	103	33.5	15	50	38379
BSH M 8/10 68 - 74	68 - 74	-	M 8/10	20 x 2.0	1300	110	37.0	15	50	38371
BSH M 8/10 75 - 80	75 - 80	2 1/2	M 8/10	20 x 2.0	1300	116	40.0	15	50	38372
BSH M 8/10 81 - 86	81 - 86	-	M 8/10	20 x 2.0	1300	122	43.0	15	50	38373
BSH M 8/10 87 - 92	87 - 92	3	M 8/10	20 x 2.0	1300	128	46.0	15	50	38374
BSH M 8/10 100 - 106	100 - 106	3 1/2	M 8/10	20 x 2.5	1300	146	53.0	15	25	38375
BSH M 8/10 108 - 116	108 - 116	4	M 8/10	20 x 2.5	1300	156	58.0	15	25	38376
BSH M 8/10 121 - 127	121 - 127	-	M 8/10	20 x 2.5	1300	167	63.5	15	25	38377

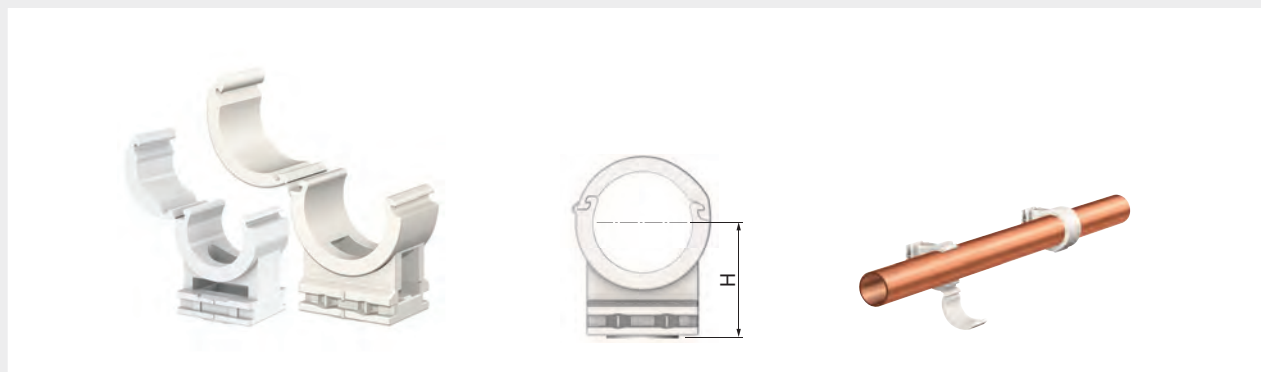



FOR COPPER AND THIN-WALLED STEEL PIPES

Variofit Clips - M 6

Variofit nylon clips are especially designed for mounting copper and thin-walled steel pipes to the wall or ceiling. Variofit clips can be secured using an M 6 rod or with wood screws with heads up to 7 mm and can be mounted using Flamco R 1 to R 8 rails. The ring on the bottom prevents damage to the wall during fitting.

- Adjustable brass fixing nut (movement: +/- 5 mm).
- Hinged snap fastening.
- Suitable for temperatures up to 90 °C.
- Pre-assembly of pipe is possible.
- Variofit clips are compatible with pipe sizes as per DIN EN 1057.



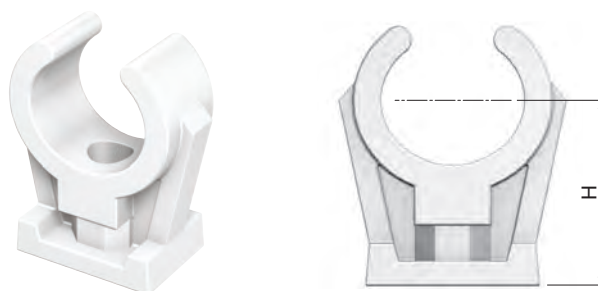
Type	Ø Pipe ext. dia. [mm]	Minimum pull-out force		Dimensions H [mm]		Order Code
		Cap open [N]	Cap closed [N]			
Variofit 12	12	100	500	20	500	15112
Variofit 15	15	100	500	20	500	15115
Variofit 22	22	100	700	25	250	15122
Variofit 28	28	100	700	25	250	15128




KS Clips - M 6

For horizontal or vertical fitting of copper, thin-walled or copper pipes.

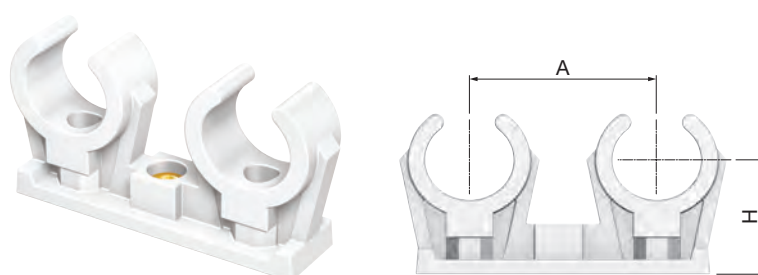
- Fast mounting.
- High quality polypropylene material provides excellent noise damping.
- With brass nut with M 6 connection.
- Suitable for temperatures from -30 °C up to +120 °C.




Type	Ø Pipe ext. dia. [mm]	Dimensions H [mm]		Order Code
KS 8	8	17.6	100	62308
KS 10	10	15.7	100	62310
KS 12	12	17.4	100	62312
KS 15	15	17.8	100	62315
KS 18	18	23.2	100	62318
KS 22	22	25.3	100	62322
KS 24	24	30	100	62324
KS 28	28	32.25	25	62328
KS 35	35	34.1	25	62335
KS 42	42	42	25	62342

KSD Clips - M 6

Similar to the KS clip, but a double format.



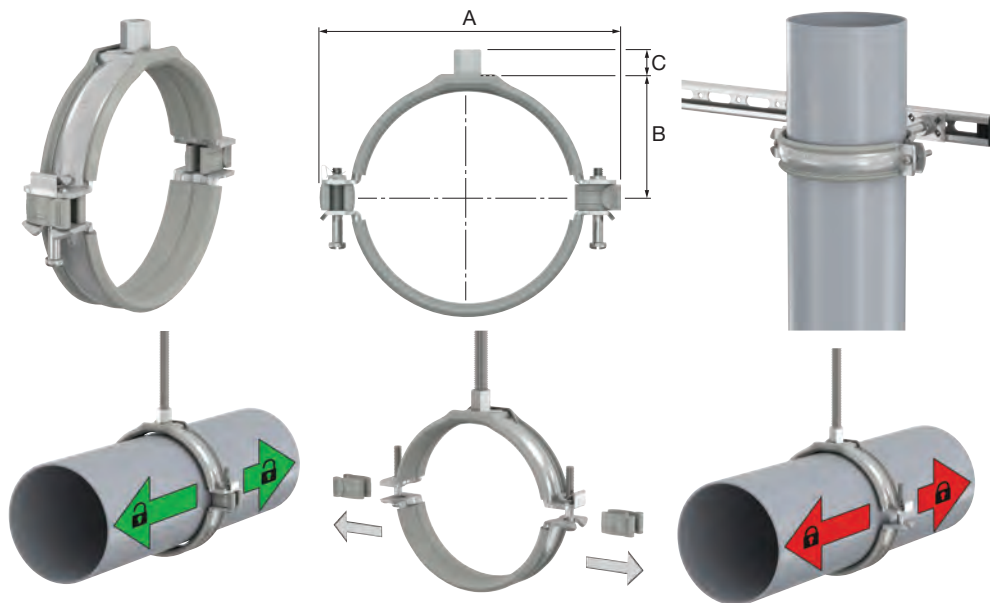
Type	Ø Pipe ext. dia. [mm]	Dimensions			Order Code
		A [mm]	H [mm]		
KSD 8	8	23	14.5	50	62408
KSD 10	10	29	15.46	50	62410
KSD 12	12	33	17.6	50	62412
KSD 15	15	35	17.8	50	62415
KSD 18	18	38	23.2	50	62418
KSD 22	22	43	25.3	50	62422
KSD 28	28	53	32.7	25	62428


FOR PLASTIC PIPES

BSK-I Clips M8/10

Dedicated clips for plastic pipes with special TPE (ThermoPlastic Elastomer) lining. The BSK-I clip has easily removable plastic spacers between the two clip halves and can be transformed into a clenching clip without the need for tools.

- The clip's edges bend outwards ensure that the pipe will not be damaged when the clamping function is being applied.
- Special TPE lining with excellent low friction properties.
- Transformable from sliding to clamping with easily removable spacer.
- Fast and safe closing around the pipe thanks to the patented click-spring locking system. To achieve maximum noise reduction do not overload the fitting.
- TPE lining is UV resistant preventing it from degrading over time.
- No additional clamp liners needed for clenching application.
- Noise reduction: 20 dB(A) with spacer, 18 dB(A) without spacer.
- Electrolytically zinc plated.
- Equipped with screws with Pozidriv 2 head.

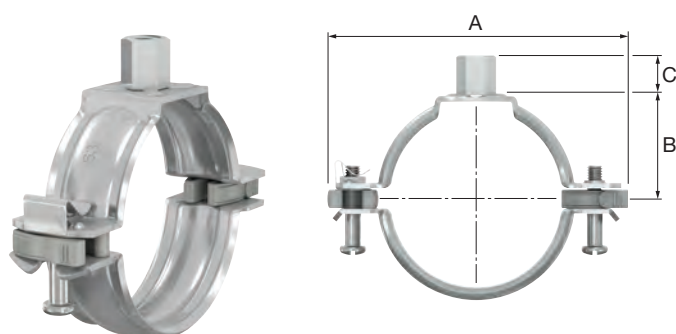



Type	Ø Pipe ext. dia. [mm]	Strip dimensions [mm]	Connection	Max. working load [N]	Dimensions				Order Code
					A [mm]	B [mm]	C [mm]		
BSK-I M8/10 x 16	16	28 x 1.5	M8 - M10	1300	66	17	15	50	37320
BSK-I M8/10 x 20	20	28 x 1.5	M8 - M10	1300	70	19	15	50	37321
BSK-I M8/10 x 25	25	28 x 1.5	M8 - M10	1300	76	21	15	50	37322
BSK-I M8/10 x 32	32	28 x 1.5	M8 - M10	1300	83	26	15	50	37323
BSK-I M8/10 x 40	40	28 x 1.5	M8 - M10	1300	91	29	15	50	37324
BSK-I M8/10 x 50	50	28 x 1.5	M8 - M10	1300	101	34	15	50	37325
BSK-I M8/10 x 56	56	28 x 2.0	M8 - M10	1300	107	37	15	50	37326
BSK-I M8/10 x 63	63	28 x 2.0	M8 - M10	1300	116	40	15	50	37327
BSK-I M8/10 x 75	75	28 x 2.0	M8 - M10	2000	127	47	15	50	37328
BSK-I M8/10 x 90	90	28 x 2.0	M8 - M10	2000	140	50	15	50	37329
BSK-I M8/10 x 110	110	28 x 2.5	M8 - M10	2000	160	61	15	25	37330
BSK-I M8/10 x 125	125	28 x 2.5	M8 - M10	2000	176	68	15	25	37331
BSK-I M8/10 x 160	160	28 x 2.5	M8 - M10	2000	212	86	15	25	37332
BSK-I M8/10 x 200	200	28 x 2.5	M8 - M10	2000	252	106	15	10	37333
BSK-I M8/10 x 250	250	28 x 3.0	M8 - M10	2000	303	132	15	50	37334
BSK-I M8/10 x 315	315	28 x 3.0	M8 - M10	2000	368	164	15	50	37335

BSK Clips M8/10

Dedicated clips for plastic pipes with easily removable plastic spacers between the clip halves. These spacers can be removed without using any tools transforming the clip from sliding to clenching.

- With the clips' edges bend away from the pipe, the design ensures low friction when used as a sliding clip and no risk of damaging the pipe when used as a clenching clip.
- Excellent low friction properties due to shallow ribbing and edges bend outwards..
- Transformable from sliding to clamping with easily removable spacer.
- Fast and safe closing around the pipe thanks to the patented click-spring locking system.
- Electrolytically zinc plated.
- No additional clamp liners needed for clenching application.




Type	Ø Pipe ext. dia. [mm]	Strip dimensions [mm]	Connection	Max. working load [N]	Dimensions				Order Code
					A [mm]	B [mm]	C [mm]		
BSK M 8/10 x 32	32	28 x 1.5	M 8 - M 10	1300	77	22	15	50	37220
BSK M 8/10 x 40	40	28 x 1.5	M 8 / M 10	1300	85	26	15	50	37221
BSK M 8/10 x 50	50	28 x 1.5	M 8 - M 10	1300	96	31	15	50	37222
BSK M 8/10 x 56	56	28 x 2.0	M 8 - M 10	1300	102	34	15	50	37223
BSK M 8/10 x 63	63	28 x 2.0	M 8 - M 10	1300	109	38	15	50	37224
BSK M 8/10 x 70	70	28 x 2.0	M 8 - M 10	1300	116	41	15	50	37225
BSK M 8/10 x 75	75	28 x 2.0	M 8 - M 10	2000	121	44	15	50	37226
BSK M 8/10 x 80	80	28 x 2.0	M 8 - M 10	2000	129	45	15	50	37227
BSK M 8/10 x 90	90	28 x 2.0	M 8 - M 10	2000	138	50	15	50	37228
BSK M 8/10 x 100	100	28 x 2.0	M 8 - M 10	2000	148	55	15	50	37229
BSK M 8/10 x 110	110	28 x 2.5	M 8 - M 10	2000	157	61	15	25	37230
BSK M 8/10 x 125	125	28 x 2.5	M 8 - M 10	2000	175	68	15	25	37231
BSK M 8/10 x 140	140	28 x 2.5	M 8 - M 10	2000	190	76	15	25	37232
BSK M 8/10 x 160	160	28 x 2.5	M 8 - M 10	2000	211	86	15	25	37233
BSK M 8/10 x 200	200	28 x 2.5	M 8 - M 10	2000	251	106	15	10	37234
BSK M 8/10 x 250	250	28 x 3.0	M 8 - M 10	2000	302	132	15	50	37235
BSK M 8/10 x 315	315	28 x 3.0	M 8 - M 10	2000	368	164	15	50	37236

BT-FIX PE Clips

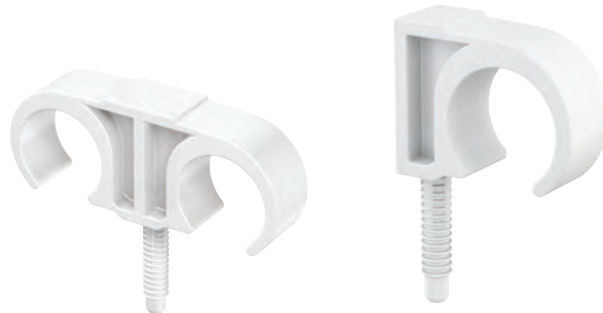



- Electrolytically zinc plated.

Type	Ø Pipe ext. dia. [mm]	Strip dimensions [mm]	Max. working load [N]		Order Code
PE 40	40	25 x 2.2	1800	25	52450
PE 50	50	25 x 2.2	1800	25	52451
PE 56	56	25 x 2.2	1800	25	52452
PE 63	63	25 x 2.2	1800	25	52453
PE 75	75	25 x 2.2	2000	25	52454
PE 90	90	25 x 2.2	2000	25	52455
PE 110	110	25 x 2.2	2000	25	52456
PE 125	125	25 x 2.2	2000	25	52457
PE 160	160	25 x 2.2	2000	25	52458

PC Plugclips

- For mounting plastic and multilayer tube. Also suitable for mounting underfloor heating pipes and cables.
- Available in single and double version.
- Very small drilling depth of 30 mm and drilling diameter of 6 mm.
- Easy mounting with a few hammer blows.
- Made of high quality plastic (HDPE) in the color white.
- Material is UV resistant and halogen free; suitable for outdoor use.
- Temperature range: -40 ° C to +90 ° C, mounting down to -20 ° C.

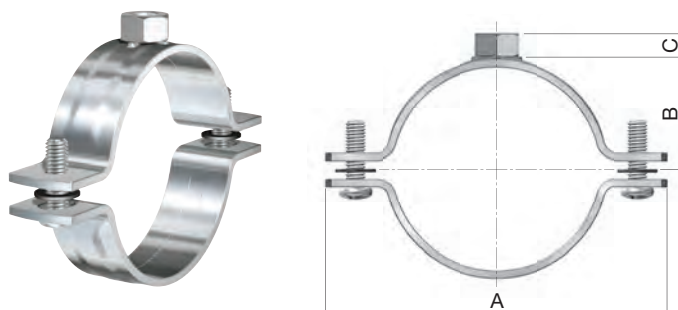



Type	Ø Pipe ext. dia. [mm]		Order Code
PC 13 - 16 single	13 - 16	100	15213
PC 16 - 19 single	16 - 19	50	15216
PC 20 - 25 single	20 - 25	50	15220
PC 25 - 30 single	25 - 30	50	15225
PC 13 - 16 double	13 - 16	50	15313
PC 20 - 25 double	20 - 25	50	15320
PC 25 - 30 double	25 - 30	50	15325

FOR STEEL PIPES

BSF M 8/10 Clips

- With combined M 8/10 connection.

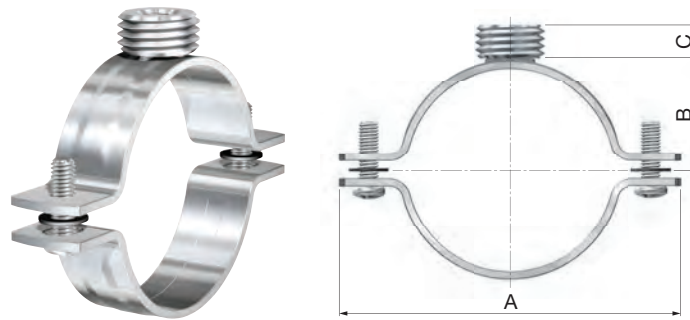



Type	Ø Pipe		Conne- ction	Strip di- men- sions [mm]	Max. working load [N]	Dimensions				Order Code
	Ext. dia. [mm]	Nom. ["]				A [mm]	B [mm]	C [mm]		
BSF M 8/10 x 13 - 17.5	13 - 17.5	$\frac{3}{8}$	M 8/10	20 x 2.5	2000	53	11	16	100	38671
BSF M 8/10 x 21 - 25.5	21 - 25.5	$\frac{1}{2}$	M 8/10	20 x 2.5	2000	61	15	16	100	38672
BSF M 8/10 x 26.5 - 30.5	26.5 - 30.5	$\frac{3}{4}$	M 8/10	20 x 2.5	2000	68	18	16	100	38673
BSF M 8/10 x 33.5 - 38.5	33.5 - 38.5	1	M 8/10	20 x 2.5	2000	76	22	16	100	38674
BSF M 8/10 x 41.5 - 47	41.5 - 47	$1\frac{1}{4}$	M 8/10	20 x 2.5	2000	86	26	16	100	38675
BSF M 8/10 x 48 - 54	48 - 54	$1\frac{1}{2}$	M 8/10	20 x 2.5	2000	95	32	16	10	38676
BSF M 8/10 x 56 - 62.5	56 - 62.5	2	M 8/10	20 x 2.5	2000	104	34	16	10	38677
BSF M 8/10 x 62.5 - 69.5	62.5 - 69.5	-	M 8/10	20 x 2.5	2000	111	37	16	10	38678
BSF M 8/10 x 69.5 - 76.5	69.5 - 76.5	$2\frac{1}{2}$	M 8/10	20 x 2.5	2000	118	41	16	10	38679
BSF M 8/10 x 77.5 - 84	77.5 - 84	-	M 8/10	20 x 2.5	2000	125	45	16	10	38680
BSF M 8/10 x 85 - 92.5	85 - 92.5	3	M 8/10	20 x 2.5	2000	134	49	16	10	38681
BSF M 8/10 x 93 - 100.5	93 - 100.5	-	M 8/10	25 x 2.5	2500	152	53	16	25	38682
BSF M 8/10 x 101.5 - 110	101.5 - 110	-	M 8/10	25 x 2.5	2500	161	58	16	25	38683
BSF M 8/10 x 110 - 117.5	110 - 117.5	4	M 8/10	25 x 2.5	2500	169	61	16	25	38684



BSF ½ M / M 10 Clips

- Similar to the BSF M 8 clips, but with a combined G ½" M (BSP) / M 10 connection.



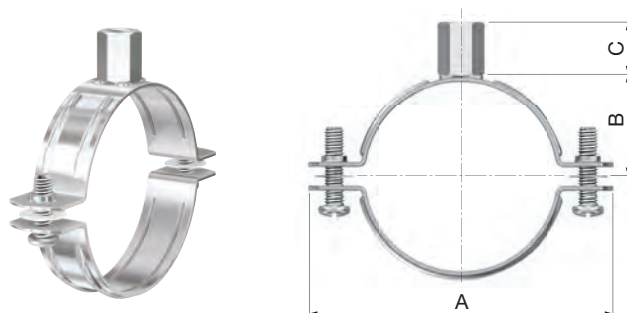
Type	Ø Pipe		Connection	Strip dimensions [mm]	Max. working load [N]	Dimensions				Order Code
	Ext. dia. [mm]	Nom. ["]				A [mm]	B [mm]	C [mm]		
BSF ½ M / M 10 x 13 - 17.5	13 - 17.5	¾	G ½" M / M 10	20 x 2.5	2000	53	11	10	50	51801
BSF ½ M / M 10 x 21 - 25.5	21 - 25.5	½	G ½" M / M 10	20 x 2.5	2000	61	15	10	50	51802
BSF ½ M / M 10 x 26.5 - 30.5	26.5 - 30.5	¾	G ½" M / M 10	20 x 2.5	2000	68	18	10	50	51803
BSF ½ M / M 10 x 33.5 - 38.5	33.5 - 38.5	1	G ½" M / M 10	20 x 2.5	2000	76	22	10	50	51804
BSF ½ M / M 10 x 41.5 - 47	41.5 - 47	1 ¼	G ½" M / M 10	20 x 2.5	2000	86	26	10	50	51805
BSF ½ M / M 10 x 48 - 54	48 - 54	1 ½	G ½" M / M 10	20 x 2.5	2000	95	32	10	50	51806
BSF ½ M / M 10 x 56 - 62.5	56 - 62.5	2	G ½" M / M 10	20 x 2.5	2000	104	34	10	50	51807
BSF ½ M / M 10 x 62.5 - 69.5	62.5 - 69.5	-	G ½" M / M 10	20 x 2.5	2000	111	37	10	50	51808
BSF ½ M / M 10 x 69.5 - 76.5	69.5 - 76.5	2 ½	G ½" M / M 10	20 x 2.5	2000	118	41	10	50	51809
BSF ½ M / M 10 x 77.5 - 84	77.5 - 84	-	G ½" M / M 10	20 x 2.5	2000	125	45	10	50	51810
BSF ½ M / M 10 x 85 - 92.5	85 - 92.5	3	G ½" M / M 10	20 x 2.5	2000	134	49	10	50	51811
BSF ½ M / M 10 x 93 - 100.5	93 - 100.5	-	G ½" M / M 10	25 x 2.5	2500	152	53	10	25	51812
BSF ½ M / M 10 x 101.5 - 110	101.5 - 110	-	G ½" M / M 10	25 x 2.5	2500	161	58	10	25	51813
BSF ½ M / M 10 x 110 - 117.5	110 - 117.5	4	G ½" M / M 10	25 x 2.5	2500	169	61	10	25	51814
BSF ½ M / M 10 x 119.5 - 127.5	119.5 - 127.5	-	G ½" M / M 10	25 x 2.5	2500	179	66	10	25	51815
BSF ½ M / M 10 x 127.5 - 133.5	127.5 - 133.5	-	G ½" M / M 10	25 x 2.5	2500	185	69	10	25	51816
BSF ½ M / M 10 x 134.5 - 142.5	134.5 - 142.5	5	G ½" M / M 10	30 x 3.0	3000	197	76	10	25	51817
BSF ½ M / M 10 x 143.5 - 150.5	143.5 - 150.5	-	G ½" M / M 10	30 x 3.0	3000	205	78	10	25	51818
BSF ½ M / M 10 x 151.5 - 159.5	151.5 - 159.5	-	G ½" M / M 10	30 x 3.0	3000	214	83	10	25	51819
BSF ½ M / M 10 x 163.5 - 171.5	163.5 - 171.5	6	G ½" M / M 10	30 x 3.0	3000	226	89	10	25	51820
BSF ½ M / M 10 x 172.5 - 182	172.5 - 182	-	G ½" M / M 10	30 x 3.0	3000	236	94	10	25	51821
BSF ½ M / M 10 x 192.5 - 198	192.5 - 198	-	G ½" M / M 10	30 x 3.0	3000	252	102	10	25	51822




BSU Clips

BSU clips are designed for mounting steel pipes to the wall or ceiling.

- With retaining ring.
- Bolt with slot and cross head.
- Close fitting possible.
- Safety margin for minimal breaking load (V) = 3.
- Compatible with pipe sizes as per DIN 2448.
- Clip: Electrolytically zinc plated.
- Equipped with Philips / slotted head screws.



Type	Ø Pipe		Conne- ction	Strip dimen- sions [mm]	Max. working load [N]	Dimensions				Order Code
	Ext. dia. [mm]	Nom. ["]				A [mm]	B [mm]	C [mm]		
BSU M 8/10 x 15 - 18	15 - 18	$\frac{3}{8}$	M 8/10	20 x 1.5	1000	50	11	16	50	38270
BSU M 8/10 x 20 - 25	20 - 25	$\frac{1}{2}$	M 8/10	20 x 1.5	1000	60	16	16	50	38271
BSU M 8/10 x 26 - 30	26 - 30	$\frac{3}{4}$	M 8/10	20 x 1.5	1000	64	19	16	50	38272
BSU M 8/10 x 32 - 36	32 - 36	1	M 8/10	20 x 1.5	1000	71	22	16	50	38273
BSU M 8/10 x 38 - 43	38 - 43	$1\frac{1}{4}$	M 8/10	20 x 1.5	1000	79	25	16	50	38274
BSU M 8/10 x 44 - 49	44 - 49	$1\frac{1}{2}$	M 8/10	20 x 1.5	1000	84	28	16	50	38275
BSU M 8/10 x 56 - 61	56 - 61	2	M 8/10	20 x 1.5	1000	93	34	16	50	38276
BSU M 8/10 x 62 - 67	62 - 67	-	M 8/10	20 x 1.5	1000	109	36	16	50	38286
BSU M 8/10 x 75 - 80	75 - 80	$2\frac{1}{2}$	M 8/10	20 x 2.0	1300	118	44	16	50	38277
BSU M 8/10 x 87 - 92	87 - 92	3	M 8/10	20 x 2.0	1300	129	50	16	50	38278
BSU M 8/10 x 108 - 116	108 - 116	4	M 8/10	20 x 2.5	2150	160	62	16	25	38279
BSU M 8/10 x 121 - 127	121 - 127	-	M 8/10	20 x 2.5	2150	176	66	16	25	38287
BSU M 10/12 x 131 - 141	131 - 141	5	M 10/12	20 x 2.5	2150	188	75	18	25	38283

RSF Clips

RSF clips are designed for heavy duty applications and fixed point constructions. The thickness of the material and the reinforcement ribs make the most rigid assemblies possible.

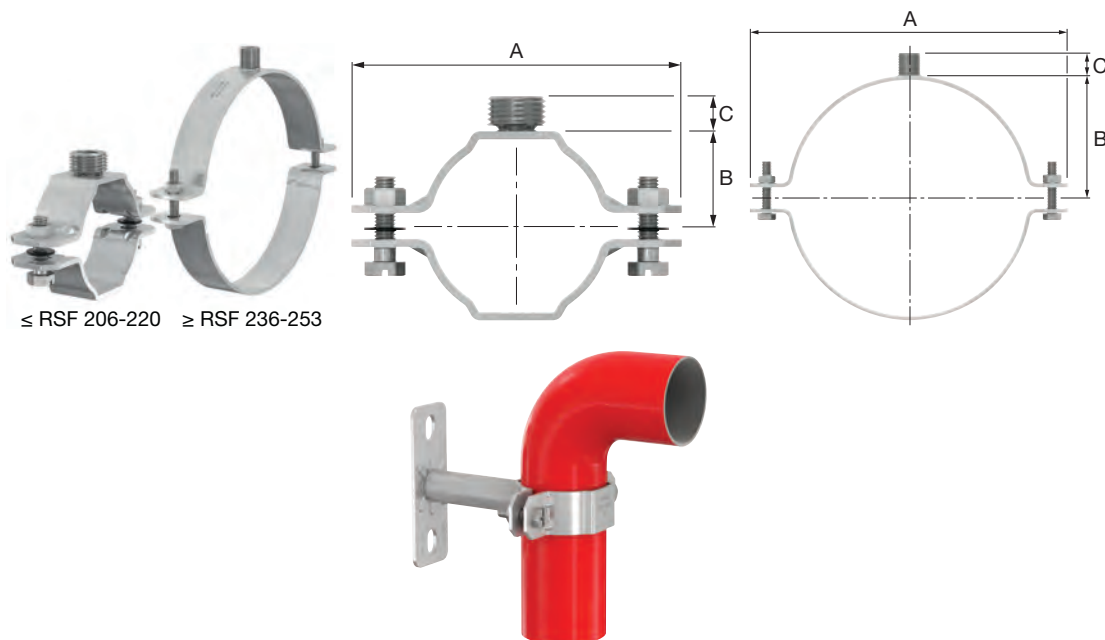
- Complete and comprehensive range.
- A special combinut with outer and inner thread makes a broad range of applications possible in combination with threaded rods and pipes.
- Electrolytically zinc plated.
- Execution:


RSF G ½ M (BSP) / M 10, G ½ M (BSP) / M 12 and G ¾ M (BSP) / M 16:


- Special welded-on nuts on the clip flanges allow high torque on the fixing bolts and permit heavy loads on the clip whilst easing installation.
- Bolt with retaining ring.
- The head of the bolt has a slot, a Pozidriv 2 (PZ2) and hexagon for fast installation with a flat or cross-head screwdriver or a spanner.

RSF G ¾ M (BSP) / M 12/16:

- Equipped with two hexagon bolts.



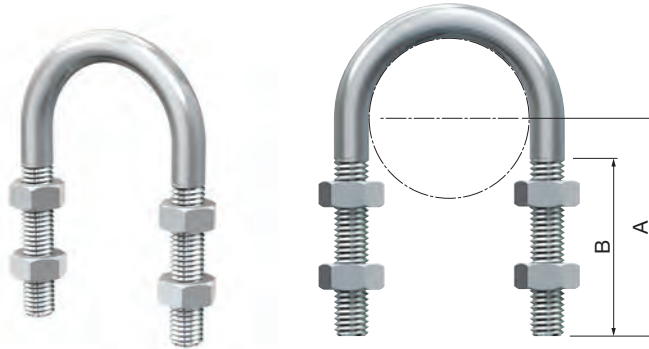
Type	Ø Pipe		Strip dimensions [mm]	Connection	Max. working load [N]	Dimensions				Order Code
	Ext. dia. [mm]	Nom. ["]				A [mm]	B [mm]	C [mm]		
RSF ½ M / M 10 x 13,5 - 18	13.5 - 18.9	½ + ³⁄₈	30 x 3.0	G ½" M / M 10	4000	74	12.0	12	50	54201
RSF ½ M / M 10 x 19 - 23	19 - 23.9	½	30 x 3.0	G ½" M / M 10	4000	79	14.5	12	50	54202
RSF ½ M / M 10 x 24 - 28	24 - 28.9	¾	30 x 3.0	G ½" M / M 10	4000	84	17.0	12	50	54203
RSF ½ M / M 10 x 29 - 33	29 - 33.9	1	30 x 3.0	G ½" M / M 10	4000	89	18.5	12	50	54204
RSF ½ M / M 10 x 34 - 39	34 - 39.9	-	30 x 3.0	G ½" M / M 10	4000	95	22.5	12	50	54205
RSF ½ M / M 10 x 40 - 44	40 - 44.9	1 ¼	30 x 3.0	G ½" M / M 10	4000	100	25.0	12	50	54206
RSF ½ M / M 10 x 45 - 49	45 - 49.9	1 ½	30 x 3.0	G ½" M / M 10	4000	105	27.5	12	50	54207
RSF ½ M / M 10 x 50 - 55	50 - 55.9	-	30 x 3.0	G ½" M / M 10	4000	111	30.5	12	25	54208
RSF ½ M / M 10 x 56 - 61	56 - 61.9	2	30 x 3.0	G ½" M / M 10	4000	117	33.5	12	25	54209
RSF ½ M / M 10 x 62 - 68	62 - 68.9	-	30 x 3.0	G ½" M / M 10	4000	124	37.0	12	25	54210
RSF ½ M / M 10 x 69 - 76	69 - 76.9	2 ½	30 x 3.0	G ½" M / M 10	4000	132	41.0	12	25	54211
RSF ½ M / M 10 x 77 - 84	77 - 84.9	-	30 x 3.0	G ½" M / M 10	4000	140	45.0	12	25	54212
RSF ½ M / M 10 x 85 - 91	85 - 91.9	3	40 x 4.0	G ½" M / M 10	5000	159	49.5	12	25	54213
RSF ½ M / M 10 x 92 - 98	92 - 98.9	-	40 x 4.0	G ½" M / M 10	5000	166	53.0	12	25	54214


Type	Ø Pipe		Strip dimensions [mm]	Connection	Max. working load [N]	Dimensions				Order Code
	Ext. dia. [mm]	Nom. ["]				A [mm]	B [mm]	C [mm]		
RSF ½ M / M 10 x 99 - 105	99 - 105.9	-	40 x 4.0	G ½" M / M 10	5000	173	56.5	12	25	54215
RSF ½ M / M 10 x 106 - 114	106 - 114.9	4	40 x 4.0	G ½" M / M 10	5000	182	61.0	12	20	54216
RSF ½ M / M 12 x 115 - 122	115 - 122.9	-	40 x 4.0	G ½" M / M 12	5000	190	65.0	12	20	54217
RSF ½ M / M 12 x 123 - 130	123 - 130.9	-	40 x 4.0	G ½" M / M 12	5000	198	69.0	12	20	54218
RSF ½ M / M 12 x 131 - 139	131 - 139.9	5	40 x 4.0	G ½" M / M 12	5000	207	73.5	12	20	54219
RSF ½ M / M 12 x 140 - 148	140 - 148.9	-	40 x 4.0	G ½" M / M 12	5000	216	78.0	12	20	54220
RSF ½ M / M 12 x 149 - 157	149 - 157.9	-	40 x 4.0	G ½" M / M 12	5000	225	82.5	12	20	54221
RSF ½ M / M 12 x 158 - 166	158 - 166.9	6	40 x 4.0	G ½" M / M 12	5000	234	87.0	12	20	54222
RSF ½ M / M 12 x 167 - 179	167 - 179.9	-	40 x 4.0	G ½" M / M 12	5000	247	93.5	12	20	54223
RSF ¾ M / M 16 x 180 - 192	180 - 192.9	-	40 x 4.0	G ¾" M / M 16	5000	260	100.0	16	10	54224
RSF ¾ M / M 16 x 193 - 205	193 - 205.9	-	40 x 4.0	G ¾" M / M 16	5000	273	106.5	16	10	54225
RSF ¾ M / M 16 x 206 - 220	206 - 220.9	8	40 x 4.0	G ¾" M / M 16	5000	288	114.0	16	10	54226
RSF ¾ M / M 16 x 221 - 235	221.0 - 235.0	-	40 x 4.0	G ¾" M / M 16	5000	303	121.5	16	10	54246
RSF ¾ M / M 12/16 x 236 - 253	236 - 253.9	-	50 x 5.0	G ¾" M / M 12/16	9000	330	133.0	26	1	54227
RSF ¾ M / M 12/16 x 254 - 273	254 - 273.9	10	50 x 5.0	G ¾" M / M 12/16	9000	348	142.0	26	1	54228
RSF ¾ M / M 12/16 x 274 - 286	274 - 286.9	-	50 x 5.0	G ¾" M / M 12/16	9000	361	148.0	26	1	54229
RSF ¾ M / M 12/16 x 287 - 305	287 - 305.9	-	50 x 5.0	G ¾" M / M 12/16	9000	380	158.0	26	1	54230
RSF ¾ M / M 12/16 x 306 - 324	306 - 324.9	12	50 x 5.0	G ¾" M / M 12/16	9000	399	167.0	26	1	54231
RSF ¾ M / M 12/16 x 325 - 337	325 - 337.9	-	50 x 5.0	G ¾" M / M 12/16	9000	412	174.0	26	1	54232
RSF ¾ M / M 12/16 x 338 - 356	338 - 356.9	14	50 x 5.0	G ¾" M / M 12/16	9000	431	183.0	26	1	54233
RSF ¾ M / M 12/16 x 357 - 369	357 - 369.9	-	50 x 5.0	G ¾" M / M 12/16	9000	444	190.0	26	1	54234
RSF ¾ M / M 12/16 x 370 - 387	370 - 387.9	-	50 x 5.0	G ¾" M / M 12/16	9000	462	199.0	26	1	54235
RSF ¾ M / M 12/16 x 388 - 406	388 - 406.9	16	50 x 5.0	G ¾" M / M 12/16	9000	481	208.0	26	1	54236

UB U-bolts

U-bolts for fixing pipes directly to rail or other foundations.

- Electrolytically zinc plated.
- Threaded connections from M 6 up to M 16.
- Supplied with 4 nuts.

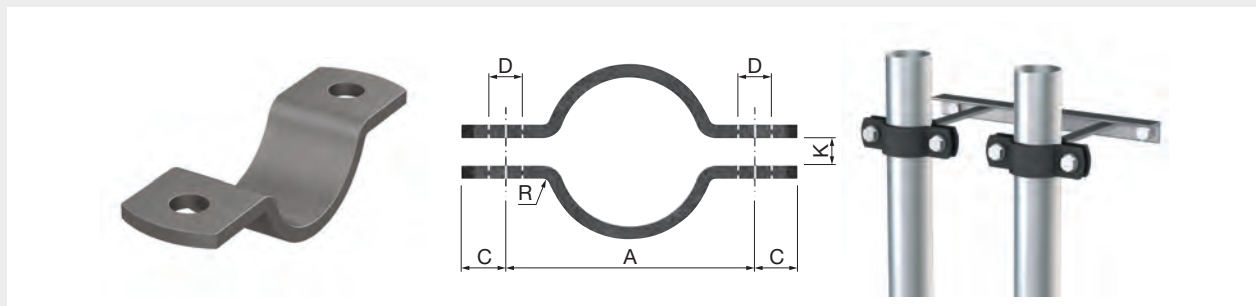



Type	Ø Pipe		Connec- tion	Suitable for Flamco and STRUT rail	Dimensions			Order Code
	Ext. dia [mm]	Nom. ["]			A [mm]	B [mm]		
UB M 6 x 10 - 14	10 - 14	1/4	M 6	R1/R2/R8/STRUT	35	30	100	81001
UB M 6 x 15 - 18	15 - 18	3/8	M 6	R1/R2/R8	36.5	30	100	81002
UB M 6 x 19 - 22	19 - 22	1/2	M 6	R1/R2/R8/STRUT	38.5	30	100	81003
UB M 8 x 23 - 27	23 - 27	3/4	M 8	R0-2/R8/STRUT	45	40	50	81004
UB M 8 x 28 - 34	28 - 34	1	M 8	R0-2/R8/STRUT	49	40	50	81005
UB M 8 x 35 - 43	35 - 43	1 1/4	M 8	R0-2/R8/STRUT	53	40	50	81006
UB M 8 x 44 - 49	44 - 49	1 1/2	M 8	R0-2/R8/STRUT	56	45	50	81007
UB M 8 x 50 - 61	50 - 61	2	M 8	R1/R2/R8	62	45	50	81008
UB M 8 x 62 - 70	62 - 70	-	M 8	R1/R2/R8	67	45	50	81009
UB M 8 x 71 - 77	71 - 77	2 1/2	M 8	R0-2/R8/STRUT	70	45	50	81010
UB M 10 x 78 - 89	78 - 89	3	M 10	R1/R2/R8/STRUT	82	50	20	81011
UB M 10 x 90 - 102	90 - 102	3 1/2	M 10	R1/R2/R8/STRUT	88	50	20	81012
UB M 10 x 103 - 108	103 - 108	-	M 10	R1/R2/R8	91	50	20	81013
UB M 10 x 109 - 115	109 - 115	4	M 10	R1/R2/R8	94	50	20	81014
UB M 12 x 116 - 127	116 - 127	-	M 12	R4/R7/R8/STRUT	124	70	20	81015
UB M 12 x 128 - 133	128 - 133	-	M 12	R4/R7/R8/STRUT	127	80	20	81016
UB M 12 x 134 - 140	134 - 140	5	M 12	R4/R7/R8/STRUT	130	80	20	81017
UB M 12 x 141 - 159	141 - 159	-	M 12	-	140	80	20	81018
UB M 12 x 160 - 169	160 - 169	6	M 12	R4/R7/R8/STRUT	175	85	20	81019
UB M 12 x 170 - 220	170 - 220	8	M 12	R4/R7/R8/STRUT	150	85	20	81020
UB M 16 x 221 - 273	221 - 273	10	M 16	-	180	60	10	81021
UB M 16 x 274 - 324	274 - 324	12	M 16	-	205	70	10	81022
UB M 16 x 325 - 356	325 - 356	14	M 16	-	220	70	10	81023
UB M 16 x 357 - 407	357 - 407	16	M 16	-	250	70	10	81024

KB Fixed Point Clips (steel)

KB clips are designed for rigid support, such as mounting heavy pipes for rising mains. Suitable for fixed point construction.

- Clip as per DIN 3567.
- Supplied per one halve.
- KB clips are compatible with pipe sizes as per DIN 2448 and DIN EN 10220.



Type	Ø Pipe		Boiler tube nom. dia. [mm]	Strip dimensions [mm]	Bolts needed *	Dimensions					Torque * [Nm]	Max. axial shear [N]		Order Code
	Ext. dia. [mm]	Nom. ["]				A [mm]	C [mm]	D [mm]	K [mm]	R [mm]				
KB 27	27	3/4	20	30 x 5.0	M 10 x 30	66	15	11.5	7	7	50	1000	1	37901
KB 34	34	1	25	30 x 5.0	M 10 x 30	72	15	11.5	7	7	50	2500	1	37903
KB 43	43	1 1/4	32	30 x 5.0	M 10 x 30	82	15	11.5	7	7	50	2500	1	37905
KB 49	49	1 1/2	40	30 x 5.0	M 10 x 30	88	15	11.5	7	7	50	2500	1	37907
KB 61	61	2	50	40 x 6.0	M 12 x 35	108	18	14	9	9	90	5000	1	37909
KB 77	77	2 1/2	65	40 x 6.0	M 12 x 35	122	18	14	9	9	90	5000	1	37910
KB 89	89	3	80	40 x 6.0	M 12 x 35	136	18	14	9	9	90	5000	1	37911
KB 115	115	4	100	50 x 8.0	M 16 x 45	178	24	18	11	12	230	10000	1	37913
KB 140	140	5	125	50 x 8.0	M 16 x 45	204	24	18	11	12	230	10000	1	37915
KB 169	169	6	150	50 x 8.0	M 16 x 45	232	24	18	11	12	230	10000	1	37917
KB 220	220	8	200	50 x 8.0	M 16 x 45	284	24	18	11	12	230	10000	1	37921
KB 273	273	10	250	60 x 8.0	M 20 x 50	348	30	23	14	12	460	15000	1	37923
KB 324	324	12	300	60 x 8.0	M 20 x 50	398	30	23	14	12	460	15000	1	37925
KB 407	407	16	400	70 x 10.0	M 24 x 60	498	36	27	18	15	800	20000	1	37928

* Hex bolt strength class 8.8 according to ISO 4014 (with friction coefficient of 0,14).

FOR AIR DUCT FIXING

BSL Clips

BSL clips are especially designed for mounting circular air duct work to the wall or ceiling.

- Suitable for spiral tubing.
- Possibility of a low built-in height.
- Robust, durable two-piece clip.
- Sendzimir galvanized.
- Execution:

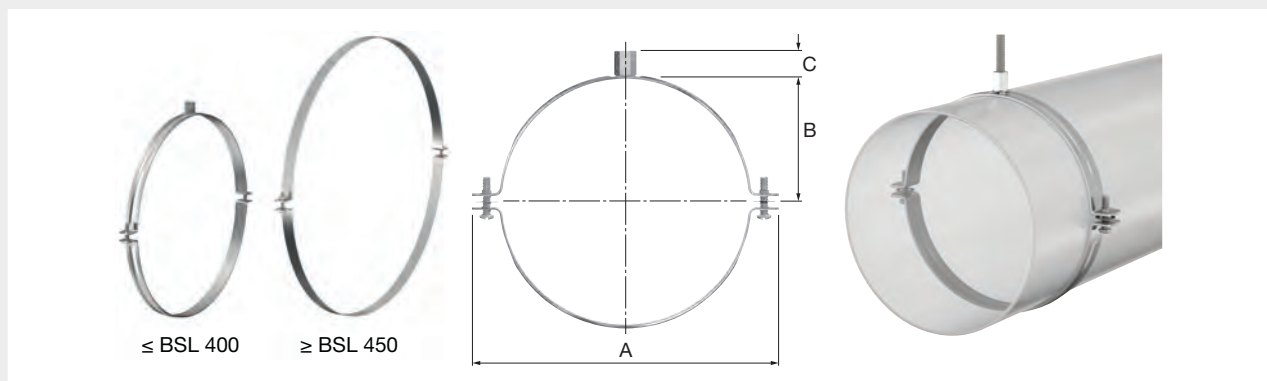
BSL 63 - 400:


With M 8/10 connection.

Side closure: Fastening hook and cross head bolts.

450 - 1250:

Side closure: Hexagonal bolts and nuts (M 8 x 35).

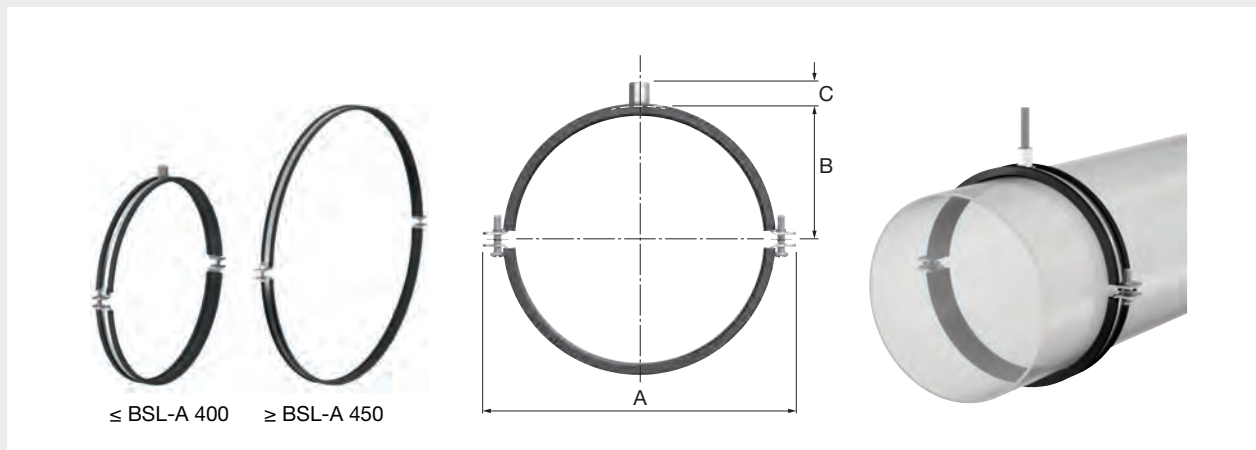



Type	Ø Pipe int. dia. [mm]	Max. working load [N]	Strip dimen- sions [mm]	Side-mounted connections	A [mm]	Dimensions B [mm]	C [mm]		Order Code
BSL 63	63	850	20 x 2.0	M 6 x 25	102	35	15	50	39929
BSL 80	80	850	20 x 1.5	M 6 x 25	124	43	15	50	39901
BSL 100	100	850	20 x 1.5	M 6 x 25	144	53	15	25	39903
BSL 112	112	850	20 x 1.5	M 6 x 25	156	59	15	25	39904
BSL 125	125	850	20 x 1.5	M 6 x 25	169	66	15	25	39905
BSL 140	140	850	20 x 1.5	M 6 x 25	184	73	15	25	39906
BSL 150	150	850	20 x 1.5	M 6 x 25	194	78	15	25	39907
BSL 160	160	850	20 x 1.5	M 6 x 25	204	84	15	25	39908
BSL 180	180	850	20 x 1.5	M 6 x 25	224	94	15	25	39909
BSL 200	200	850	20 x 1.5	M 6 x 25	244	104	15	25	39910
BSL 224	224	850	20 x 1.5	M 6 x 25	268	116	15	25	39911
BSL 250	250	850	20 x 1.5	M 6 x 25	294	129	15	25	39912
BSL 280	280	850	20 x 1.5	M 6 x 25	324	144	15	25	39913
BSL 300	300	850	20 x 1.5	M 6 x 25	344	154	15	25	39914
BSL 315	315	850	20 x 1.5	M 6 x 25	359	161	15	25	39915
BSL 355	355	850	20 x 1.5	M 6 x 40	399	181	15	25	39916
BSL 400	400	850	20 x 1.5	M 6 x 40	444	204	15	25	39917
BSL 450	450	2500	25 x 2.5	M 8 x 35 *	515	230	15	1	39918
BSL 500	500	2500	25 x 2.5	M 8 x 35 *	565	255	15	1	39919
BSL 560	560	2500	25 x 2.5	M 8 x 35 *	625	285	15	1	39920
BSL 600	600	2500	25 x 2.5	M 8 x 35 *	665	306	15	1	39928
BSL 630	630	2500	25 x 2.5	M 8 x 35 *	695	321	15	1	39921
BSL 710	710	2500	25 x 2.5	M 8 x 35 *	775	361	15	1	39922
BSL 800	800	2500	25 x 2.5	M 8 x 35 *	865	406	15	1	39923
BSL 900	900	2500	25 x 2.5	M 8 x 35 *	965	456	15	1	39924
BSL 1000	1000	2500	25 x 2.5	M 8 x 35 *	1065	506	15	1	39925
BSL 1120	1120	2500	25 x 3.0	M 8 x 35 *	1185	566	15	1	39926
BSL 1250	1250	2500	25 x 3.0	M 8 x 35 *	1315	631	15	1	39927

* Bolt and nut.

BSL-A Clips

- Similar to the BSL clip but equipped with noise-suppressing EPDM rubber lining.
- Suitable for temperatures from -40 °C up to +100 °C.



Type	Ø Pipe int. dia. [mm]	Max. working load [N]	Strip dimen- sions [mm]	Side-mounted connections	Dimensions				Order Code
					A [mm]	B [mm]	C [mm]		
BSL-A 63	63	850	20 x 2.0	M 6 x 25	112	37	15	50	39979
BSL-A 80	80	850	20 x 1.5	M 6 x 25	128	47	15	50	39951
BSL-A 100	100	850	20 x 1.5	M 6 x 25	150	57	15	25	39953
BSL-A 112	112	850	20 x 1.5	M 6 x 25	170	63	15	25	39954
BSL-A 125	125	850	20 x 1.5	M 6 x 25	185	69	15	25	39955
BSL-A 140	140	850	20 x 1.5	M 6 x 25	195	77	15	25	39956
BSL-A 150	150	850	20 x 1.5	M 6 x 25	205	82	15	25	39957
BSL-A 160	160	850	20 x 1.5	M 6 x 25	215	87	15	25	39958
BSL-A 180	180	850	20 x 1.5	M 6 x 25	240	97	15	25	39959
BSL-A 200	200	850	20 x 1.5	M 6 x 25	265	107	15	25	39960
BSL-A 224	224	850	20 x 1.5	M 6 x 25	277	119	15	25	39961
BSL-A 250	250	850	20 x 1.5	M 6 x 25	303	132	15	25	39962
BSL-A 280	280	850	20 x 1.5	M 6 x 25	333	147	15	25	39963
BSL-A 300	300	850	20 x 1.5	M 6 x 25	353	157	15	25	39964
BSL-A 315	315	850	20 x 1.5	M 6 x 25	368	165	15	25	39965
BSL-A 355	355	850	20 x 1.5	M 6 x 40	408	185	15	25	39966
BSL-A 400	400	850	20 x 1.5	M 6 x 40	453	207	15	25	39967
BSL-A 450	450	2500	25 x 2.5	M 8 x 35 *	514	233	15	1	39968
BSL-A 500	500	2500	25 x 2.5	M 8 x 35 *	564	258	15	1	39969
BSL-A 560	560	2500	25 x 2.5	M 8 x 35 *	624	288	15	1	39970
BSL-A 600	600	2500	25 x 2.5	M 8 x 35 *	664	309	15	1	39978
BSL-A 630	630	2500	25 x 2.5	M 8 x 35 *	694	324	15	1	39971
BSL-A 710	710	2500	25 x 2.5	M 8 x 35 *	774	364	15	1	39972
BSL-A 800	800	2500	25 x 2.5	M 8 x 35 *	864	409	15	1	39973
BSL-A 900	900	2500	25 x 2.5	M 8 x 35 *	964	459	15	1	39974
BSL-A 1000	1000	2500	25 x 2.5	M 8 x 35 *	1064	509	15	1	39975
BSL-A 1120	1120	2500	25 x 3.0	M 8 x 35 *	1184	569	15	1	39976
BSL-A 1250	1250	2500	25 x 3.0	M 8 x 35 *	1314	634	15	1	39977

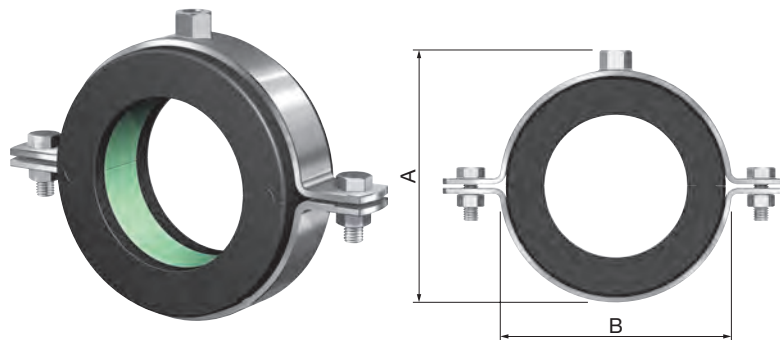
* Bolt and nut.


WITH ELASTOMER INSULATION

CA Clips - 19 mm

For mounting pipework with an elastomer insulation to the wall or ceiling to prevent thermal losses.

- Clip and pipework insulation form an integral component.
- 'Hook' shape allows easy pre-mounting of pipe.
- Pipe can still be moved positioned after pre-mounting.
- Easy to glue bond with pipework insulation. No thermal bridge.
- Screw fitted with a retaining ring.
- Clip: Electrolytically zinc plated.
- Insulation: 19 mm elastomeric foam with PIR core and coated with an aluminum foil.
- Connection: M 12 with side connection bolt/nut M 10.
- Insulation width: 100 mm.
- PIR density 120 kg/m³, PIR pressure resistance 1,3 N/mm².
- Suitable for temperatures from -45 °C up to +105 °C.
- Thermal conductivity: maximal 0.036 W/(m.K).
- Vapour permeability: 7,000 µ.
- Fire rating B2 according to DIN 4102/1.
- Fire rating B1 according to DIN 4102/1 as part of a system with tubes, elastomer insulation.



Type	Ø Pipe		Strip dimensions [mm]	Max. working load *		Dimensions			Order Code
	Ext. dia. [mm]	Nom. ["]		Ceiling [N]	Wall [N]	A [mm]	B [mm]		
CA 19 x 140 - 5 **	140	5	50 x 4.0	2250	-	213.0	205.0	5	39832
CA 19 x 168 - 6 **	168	6	50 x 4.0	2700	-	231.0	223.0	5	39833
CA 19 x 219 - 8 **	219	8	50 x 4.0	3500	-	282.0	274.0	5	39834

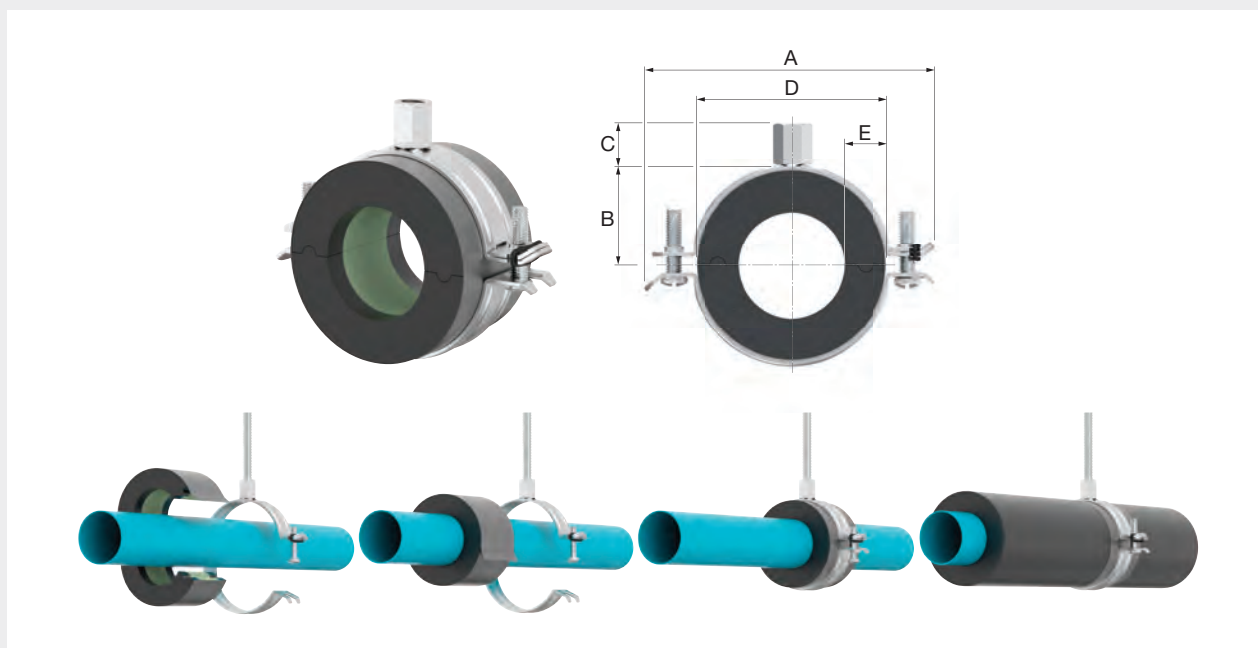
* The max. working load will be determined by the PIR insulation.


** Closing system provided with 2 closing screws.

CB Clips - 13 mm

For mounting pipework with an elastomer insulation to the wall or ceiling to prevent thermal losses.

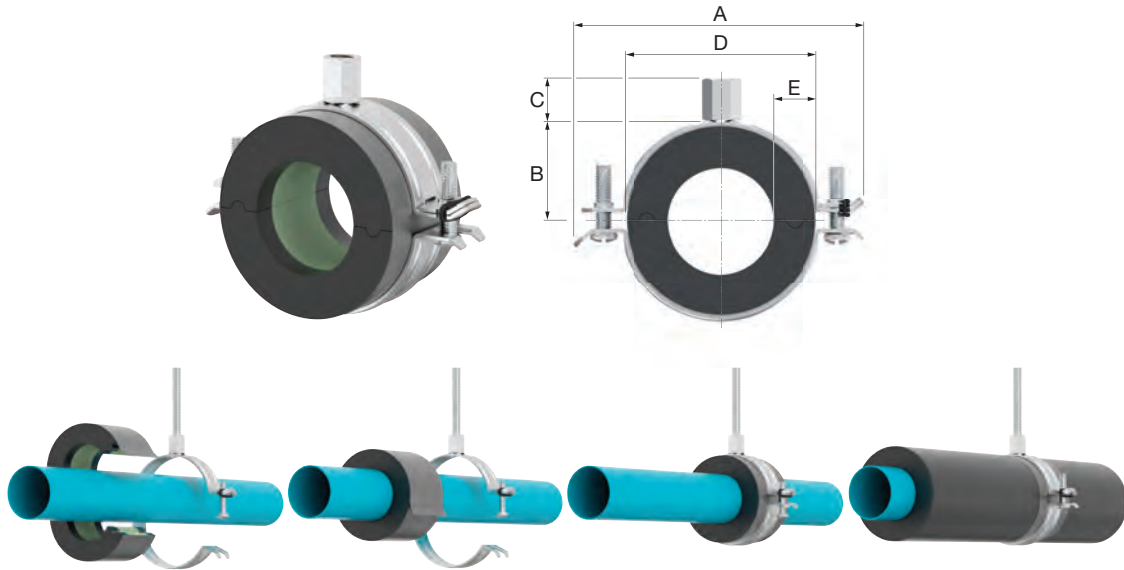
- Clip: Electrolytically zinc plated.
- Insulation: 13 Elastomeric foam with a PIR core and coated with a black PVC foil.
- Easy to bond with pipework insulation. No thermal bridge.
- Connection: M 8/10.
- Insulation width: 50 mm.
- All clips are fitted with two cross head screws.
- Clips fitted with quick-locking system and bolts designed not to fall out during installation: all sizes except 114-4".
- Clips fitted with retaining ring: CB 13 x 114-4" and CB 19 x 114-4".
- PIR density 80 kg/m³, PIR pressure resistance 0.52 N/mm²: CB 13 x 10 up to CB 13 x 60-2" and CB 19 x 18 up to CB 19 x 76-2½".
- PIR density 120 kg/m³, PIR pressure resistance 1.3 N/mm²: other sizes.
- Suitable for temperatures from -50 °C up to +110 °C.
- Thermal conductivity: maximal 0.033 W/(m.K).
- Vapour permeability: 10,000 μ.
- Fire rating B2 according to DIN 4102/1.
- Fire rating B1 according to DIN 4102/1 as part of a system with tubes, elastomer insulation.
- In connection with Kaiflex ST hoses fire class BL-s3, d0.




Type	Ø pipe		Max. vertical working load [N]	Strip dimensions [mm]	Dimensions						Order Code
	Ext. dia. [mm]	Nom. ["]			A [mm]	B [mm]	C [mm]	D [mm]	E [mm]		
CB 13 x 10	10	-	50	20 x 1.5	73	21	15	36	13	10	39847
CB 13 x 12	12	-	50	20 x 1.5	73	22	15	38	13	10	39848
CB 13 x 15	15	-	50	20 x 1.5	81	23	15	41	13	10	39870
CB 13 x 18	18	-	70	20 x 1.5	81	23	15	44	13	10	39871
CB 13 x 22 - ½	22	½	80	20 x 1.5	85	25	15	48	13	10	39872
CB 13 x 28 - ¾	28	¾	100	20 x 1.5	90	28	15	54	13	10	39873
CB 13 x 35 - 1	35	1	130	20 x 1.5	98	32	15	61	13	10	39874
CB 13 x 42 - 1 ¼	42	1 ¼	160	20 x 2.0	107	36	15	68	13	10	39875
CB 13 x 48-50 - 1 ½	50	1 ½	180	20 x 2.0	115	40	15	76	13	10	39876
CB 13 x 54	54	-	210	20 x 2.0	122	43	15	80	13	10	39841
CB 13 x 60 - 2	60	2	230	20 x 2.0	134	49	15	86	13	10	39877
CB 13 x 64	64	-	240	20 x 2.0	134	49	15	92	14	10	39843
CB 13 x 76 - 2 ½	76	2 ½	740	20 x 2.5	155	60	15	111	17	10	39878
CB 13 x 89-90 - 3	90	3	850	20 x 2.5	165	65	15	125	17	10	39879
CB 13 x 114 - 4	114	4	1100	20 x 2.5	192	77	15	149	17	10	39880

CB Clips - 19 mm

- Similar to CB clips - 13 mm, but with 19 mm elastomer insulation.



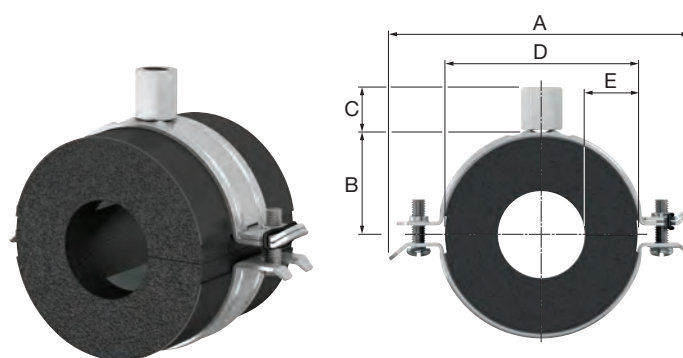
Type	Ø pipe		Max. vertical working load [N]	Strip dimen- sions [mm]	Dimensions						Order Code
	Ext. dia. [mm]	Nom. ["]			A [mm]	B [mm]	C [mm]	D [mm]	E [mm]		
CB 19 x 18	18	-	70	20 x 1.5	98	32	15	64	19	10	39886
CB 19 x 22 - 1/2	22	1/2	80	20 x 1.5	98	32	15	64	19	10	39887
CB 19 x 28 - 3/4	28	3/4	100	20 x 1.5	104	35	15	70	19	10	39888
CB 19 x 35 - 1	35	1	130	20 x 1.5	115	40	15	80	19	10	39889
CB 19 x 42 - 1 1/4	42	1 1/4	160	20 x 2.0	122	43	15	86	19	10	39890
CB 19 x 48-50 - 1 1/2	50	1 1/2	190	20 x 2.0	128	46	15	92	19	10	39891
CB 19 x 54	54	-	210	20 x 2.0	134	49	15	98	19	10	39897
CB 19 x 60 - 2	60	2	230	20 x 2.0	140	52	15	104	19	10	39892
CB 19 x 64	64	-	240	20 x 2.0	140	52	15	104	20	10	39898
CB 19 x 76 - 2 1/2	76	2 1/2	290	20 x 2.5	155	60	15	120	20	10	39893
CB 19 x 89-90 - 3	90	3	850	20 x 2.5	177	70	15	140	24	10	39894
CB 19 x 114 - 4	114	4	1100	20 x 2.5	211	87	15	174	26	10	39895


CBA-2 Clips

For mounting pipework with an elastomer insulation to the wall or ceiling to prevent thermal losses and condensation from chilled water pipes. The CBA insulation clips are a combination of our Flamco CK clips with AF Armafix insulation from Armaflex.

- Easy to bond with pipework insulation. No thermal bridge.
- Adhesive sealing strip for easy closing and lasting of the insulation.
- Elastomer foam with a PET core (100% recycled) with aluminium cover plates (thickness 0.8 mm).
- Part of the Armaflex system warranty.
- Clip: Electrolytically zinc plated.
- Connection: M 8/10.
- CBA-2 x 10 - 12 to CBA-2 x 89 - 3: Suited with a quick-locking system and special retaining bolts.
- CBA-2 x 110 - 114 - 4: Fitted with retaining ring to prevent loss of bolts.
- Suitable for temperatures from -50 °C up to +110 °C.
- Insulation thickness between 9.5 and 16 mm.
- PET density: 90 - 105 kg/m³.
- PET pressure resistance: 1.5 N/mm².
- Thermal conductivity: 0.033 W/(m.K).
- Vapour barrier: min 10,000 μ.
- Fire rating B / B₁-s3,d0 according to EN13501-1.

Part of the Armaflex system warranty (up to 10 years warranty under the terms of Armacell).



Type	Ø pipe		Max. vertical working load [N]	Strip dimensions [mm]	Dimensions						Order Code
	Ext. dia. [mm]	Nom. ["]			A [mm]	B [mm]	C [mm]	D [mm]	E [mm]		
CBA-2 x 10 - 12 - 1/8 - 1/4	10 - 13.5	1/8 - 1/4	170	20 x 1.5	73	20.0	15	36	12.0	32	49000
CBA-2 x 15 - 18 - 3/8	15 - 18	3/8	254	20 x 1.5	81	22.0	15	43	12.5	24	49001
CBA-2 x 22 - 25 - 1/2	21.3 - 25	1/2	311	20 x 1.5	85	24.0	15	47	12.5	24	49002
CBA-2 x 28 - 30 - 3/4	26.9 - 30	3/4	396	20 x 1.5	90	26.5	15	53	12.5	16	49003
CBA-2 x 35 - 38 - 1	33.7 - 38	1	550	20 x 1.5	98	30.5	15	61	13.0	12	49004
CBA-2 x 42 - 45 - 1 1/4	42 - 45	1 1/4	707	20 x 1.5	107	35.0	15	72	13.5	12	49005
CBA-2 x 48 - 1 1/2	48 - 51	1 1/2	829	20 x 2.0	115	38.0	15	76	14.0	12	49006
CBA-2 x 54 - 57	54 - 57	-	985	20 x 2.0	122	41.5	15	85	14.0	12	49007
CBA-2 x 60 - 64 - 2	60 - 64	2	1300	20 x 2.0	134	47.5	15	92	14.0	10	49008
CBA-2 x 76 - 80 - 2 1/2	76 - 80	2 1/2	1300	20 x 2.5	155	57.5	15	109	14.5	12	49009
CBA-2 x 89 - 3	89	3	1300	20 x 2.5	165	62.5	15	118	14.5	8	49010
CBA-2 x 110 - 114 - 4	110 - 114.3	4	2150	20 x 2.5	192	75.0	15	144	15.0	4	49011

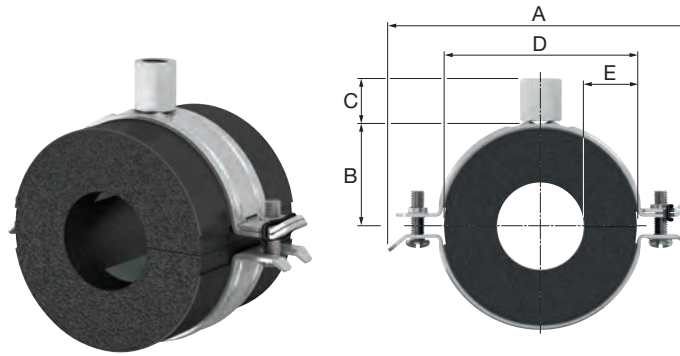
* The max. working load will be determined by the insulation.


CBA-4 Clips

Similar to CBA-2 clips, but with:

- Insulation thickness between 15.5 and 25 mm.
- CBA-4 x 10 - 12 to CBA-4 x 89 - 3: Suited with a quick-locking system and special retaining bolts.
- CBA-4 x 110 - 114 - 4 to CBA-4 x 216 - 219 - 8: Fitted with retaining ring to prevent loss of bolts.
- Connection CBA-4 x 216 - 219 - 8: G $\frac{3}{4}$ M / M 12 / M 16.

Part of the Armaflex system warranty (up to 10 years warranty under the terms of Armacell).



Type	Ø pipe		Max. vertical working load [N]	Strip dimen- sions [mm]	Dimensions						Order Code
	Ext. dia. [mm]	Nom. ["]			A [mm]	B [mm]	C [mm]	D [mm]	E [mm]		
CBA-4 x 10 - 12 - $\frac{1}{8}$ - $\frac{1}{4}$	10 - 13.5	$\frac{1}{8}$ - $\frac{1}{4}$	207	20 x 1.5	85	24.0	15	48	18.0	26	49025
CBA-4 x 15 - 18 - $\frac{3}{8}$	15 - 18	$\frac{3}{8}$	311	20 x 1.5	90	26.5	15	55	18.5	24	49026
CBA-4 x 22 - 25 - $\frac{1}{2}$	21.3 - 25	$\frac{1}{2}$	432	20 x 1.5	98	30.5	15	64	19.5	12	49027
CBA-4 x 28 - 30 - $\frac{3}{4}$	26.9 - 30	$\frac{3}{4}$	518	20 x 1.5	107	35.0	15	70	20.0	12	49028
CBA-4 x 35 - 38 - 1 **	33.7 - 38	1	776	20 x 2.0	122	41.5	15	79	20.5	12	49029
CBA-4 x 42 - 45 - 1 $\frac{1}{4}$	42 - 45	1 $\frac{1}{4}$	919	20 x 2.0	128	44.5	15	88	21.5	12	49030
CBA-4 x 48 - 1 $\frac{1}{2}$	48 - 51	1 $\frac{1}{2}$	918	20 x 2.0	134	47.5	15	91	21.5	12	49031
CBA-4 x 54 - 57	54 - 57	-	1164	20 x 2.0	140	50.5	15	101	22.0	16	49032
CBA-4 x 60 - 64 - 2	60 - 64	2	1300	20 x 2.5	155	57.5	15	109	22.5	12	49033
CBA-4 x 76 - 80 - 2 $\frac{1}{2}$	76 - 80	2 $\frac{1}{2}$	1300	20 x 2.5	167	63.5	15	127	23.5	18	49034
CBA-4 x 89 - 3	89	3	1300	20 x 2.5	177	68.0	15	136	23.5	14	49035
CBA-4 x 110 - 114 - 4	110 - 114.3	4	2150	20 x 2.5	205	81.5	15	162	24.0	6	49036
CBA-4 x 133 - 140 - 5	133 - 140	5	2150	20 x 2.0	229	94.5	15	189	24.5	6	49037
CBA-4 x 165 - 168 - 6	165 - 168.3	6	3000	20 x 3.0	255	105.5	15	219	25.5	3	49038
CBA-4 x 216 - 219 - 8	216 - 219.1	8	9000	50 x 5.0	348	142.0	15	270	25.5	3	49039

* The max. working load will be determined by the insulation.

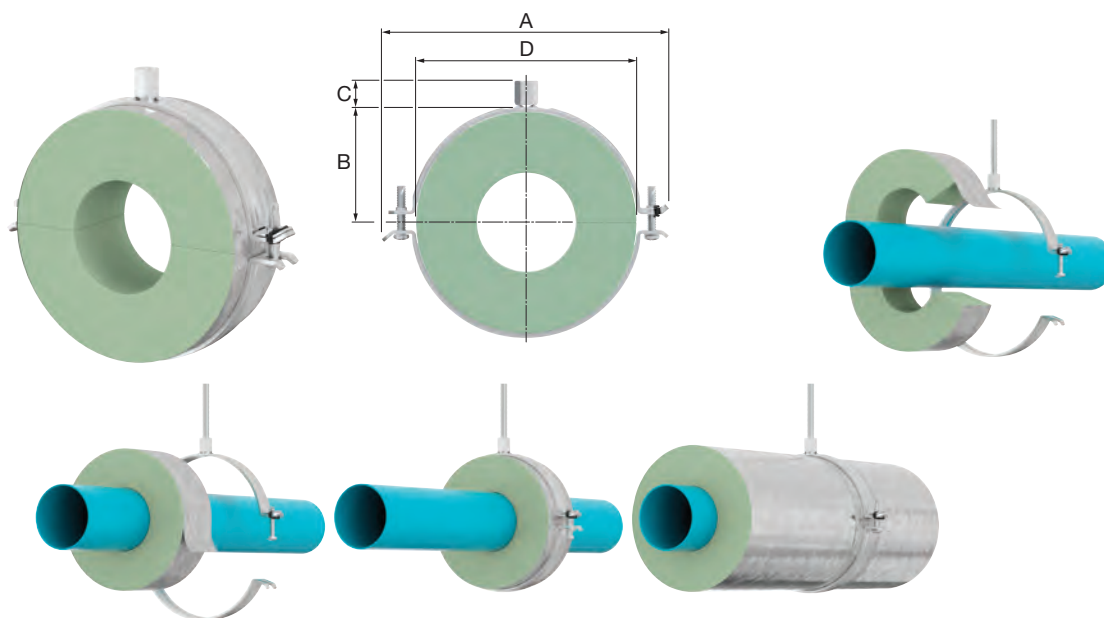
** Pipe with a diameter of 33.7 mm cannot be mounted clamping as standard.


WITH POLYISOCYANURATE (PIR) INSULATION

CC Clips - 20 mm

For mounting pipework with an elastomer insulation to the wall or ceiling to prevent thermal losses.

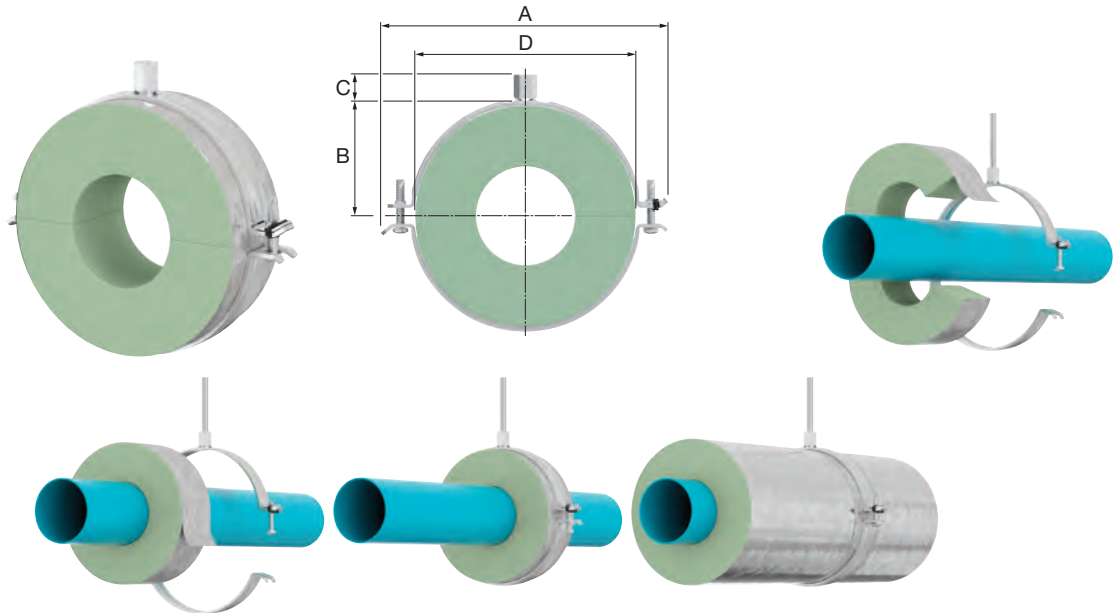
- Clip: Electrolytically zinc plated.
- Insulation: 20 mm hard PIR insulation, coated with an aluminum foil.
- Connection: M 8/10.
- Insulation width: 50 mm.
- All clips are fitted with two cross head screws.
- Clips fitted with quick-locking system and bolts designed not to fall out during installation.
- PIR density 80 kg/m³, PIR pressure resistance 0.65 N/mm².
- Suitable for temperatures from -200 °C up to +120 °C.
- Thermal conductivity: maximal 0.029 W/(m.K).
- Vapour permeability: 30,000 μ.




Type	Ø pipe		Max. vertical working load [N]	Strip dimensions [mm]	Dimensions					Order Code
	Ext. dia. [mm]	Nom. ["]			A [mm]	B [mm]	C [mm]	D [mm]		
CC 20 x 15	15	-	102	20 x 1.5	90	26,5	15	55	10	39720
CC 20 x 18 - 3/8	18	3/8	123	20 x 1.5	98	30,5	15	58	10	39721
CC 20 x 22 - 1/2	22	1/2	150	20 x 1.5	98	30,5	15	62	10	39722
CC 20 x 28 - 3/4	28	3/4	191	20 x 1.5	107	35	15	68	10	39723
CC 20 x 35 - 1	35	1	238	20 x 2.0	115	38	15	75	10	39724
CC 20 x 42 - 1 1/4	42	1 1/4	286	20 x 2.0	122	41,5	15	82	10	39725
CC 20 x 48 - 1 1/2	48	1 1/2	327	20 x 2.0	128	44,5	15	88	10	39726
CC 20 x 54	54	-	368	20 x 2.0	134	47,5	15	94	10	39727
CC 20 x 60 - 2	60	2	408	20 x 2.0	140	50,5	15	100	10	39728

CC Clips - 30 mm

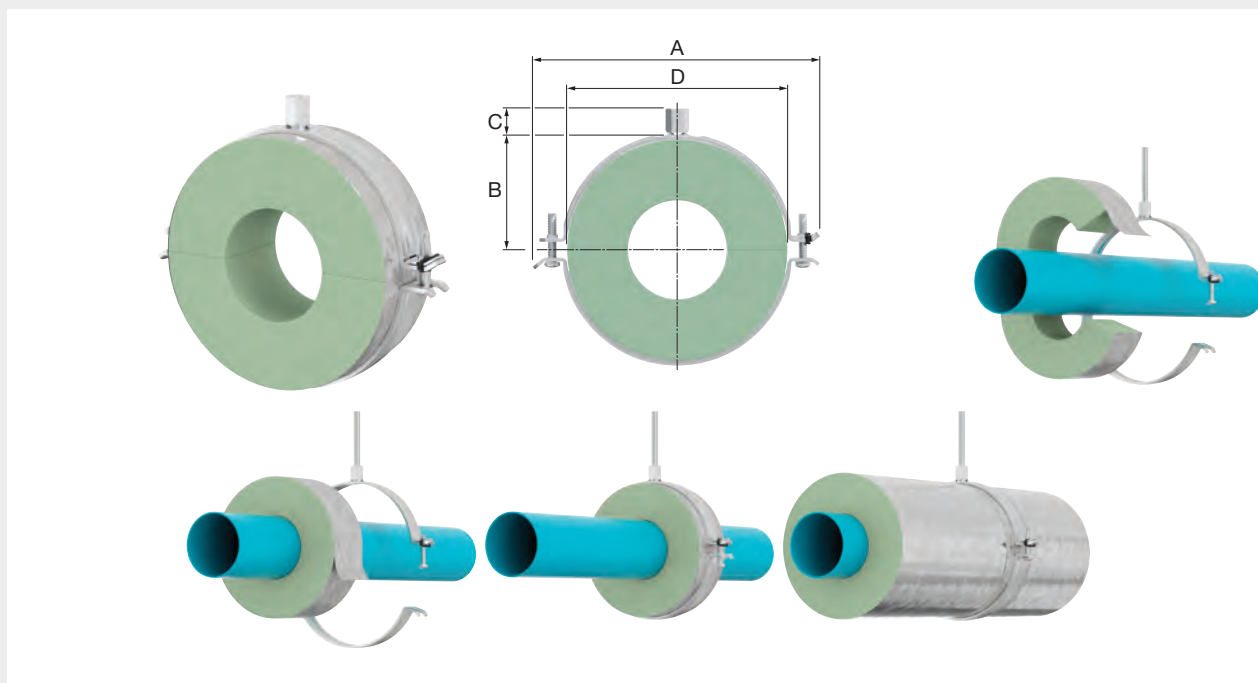
- Similar to CC clips - 20 mm, but with 30 mm PIR insulation with aluminium liner.
- Clips fitted with quick-locking system and bolts designed not to fall out during installation: all sizes up to CC 30 x 76-2 1/2".
- Clips fitted with retaining ring: all sizes above CC 30 x 76-2 1/2".




Type	Ø pipe		Max. vertical working load [N]	Strip dimensions [mm]	Dimensions					Order Code
	Ext. dia. [mm]	Nom. ["]			A [mm]	B [mm]	C [mm]	D [mm]		
CC 30 x 15	15	-	102	20 x 2.0	115	40	15	74	10	39770
CC 30 x 18 - 3/8	18	3/8	119	20 x 2.0	115	40	15	77	10	39771
CC 30 x 22 - 1/2	22	1/2	146	20 x 2.0	122	43	15	81	10	39772
CC 30 x 28 - 3/4	28	3/4	187	20 x 2.0	128	46	15	87	10	39773
CC 30 x 35 - 1	35	1	235	20 x 2.0	134	49	15	94	10	39774
CC 30 x 42 - 1 1/4	42	1 1/4	289	20 x 2.0	140	52	15	102	10	39775
CC 30 x 48-50 - 1 1/2	48	1 1/2	329	20 x 2.5	155	60	15	108	10	39776
CC 30 x 54	54	-	368	20 x 2.5	155	60	15	114	10	39777
CC 30 x 60 - 2	60	2	410	20 x 2.5	165	65	15	120	10	39779
CC 30 x 70	70	-	476	20 x 2.5	167	66	15	130	10	39780
CC 30 x 76 - 2 1/2	76	2 1/2	517	20 x 2.5	177	70	15	136	10	39781
CC 30 x 89 - 3	89	3	605	20 x 2.5	192	77	15	149	10	39782
CC 30 x 108	108	-	735	20 x 2.5	211	87	15	168	10	39783
CC 30 x 114 - 4	114	4	778	20 x 2.5	211	87	15	174	10	39784
CC 30 x 133	133	-	905	20 x 3.0	245	104	15	193	10	39785
CC 30 x 139 - 5	139	5	951	20 x 3.0	245	104	15	200	10	39786

CC Clips - 40 mm

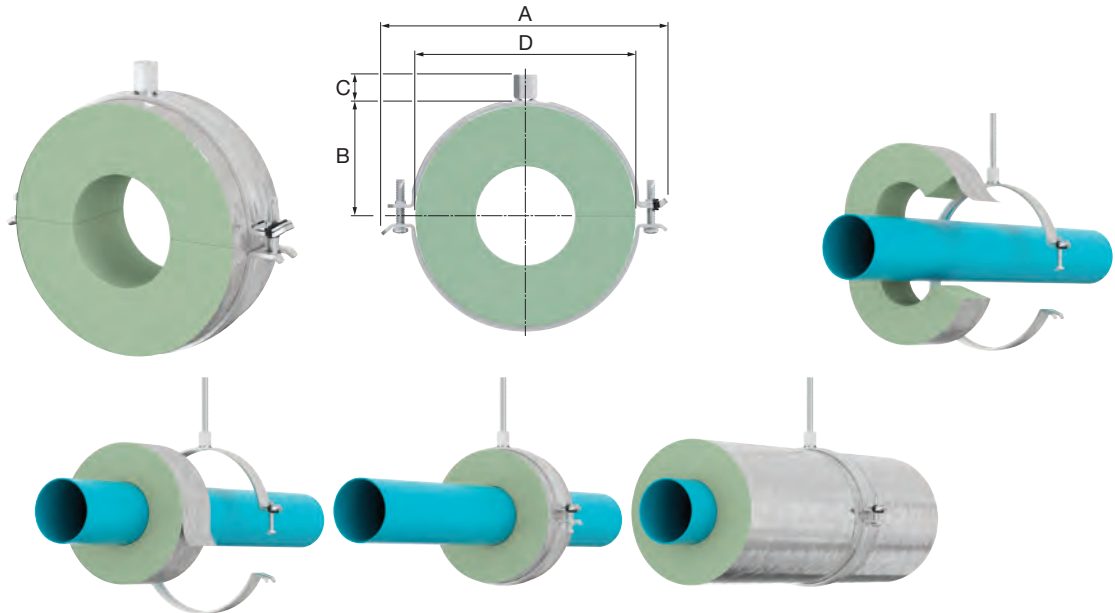
- Similar to CC clips - 20 mm, but with 40 mm PIR insulation with aluminium liner.
- Clips fitted with quick-locking system and bolts designed not to fall out during installation: all sizes up to CC 40 x 60-2".
- Clips fitted with retaining ring: all sizes above CC 40 x 60-2".




Type	Ø pipe		Max. vertical working load [N]	Strip dimensions [mm]	Dimensions					Order Code
	Ext. dia. [mm]	Nom. ["]			A [mm]	B [mm]	C [mm]	D [mm]		
CC 40 x 15	15	-	102	20 x 2.0	134	49	15	95	10	39850
CC 40 x 18 - 3/8	18	3/8	119	20 x 2.0	140	52	15	97	10	39851
CC 40 x 22 - 1/2	22	1/2	146	20 x 2.0	140	52	15	101	10	39852
CC 40 x 28 - 3/4	28	3/4	187	20 x 2.0	155	60	15	107	10	39853
CC 40 x 35 - 1	35	1	235	20 x 2.0	155	60	15	114	10	39854
CC 40 x 42 - 1 1/4	42	1 1/4	289	20 x 2.0	165	65	15	122	10	39855
CC 40 x 48 - 1 1/2	48	1 1/2	329	20 x 2.5	167	66	15	128	10	39856
CC 40 x 54	54	-	368	20 x 2.5	177	70	15	134	10	39857
CC 40 x 60 - 2	60	2	410	20 x 2.5	177	70	15	140	10	39859
CC 40 x 70	70	-	476	20 x 2.5	192	77	15	150	10	39860
CC 40 x 76 - 2 1/2	76	2 1/2	517	20 x 2.5	205	84	15	156	10	39861
CC 40 x 89 - 3	89	3	605	20 x 2.5	211	87	15	169	10	39862
CC 40 x 108	108	-	735	20 x 2.5	229	96	15	188	10	39863
CC 40 x 114 - 4	114	4	778	20 x 2.5	245	104	15	194	10	39864
CC 40 x 133	133	-	905	20 x 3.0	255	108	15	213	10	39865
CC 40 x 140 - 5	140	5	951	20 x 3.0	272	117	15	220	10	39866

CC Clips - 50 mm

- Similar to CC clips - 20 mm, but with 50 mm PIR insulation with aluminium liner.
- Clips fitted with quick-locking system and bolts designed not to fall out during installation: all sizes up to CC 50 x 28- $\frac{3}{4}$ ".
- Clips fitted with retaining ring: all sizes above CC 50 x 28- $\frac{3}{4}$ ".

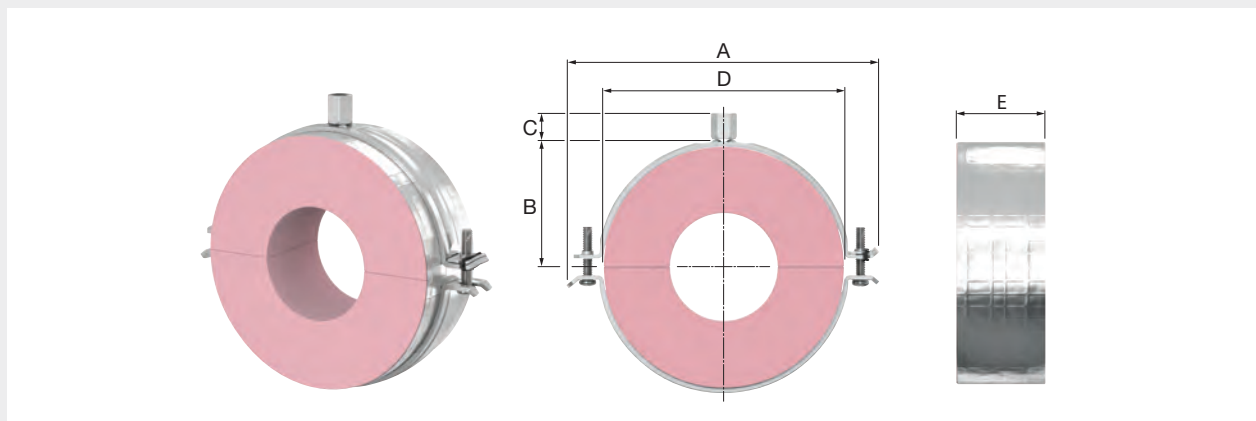



Type	Ø pipe		Max. vertical working load [N]	Strip dimensions [mm]	Dimensions					Order Code
	Ext. dia. [mm]	Nom. ["]			A [mm]	B [mm]	C [mm]	D [mm]		
CC 50 x 22 - $\frac{1}{2}$	22	$\frac{1}{2}$	150	20 x 2.5	165	62.5	15	122	10	39752
CC 50 x 28 - $\frac{3}{4}$	28	$\frac{3}{4}$	191	20 x 2.5	167	63.5	15	128	10	39753
CC 50 x 35 - 1	35	1	238	20 x 2.5	177	68	15	135	10	39754
CC 50 x 42 - 1 $\frac{1}{4}$	42	1 $\frac{1}{4}$	286	20 x 2.5	192	75	15	142	10	39755
CC 50 x 48 - 1 $\frac{1}{2}$	48	1 $\frac{1}{2}$	327	20 x 2.5	192	75	15	148	10	39756
CC 50 x 54	54	-	368	20 x 2.5	192	75	15	154	10	39757
CC 50 x 60 - 2	60	2	408	20 x 2.5	205	81.5	15	160	10	39758
CC 50 x 76 - 2 $\frac{1}{2}$	76	2 $\frac{1}{2}$	517	20 x 2.5	211	84.5	15	176	10	39761
CC 50 x 89 - 3	89	3	606	20 x 2.0	229	94.5	15	189	10	39762
CC 50 x 114 - 4	114	4	776	20 x 3.0	255	105.5	15	214	10	39763
CC 50 x 133	133	-	905	20 x 3.0	272	114.5	15	233	10	39764
CC 50 x 140 - 5	140	5	953	40 x 2.5	319	132.5	18	240	10	39765
CC 50 x 168 - 6	168	6	1144	40 x 2.5	344	145	18	268	10	39767

WITH PHENOLIC INSULATION

CP Clips - 20 mm

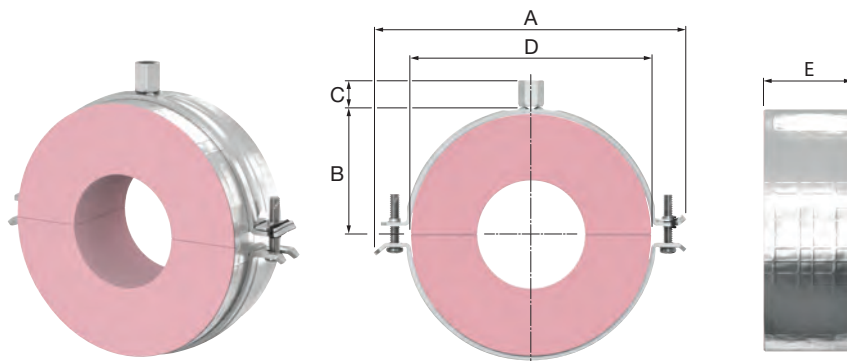
- Similar to CP Clips - 15 mm.
- Insulation thickness: 20 mm. Faced with reinforced low vapour permeability aluminium foil.




Type	Ø pipe		Max. vertical working load [N]	Strip dimen- sions [mm]	Dimensions						Order Code
	Ext. dia. [mm]	Nom. ["]			A [mm]	B [mm]	C [mm]	D [mm]	E [mm]		
CP 20 x 15	15	-	90	20 x 1.5	90	27	15	55	100	10	32613
CP 20 x 22 - 1/2	22	1/2	120	20 x 1.5	98	31	15	62	100	10	32614
CP 20 x 28 - 3/4	28	3/4	150	20 x 1.5	107	35	15	68	100	10	32615
CP 20 x 35 - 1	35	1	190	20 x 1.5	115	38	15	75	100	10	32616
CP 20 x 42 - 1 1/4	42	1 1/4	230	20 x 1.5	122	42	15	82	100	10	32617
CP 20 x 48 - 1 1/2	48	1 1/2	270	20 x 1.5	128	45	15	88	100	10	32618
CP 20 x 54	54	-	300	20 x 1.5	134	48	15	94	100	10	32619
CP 20 x 60	60	2	330	20 x 1.5	140	51	15	100	100	10	32620

CP Clips - 25 mm

- Similar to CP Clips - 15 mm.
- Insulation thickness: 25 mm. Faced with reinforced low vapour permeability aluminium foil.

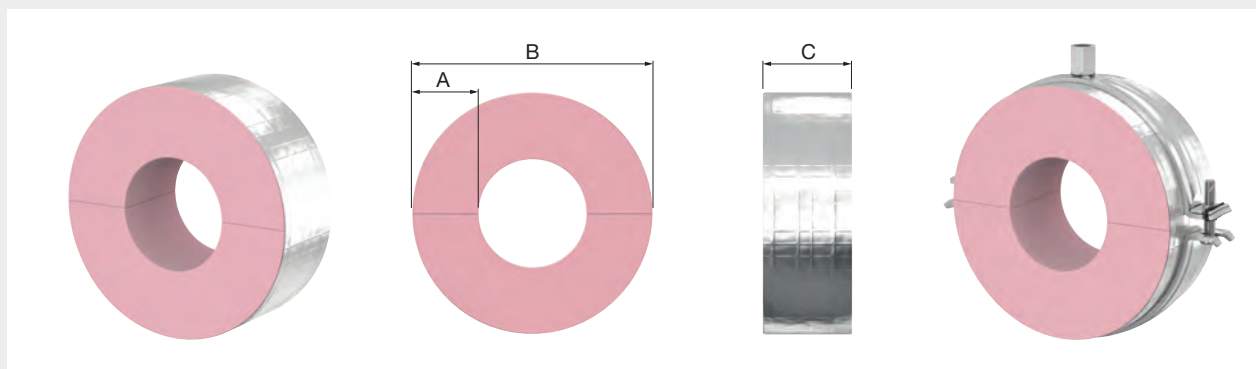



Type	Ø pipe		Max. vertical working load [N]	Strip dimen- sions [mm]	Dimensions						Order Code
	Ext. dia. [mm]	Nom. ["]			A [mm]	B [mm]	C [mm]	D [mm]	E [mm]		
CP 25 x 15	15	-	90	20 x 1.5	104	34	65	55	100	10	32630
CP 25 x 22 - 1/2	22	1/2	120	20 x 1.5	115	38	15	72	100	10	32631
CP 25 x 28 - 3/4	28	3/4	150	20 x 1.5	122	42	15	78	100	10	32632
CP 25 x 35 - 1	35	1	190	20 x 1.5	128	45	15	85	100	10	32633
CP 25 x 42 - 1 1/4	42	1 1/4	230	20 x 1.5	134	48	15	92	100	10	32634
CP 25 x 48 - 1 1/2	48	1 1/2	270	20 x 1.5	140	51	15	98	100	10	32635
CP 25 x 54	54	-	300	20 x 1.5	155	58	15	104	100	10	32636
CP 25 x 60	60	2	330	20 x 1.5	155	58	15	110	100	10	32637

Kooltherm insulation - 15 mm

Phenolic insulation blocks to combine with specified FlamcoFix clips. Use of insulation blocks will isolate the pipework from the pipe support and the surrounding environment. It will limit heat transfer from and to the pipework and prevent thermal bridging.

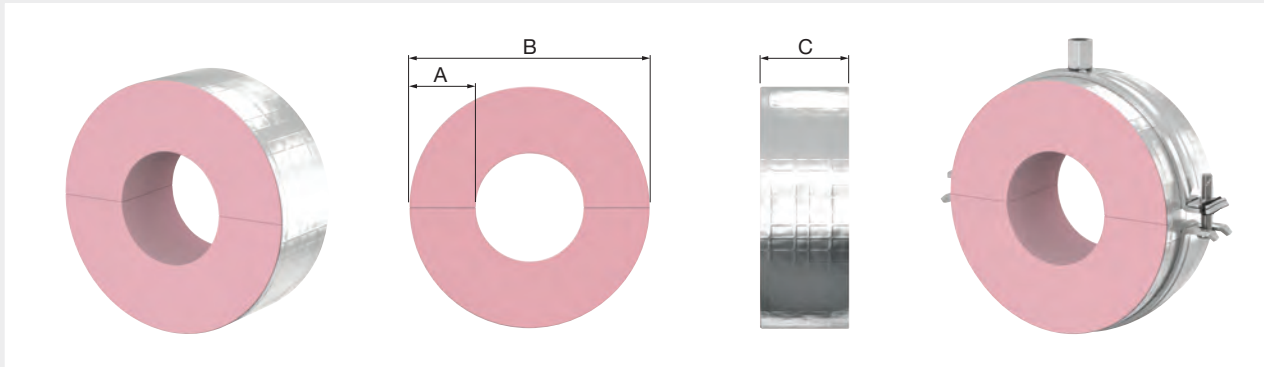
- Insulation thickness: 15 mm.
Faced with reinforced low vapour permeability aluminium foil.
- Insulation value: <0.031 W/(mk) up to 2", <0.036 W/(mk) up to 5", <0.045 W/(mk) up to 12".
- Density:
Kooltherm - 15 - 66 mm: 60 kg/m³
Kooltherm - 76 - 114 mm: 80 kg/m³
- Pressure resistance:
Kooltherm - 15 - 66 mm: 0,17 N/mm²
Kooltherm - 76 - 114 mm: 0,34 N/mm²
- Temperature resistance: from -50 °C to +110 °C.
- Fire rating: B/ BL - s1, d0.
- Over 90% closed cell structure.
- CE Marked in accordance with BS EN 14314.
- Performance, application method and factory production control assessed and certified by KIWA.
- BDA Agrément® BAP 15-036/01/C.
- Covered by LABC EWW382.
- Insulation FM approved (Class 4924).




Type	Ø pipe		Max. working load [N]	Dimensions				Order Code Suitable Clip	Order Code Insulation
	Ext. dia. [mm]	Nom. ["]		A [mm]	B [mm]	C [mm]			
Kooltherm 15x100 - 15 mm	15	-	90	15	45	100	120	37501	32750
Kooltherm 15x100 - 17 mm	17	3/8	100	15	47	100	100	37501	33300
Kooltherm 15x100 - 20 mm	20	-	110	15	50	100	100	37502	33301
Kooltherm 15x100 - 22 mm	22	1/2	120	15	52	100	96	37502	32751
Kooltherm 15x100 - 25 mm	25	-	140	15	55	100	81	37502	33302
Kooltherm 15x100 - 28 mm	28	3/4	150	15	58	100	76	37503	32752
Kooltherm 15x100 - 32 mm	32	-	180	15	62	100	64	37503	33303
Kooltherm 15x100 - 35 mm	35	1	190	15	65	100	64	37504	32753
Kooltherm 15x100 - 40 mm	40	-	230	15	70	100	49	37505	33304
Kooltherm 15x100 - 42 mm	42	1 1/4	230	15	72	100	54	37506	32754
Kooltherm 15x100 - 48 mm	48	1 1/2	270	15	78	100	42	37507	32755
Kooltherm 15x100 - 54 mm	54	-	300	15	84	100	35	37508	32756
Kooltherm 15x100 - 60 mm	60	2	330	15	90	100	35	37509	32757

Kooltherm insulation - 20 mm

- Similar to Kooltherm insulation - 15 mm.
- Insulation thickness: 20 mm.

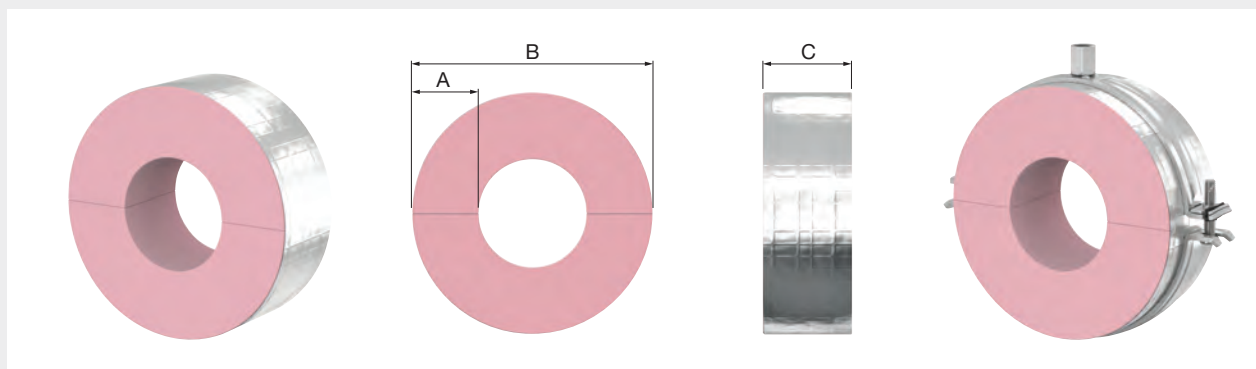



Type	Ø pipe		Max. working load [N]	Dimensions				Order Code Suitable Clip	Order Code Insulation
	Ext. dia. [mm]	Nom. ["]		A [mm]	B [mm]	C [mm]			
Kooltherm 20x100 - 15 mm	15	-	90	20	55	100	80	37502	32763
Kooltherm 20x100 - 17 mm	17	$\frac{3}{8}$	100	20	57	100	64	37503	33305
Kooltherm 20x100 - 20 mm	20	-	110	20	60	100	64	37503	33306
Kooltherm 20x100 - 22 mm	22	$\frac{1}{2}$	120	20	62	100	67	37503	32764
Kooltherm 20x100 - 25 mm	25	-	140	20	65	100	49	37504	33307
Kooltherm 20x100 - 28 mm	28	$\frac{3}{4}$	150	20	68	100	55	37505	32765
Kooltherm 20x100 - 32 mm	32	-	180	20	72	100	36	37506	33308
Kooltherm 20x100 - 35 mm	35	1	190	20	75	100	48	37506	32766
Kooltherm 20x100 - 40 mm	40	-	230	20	80	100	36	37507	33309
Kooltherm 20x100 - 42 mm	42	$1\frac{1}{4}$	230	20	82	100	40	37507	32767
Kooltherm 20x100 - 48 mm	48	$1\frac{1}{2}$	270	20	88	100	32	37508	32768
Kooltherm 20x100 - 50 mm	50	-	290	20	90	100	25	37509	33310
Kooltherm 20x100 - 54 mm	54	-	300	20	94	100	25	37509	32769
Kooltherm 20x100 - 60 mm	60	2	330	20	100	100	26	37510	32770
Kooltherm 20x100 - 63 mm	63	-	370	20	103	100	16	38683	33311
Kooltherm 20x100 - 66 mm	66	-	450	20	106	100	20	37511	32771
Kooltherm 20x100 - 76 mm	76	$2\frac{1}{2}$	620	20	116	100	22	37512	32772
Kooltherm 20x100 - 84 mm	84	-	690	20	124	100	16	37512	33312
Kooltherm 20x100 - 89 mm	89	3	730	20	129	100	14	37514	32773
Kooltherm 20x100 - 104 mm	104	3	850	20	144	100	9	37515	33313
Kooltherm 20x100 - 108 mm	108	-	900	20	148	100	12	37515	32774
Kooltherm 20x100 - 110 mm	110	-	900	20	150	100	9	37515	33314
Kooltherm 20x100 - 114 mm	114	4	940	20	154	100	12	37516	32775
Kooltherm 20x100 - 125 mm	125	-	1020	20	165	100	9	37517	33315
Kooltherm 20x100 - 129 mm	129	-	1050	20	169	100	4	37517	33316
Kooltherm 20x100 - 133 mm	133	-	1100	20	173	100	12	38751	32776
Kooltherm 20x100 - 140 mm	140	5	1150	20	180	100	12	37518	32777
Kooltherm 20x100 - 154 mm	154	-	1260	20	194	100	4	37519	33317
Kooltherm 20x100 - 159 mm	159	-	3000	20	199	100	9	37519	32778
Kooltherm 20x125 - 168 mm	168	6	3000	20	208	125	8	37520	32779
Kooltherm 20x125 - 200 mm	200	-	3000	20	240	125	4	37523	33318
Kooltherm 20x125 - 204 mm	204	-	3000	20	244	125	4	37523	33319
Kooltherm 20x125 - 219 mm	219	-	3000	20	259	125	1	37523	33320
Kooltherm 20x125 - 250 mm	250	-	3000	20	290	125	1	54230	33321
Kooltherm 20x125 - 254 mm	254	-	3000	20	294	125	1	37525	33322
Kooltherm 20x125 - 273 mm	273	10	3000	20	313	125	1	37525	33323
Kooltherm 20x125 - 304 mm	304	-	3000	20	344	125	1	37526	33324
Kooltherm 20x125 - 315 mm	315	-	3000	20	355	125	1	37526	33325
Kooltherm 20x125 - 323 mm	323	-	3000	20	323	125	1	37526	33326


Kooltherm insulation - 25 mm

Phenolic insulation blocks to combine with specified FlamcoFix clips. Use of insulation blocks will isolate the pipework from the pipe support and the surrounding environment. It will limit heat transfer from and to the pipework and prevent thermal bridging.

- Insulation thickness: 25 mm.
Faced with reinforced low vapour permeability aluminium foil.
- Insulation value: <0.031 W/(mk) up to 2", <0.036 W/(mk) up to 5", <0.045 W/(mk) up to 12".
- Density:
Kooltherm - 15 - 66 mm: 60 kg/m³
Kooltherm - 76 - 114 mm: 80 kg/m³
- Pressure resistance:
Kooltherm - 15 - 66 mm: 0,17 N/mm²
Kooltherm - 76 - 114 mm: 0,34 N/mm²
- Temperature resistance: from -50 °C to +110 °C.
- Fire rating: B/ BL - s1, d0.
- Over 90% closed cell structure.
- CE Marked in accordance with BS EN 14314.
- Performance, application method and factory production control assessed and certified by KIWA.
- BDA Agrément® BAP 15-036/01/C.
- Covered by LABC EWW382.
- Insulation FM approved (Class 4924).



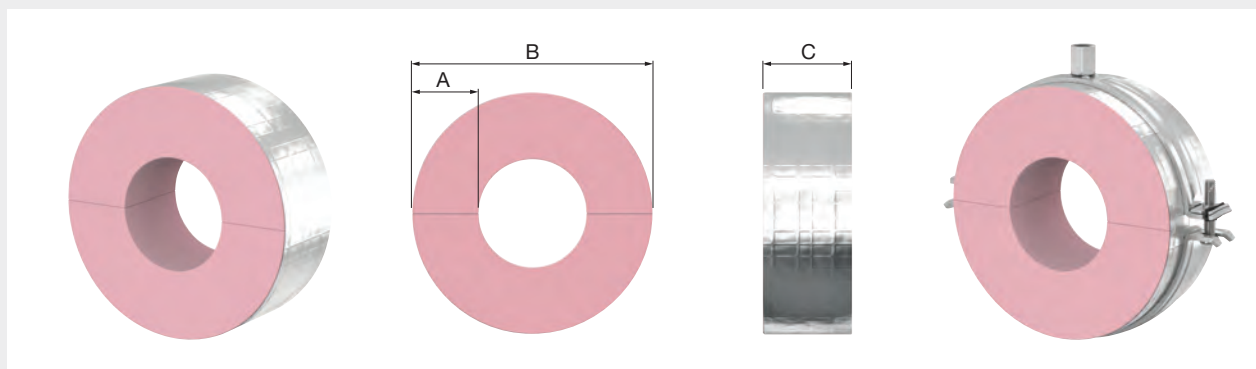
Type	Ø pipe		Max. working load [N]	Dimensions				Order Code Suitable Clip	Order Code Insulation
	Ext. dia. [mm]	Nom. [""]		A [mm]	B [mm]	C [mm]			
Kooltherm 25x100 - 15 mm	15	-	90	25	65	100	55	37504	32780
Kooltherm 25x100 - 17 mm	17	3/8	100	25	67	100	49	37504	33327
Kooltherm 25x100 - 20 mm	20	-	110	25	70	100	49	37505	33328
Kooltherm 25x100 - 22 mm	22	1/2	120	25	72	100	45	37506	32781
Kooltherm 25x100 - 25 mm	25	-	140	25	75	100	36	37506	33329
Kooltherm 25x100 - 28 mm	28	3/4	150	25	78	100	42	37507	32782
Kooltherm 25x100 - 32 mm	32	-	180	25	82	100	36	37507	33330
Kooltherm 25x100 - 35 mm	35	1	190	25	85	100	34	37508	32783
Kooltherm 25x100 - 40 mm	40	1	230	25	90	100	25	37509	33331
Kooltherm 25x100 - 42 mm	42	1 1/4	230	25	92	100	31	37509	32784
Kooltherm 25x100 - 48 mm	48	1 1/2	270	25	98	100	25	37510	32785
Kooltherm 25x100 - 50 mm	50	-	290	25	100	100	25	37510	33332
Kooltherm 25x100 - 54 mm	54	-	300	25	104	100	22	37511	32786
Kooltherm 25x100 - 60 mm	60	2	330	25	110	100	20	37511	32787
Kooltherm 25x100 - 63 mm	63	-	370	25	113	100	16	37511	33333
Kooltherm 25x100 - 66 mm	66	-	450	25	116	100	16	37512	32788
Kooltherm 25x100 - 76 mm	76	2 1/2	620	25	126	100	15	37513	32789
Kooltherm 25x100 - 84 mm	84	-	690	25	134	100	9	37514	33334
Kooltherm 25x100 - 89 mm	89	3	730	25	139	100	12	38283	32790
Kooltherm 25x100 - 104 mm	104	-	850	25	154	100	9	37516	33335
Kooltherm 25x100 - 108 mm	108	-	900	25	158	100	10	37516	32791
Kooltherm 25x100 - 110 mm	110	-	900	25	160	100	9	37516	33336


Type	Ø pipe		Max. working load [N]	Dimensions				Order Code Suitable Clip	Order Code Insulation
	Ext. dia. [mm]	Nom. ["]		A [mm]	B [mm]	C [mm]			
Kooltherm 25x100 - 125 mm	125	-	1020	25	175	100	4	38751	33337
Kooltherm 25x100 - 129 mm	129	-	1050	25	179	100	4	38751	33338
Kooltherm 25x100 - 133 mm	133	-	1100	25	183	100	10	37518	32793
Kooltherm 25x100 - 140 mm	140	5	1150	25	190	100	10	37518	32794
Kooltherm 25x100 - 154 mm	154	-	1260	25	204	100	4	37520	33339
Kooltherm 25x100 - 159 mm	159	-	1300	25	209	100	7	37520	32795
Kooltherm 25x125 - 168 mm	168	6	3000	25	218	125	7	37521	32796
Kooltherm 25x125 - 200 mm	200	-	3000	25	250	125	4	37523	33340
Kooltherm 25x125 - 204 mm	204	-	3000	25	254	125	1	37523	33341
Kooltherm 25x125 - 219 mm	219	8	3000	25	269	125	1	37524	33342
Kooltherm 25x125 - 250 mm	250	-	3000	25	300	125	1	37525	33343
Kooltherm 25x125 - 254 mm	254	-	3000	25	304	125	1	37525	33344
Kooltherm 25x125 - 273 mm	273	10	3000	25	323	125	1	37525	33345
Kooltherm 25x125 - 304 mm	304	-	3000	25	354	125	1	37526	33346
Kooltherm 25x125 - 315 mm	315	-	3000	25	365	125	1	37526	33347
Kooltherm 25x125 - 323 mm	323	12	3000	25	373	125	1	37526	33348


Kooltherm insulation - 30 mm

Phenolic insulation blocks to combine with specified FlamcoFix clips. Use of insulation blocks will isolate the pipework from the pipe support and the surrounding environment. It will limit heat transfer from and to the pipework and prevent thermal bridging.

- Insulation thickness: 30 mm.
Faced with reinforced low vapour permeability aluminium foil.
- Insulation value: <0.031 W/(mk) up to 2", <0.036 W/(mk) up to 5", <0.045 W/(mk) up to 12".
- Density:
Kooltherm - 15 - 66 mm: 60 kg/m³
Kooltherm - 76 - 114 mm: 80 kg/m³
- Pressure resistance:
Kooltherm - 15 - 66 mm: 0,17 N/mm²
Kooltherm - 76 - 114 mm: 0,34 N/mm²
- Temperature resistance: from -50 °C to +110 °C.
- Fire rating: B/ BL - s1, d0.
- Over 90% closed cell structure.
- CE Marked in accordance with BS EN 14314.
- Performance, application method and factory production control assessed and certified by KIWA.
- BDA Agrément® BAP 15-036/01/C.
- Covered by LABC EWW382.
- Insulation FM approved (Class 4924).



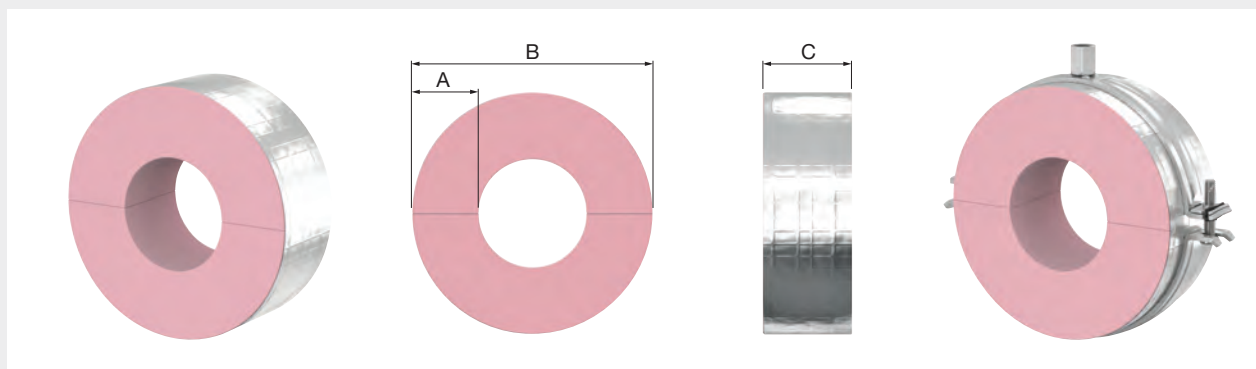
Type	Ø pipe		Max. working load [N]	Dimensions				Order Code Suitable Clip	Order Code Insulation
	Ext. dia. [mm]	Nom. [""]		A [mm]	B [mm]	C [mm]			
Kooltherm 30x100 - 15 mm	15	-	90	30	75	100	42	37506	32797
Kooltherm 30x100 - 17 mm	17	3/8	100	30	77	100	36	37506	33349
Kooltherm 30x100 - 20 mm	20	-	110	30	80	100	36	37507	33350
Kooltherm 30x100 - 22 mm	22	1/2	120	30	82	100	36	37507	32798
Kooltherm 30x100 - 25 mm	25	-	140	30	85	100	25	37508	33351
Kooltherm 30x100 - 28 mm	28	3/4	150	30	88	100	30	37508	32799
Kooltherm 30x100 - 32 mm	32	-	180	30	92	100	25	37509	33352
Kooltherm 30x100 - 35 mm	35	1	190	30	95	100	27	37509	32800
Kooltherm 30x100 - 40 mm	40	-	230	30	100	100	25	37510	33353
Kooltherm 30x100 - 42 mm	42	1 1/4	230	30	102	100	24	37510	32801
Kooltherm 30x100 - 48 mm	48	1 1/2	270	30	108	100	22	37511	32802
Kooltherm 30x100 - 50 mm	50	-	290	30	110	100	16	37511	33354
Kooltherm 30x100 - 54 mm	54	-	300	30	114	100	18	37512	32803
Kooltherm 30x100 - 60 mm	60	2	330	30	120	100	16	37512	32804
Kooltherm 30x100 - 63 mm	63	-	370	30	123	100	16	37512	33355
Kooltherm 30x100 - 66 mm	66	-	450	30	126	100	14	37513	32805
Kooltherm 30x100 - 76 mm	76	2 1/2	620	30	136	100	12	37514	32806
Kooltherm 30x100 - 84 mm	84	-	690	30	144	100	9	37515	33356
Kooltherm 30x100 - 89 mm	89	3	730	30	149	100	10	37515	32807
Kooltherm 30x100 - 104 mm	104	-	850	30	164	100	9	37517	33357
Kooltherm 30x100 - 108 mm	108	-	900	30	168	100	9	37517	32808
Kooltherm 30x100 - 110 mm	110	-	900	30	170	100	4	37517	33358


Type	Ø pipe		Max. working load [N]	Dimensions				Order Code Suitable Clip	Order Code Insulation
	Ext. dia. [mm]	Nom. ["]		A [mm]	B [mm]	C [mm]			
Kooltherm 30x100 - 114 mm	114	4	940	30	174	100	10	38751	32809
Kooltherm 30x100 - 125 mm	125	-	1020	30	185	100	4	37518	33359
Kooltherm 30x100 - 129 mm	129	-	1050	30	189	100	4	37518	33360
Kooltherm 30x100 - 133 mm	133	-	1100	30	193	100	7	37519	32810
Kooltherm 30x100 - 140 mm	140	5	1150	30	200	100	7	37519	32811
Kooltherm 30x100 - 154 mm	154	-	1260	30	214	100	4	37520	33361
Kooltherm 30x100 - 159 mm	159	-	3000	30	219	100	6	37521	32812
Kooltherm 30x125 - 168 mm	168	6	3000	30	228	125	6	37521	32813
Kooltherm 30x125 - 200 mm	200	6	3000	30	260	125	1	37524	33362
Kooltherm 30x125 - 204 mm	204	-	3000	30	264	125	1	37524	33363
Kooltherm 30x125 - 219 mm	219	8	3000	30	279	125	1	37524	33364
Kooltherm 30x125 - 250 mm	250	-	3000	30	310	125	1	37525	33365
Kooltherm 30x125 - 254 mm	254	-	3000	30	314	125	1	37525	33366
Kooltherm 30x125 - 273 mm	273	10	3000	30	333	125	1	54232	33367
Kooltherm 30x125 - 304 mm	304	-	3000	30	364	125	1	37526	33368
Kooltherm 30x200 - 315 mm	315	-	3000	30	375	200	1	37526	33369
Kooltherm 30x200 - 323 mm	323	12	9000	30	383	200	1	54235	33370


Kooltherm insulation - 35 mm

Phenolic insulation blocks to combine with specified FlamcoFix clips. Use of insulation blocks will isolate the pipework from the pipe support and the surrounding environment. It will limit heat transfer from and to the pipework and prevent thermal bridging.

- Insulation thickness: 35 mm.
Faced with reinforced low vapour permeability aluminium foil.
- Insulation value: <0.031 W/(mk) up to 2", <0.036 W/(mk) up to 5", <0.045 W/(mk) up to 12".
- Density:
Kooltherm - 15 - 66 mm: 60 kg/m³
Kooltherm - 76 - 114 mm: 80 kg/m³
- Pressure resistance:
Kooltherm - 15 - 66 mm: 0,17 N/mm²
Kooltherm - 76 - 114 mm: 0,34 N/mm²
- Temperature resistance: from -50 °C to +110 °C.
- Fire rating: B/ BL - s1, d0.
- Over 90% closed cell structure.
- CE Marked in accordance with BS EN 14314.
- Performance, application method and factory production control assessed and certified by KIWA.
- BDA Agrément® BAP 15-036/01/C.
- Covered by LABC EWW382.
- Insulation FM approved (Class 4924).



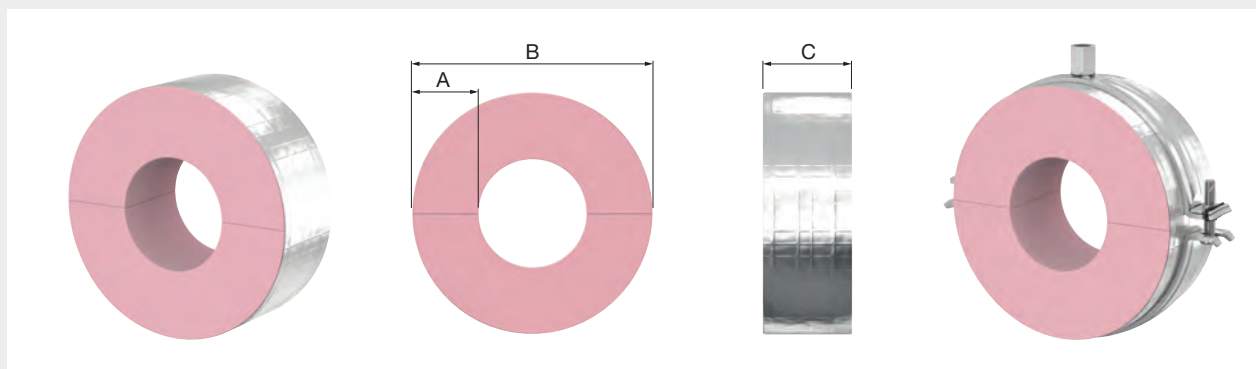
Type	Ø pipe		Max. working load [N]	Dimensions				Order Code Suitable Clip	Order Code Insulation
	Ext. dia. [mm]	Nom. [""]		A [mm]	B [mm]	C [mm]			
Kooltherm 35x100 - 15 mm	15	-	90	35	85	100	25	37508	33371
Kooltherm 35x100 - 17 mm	17	3/8	100	35	87	100	25	37508	33372
Kooltherm 35x100 - 20 mm	20	-	110	35	90	100	25	37509	33373
Kooltherm 35x100 - 22 mm	22	1/2	120	35	92	100	25	37509	33374
Kooltherm 35x100 - 25 mm	25	-	140	35	95	100	25	37509	33375
Kooltherm 35x100 - 28 mm	28	3/4	150	35	98	100	25	37510	33376
Kooltherm 35x100 - 32 mm	32	-	180	35	102	100	16	37510	33377
Kooltherm 35x100 - 35 mm	35	1	190	35	105	100	16	37511	33378
Kooltherm 35x100 - 40 mm	40	-	230	35	110	100	16	37511	33379
Kooltherm 35x100 - 42 mm	42	1 1/4	230	35	112	100	16	37511	33380
Kooltherm 35x100 - 48 mm	48	1 1/2	270	35	118	100	16	37512	33381
Kooltherm 35x100 - 50 mm	50	-	290	35	120	100	16	37512	33382
Kooltherm 35x100 - 54 mm	54	-	300	35	124	100	16	37512	33383
Kooltherm 35x100 - 60 mm	60	2	330	35	130	100	9	37514	33384
Kooltherm 35x100 - 63 mm	63	-	370	35	133	100	9	37514	33385
Kooltherm 35x100 - 66 mm	66	-	450	35	136	100	9	37514	33386
Kooltherm 35x100 - 76 mm	76	2 1/2	620	35	146	100	9	37515	33387
Kooltherm 35x100 - 84 mm	84	-	690	35	154	100	9	37516	33388
Kooltherm 35x100 - 89 mm	89	3	730	35	159	100	9	37516	33389
Kooltherm 35x100 - 104 mm	104	-	850	35	174	100	4	38751	33390
Kooltherm 35x100 - 108 mm	108	-	900	35	178	100	4	38751	33391
Kooltherm 35x100 - 110 mm	110	-	900	35	180	100	4	37518	33392


Type	Ø pipe		Max. working load [N]	Dimensions				Order Code Suitable Clip	Order Code Insulation
	Ext. dia. [mm]	Nom. ["]		A [mm]	B [mm]	C [mm]			
Kooltherm 35x100 - 114 mm	114	4	940	35	184	100	4	37518	33393
Kooltherm 35x100 - 125 mm	125	-	1020	35	195	100	4	37519	33394
Kooltherm 35x100 - 129 mm	129	-	1050	35	199	100	4	37519	33395
Kooltherm 35x100 - 133 mm	133	-	1100	35	203	100	4	37520	33396
Kooltherm 35x100 - 140 mm	140	5	1150	35	210	100	4	37520	33397
Kooltherm 35x100 - 154 mm	154	-	1260	35	224	100	4	37521	33398
Kooltherm 35x100 - 159 mm	159	-	1300	35	229	100	4	37521	33399
Kooltherm 35x125 - 168 mm	168	6	3000	35	238	125	4	37523	33400
Kooltherm 35x125 - 200 mm	200	-	3000	35	270	125	1	37524	33401
Kooltherm 35x125 - 204 mm	204	-	3000	35	274	125	1	37524	33402
Kooltherm 35x125 - 219 mm	219	8	3000	35	289	125	1	54230	33403
Kooltherm 35x125 - 250 mm	250	-	3000	35	320	125	1	37525	33404
Kooltherm 35x125 - 254 mm	254	-	3000	35	324	125	1	37525	33405
Kooltherm 35x125 - 273 mm	273	10	3000	35	343	125	1	37526	33406
Kooltherm 35x125 - 304 mm	304	-	3000	35	374	125	1	37526	33407
Kooltherm 35x200 - 315 mm	315	-	7680	35	385	200	1	54235	33408
Kooltherm 35x200 - 323 mm	323	-	9000	35	393	200	1	54236	33409


Kooltherm insulation - 40 mm

Phenolic insulation blocks to combine with specified FlamcoFix clips. Use of insulation blocks will isolate the pipework from the pipe support and the surrounding environment. It will limit heat transfer from and to the pipework and prevent thermal bridging.

- Insulation thickness: 40 mm.
Faced with reinforced low vapour permeability aluminium foil.
- Insulation value: <0.031 W/(mk) up to 2", <0.036 W/(mk) up to 5", <0.045 W/(mk) up to 12".
- Density:
Kooltherm - 15 - 66 mm: 60 kg/m³
Kooltherm - 76 - 114 mm: 80 kg/m³
- Pressure resistance:
Kooltherm - 15 - 66 mm: 0,17 N/mm²
Kooltherm - 76 - 114 mm: 0,34 N/mm²
- Temperature resistance: from -50 °C to +110 °C.
- Fire rating: B/ BL - s1, d0.
- Over 90% closed cell structure.
- CE Marked in accordance with BS EN 14314.
- Performance, application method and factory production control assessed and certified by KIWA.
- BDA Agrément® BAP 15-036/01/C.
- Covered by LABC EWW382.
- Insulation FM approved (Class 4924).



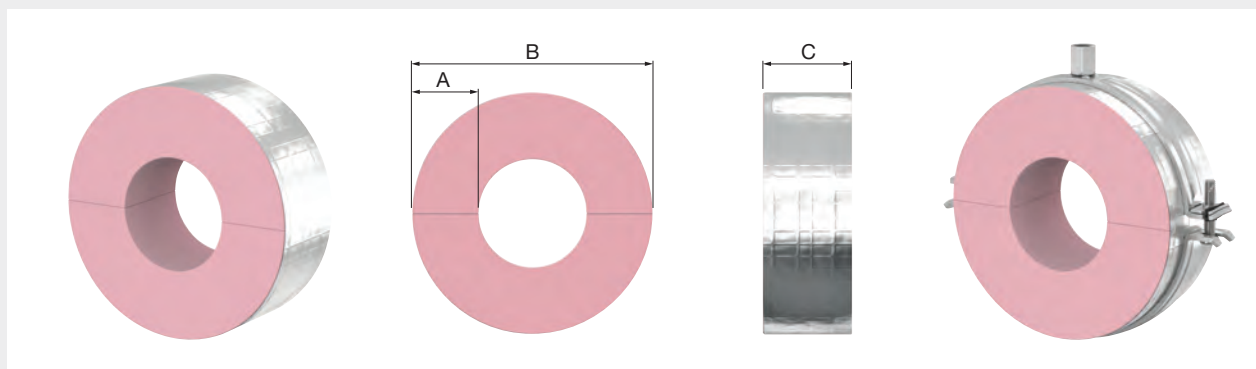
Type	Ø pipe		Max. working load [N]	Dimensions				Order Code Suitable Clip	Order Code Insulation
	Ext. dia. [mm]	Nom. [""]		A [mm]	B [mm]	C [mm]			
Kooltherm 40x100 - 15 mm	15	-	90	40	95	100	25	37509	32814
Kooltherm 40x100 - 17 mm	17	3/8	100	40	97	100	25	37510	33410
Kooltherm 40x100 - 20 mm	20	-	110	40	100	100	25	37510	33411
Kooltherm 40x100 - 22 mm	22	1/2	120	40	102	100	20	37510	32815
Kooltherm 40x100 - 25 mm	25	-	140	40	105	100	16	37511	33412
Kooltherm 40x100 - 28 mm	28	3/4	150	40	108	100	20	37511	32816
Kooltherm 40x100 - 32 mm	32	-	180	40	112	100	16	37511	33413
Kooltherm 40x100 - 35 mm	35	1	190	40	115	100	20	37512	32817
Kooltherm 40x100 - 40 mm	40	-	230	40	120	100	16	37512	33414
Kooltherm 40x100 - 42 mm	42	1 1/4	230	40	122	100	16	37512	32818
Kooltherm 40x100 - 48 mm	48	1 1/2	270	40	128	100	14	37513	32819
Kooltherm 40x100 - 50 mm	50	-	290	40	130	100	9	37514	33415
Kooltherm 40x100 - 54 mm	54	-	300	40	134	100	13	37514	32820
Kooltherm 40x100 - 60 mm	60	2	330	40	140	100	10	37515	32821
Kooltherm 40x100 - 63 mm	63	-	370	40	143	100	9	37515	33416
Kooltherm 40x100 - 66 mm	66	-	450	40	146	100	10	37515	32822
Kooltherm 40x100 - 76 mm	76	2 1/2	620	40	156	100	10	37516	32823
Kooltherm 40x100 - 84 mm	84	-	690	40	164	100	9	37517	33417
Kooltherm 40x100 - 89 mm	89	3	730	40	169	100	7	37517	32824
Kooltherm 40x100 - 104 mm	104	-	850	40	184	100	4	37518	33418
Kooltherm 40x100 - 108 mm	108	-	900	40	188	100	8	37518	32825
Kooltherm 40x100 - 110 mm	110	-	900	40	190	100	4	37518	33419


Type	Ø pipe		Max. working load [N]	Dimensions				Order Code Suitable Clip	Order Code Insulation
	Ext. dia. [mm]	Nom. ["]		A [mm]	B [mm]	C [mm]			
Kooltherm 40x100 - 114 mm	114	4	940	40	194	100	8	37519	32826
Kooltherm 40x100 - 125 mm	125	-	1020	40	205	100	4	37520	33420
Kooltherm 40x100 - 129 mm	129	-	1050	40	209	100	4	37520	33421
Kooltherm 40x100 - 133 mm	133	-	1100	40	213	100	6	37520	32827
Kooltherm 40x100 - 140 mm	140	5	1150	40	220	100	6	37521	32828
Kooltherm 40x100 - 154 mm	154	-	1260	40	234	100	4	37523	33422
Kooltherm 40x100 - 159 mm	159	-	3000	40	239	100	4	37523	32829
Kooltherm 40x125 - 168 mm	168	6	3000	40	248	125	4	37523	32830
Kooltherm 40x125 - 200 mm	200	-	3000	40	280	125	1	37524	33423
Kooltherm 40x125 - 204 mm	204	-	3000	40	284	125	1	37524	33424
Kooltherm 40x125 - 219 mm	219	8	3000	40	299	125	1	37525	33425
Kooltherm 40x125 - 250 mm	250	-	3000	40	330	125	1	54232	33426
Kooltherm 40x125 - 254 mm	254	-	3000	40	334	125	1	54232	33427
Kooltherm 40x125 - 273 mm	273	10	3000	40	353	125	1	37526	33428
Kooltherm 40x125 - 304 mm	304	-	7410	40	384	125	1	54235	33429
Kooltherm 40x200 - 315 mm	315	-	7680	40	395	200	1	54236	33430
Kooltherm 40x200 - 323 mm	323	12	9000	40	403	200	1	54236	33431

Kooltherm insulation - 45 mm

Phenolic insulation blocks to combine with specified FlamcoFix clips. Use of insulation blocks will isolate the pipework from the pipe support and the surrounding environment. It will limit heat transfer from and to the pipework and prevent thermal bridging.

- Insulation thickness: 45 mm.
Faced with reinforced low vapour permeability aluminium foil.
- Insulation value: <0.031 W/(mk) up to 2", <0.036 W/(mk) up to 5", <0.045 W/(mk) up to 12".
- Density:
Kooltherm - 15 - 66 mm: 60 kg/m³
Kooltherm - 76 - 114 mm: 80 kg/m³
- Pressure resistance:
Kooltherm - 15 - 66 mm: 0,17 N/mm²
Kooltherm - 76 - 114 mm: 0,34 N/mm²
- Temperature resistance: from -50 °C to +110 °C.
- Fire rating: B/ BL - s1, d0.
- Over 90% closed cell structure.
- CE Marked in accordance with BS EN 14314.
- Performance, application method and factory production control assessed and certified by KIWA.
- BDA Agrément® BAP 15-036/01/C.
- Covered by LABC EWW382.
- Insulation FM approved (Class 4924).

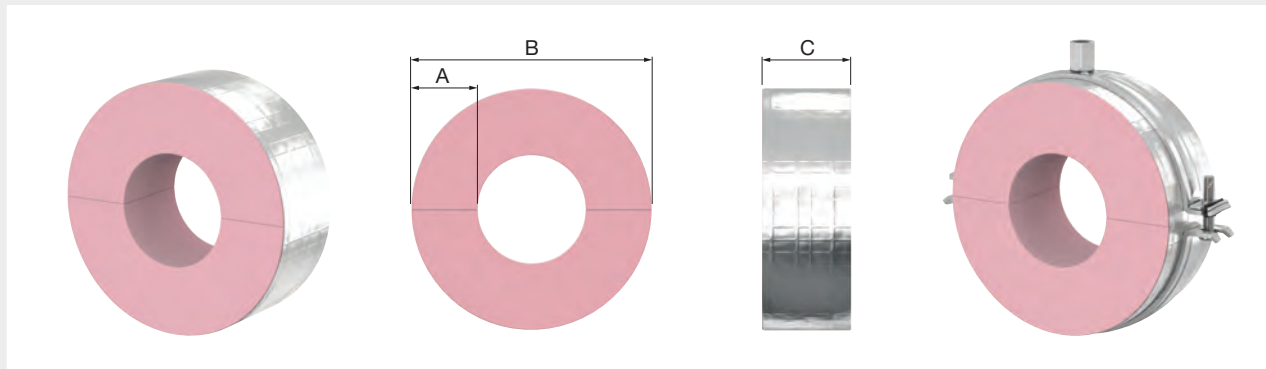



Type	Ø pipe		Max. working load [N]	Dimensions				Order Code Suitable Clip	Order Code Insulation
	Ext. dia. [mm]	Nom. [""]		A [mm]	B [mm]	C [mm]			
Kooltherm 45x100 - 15 mm	15	-	90	45	105	100	16	37511	33432
Kooltherm 45x100 - 22 mm	22	1/2	120	45	112	100	16	37511	33433
Kooltherm 45x100 - 28 mm	28	3/4	150	45	118	100	16	37512	33434
Kooltherm 45x100 - 35 mm	35	1	190	45	125	100	16	37512	33435
Kooltherm 45x100 - 42 mm	42	1 1/4	230	45	132	100	9	37514	33436
Kooltherm 45x100 - 48 mm	48	1 1/2	270	45	138	100	9	38283	33437
Kooltherm 45x100 - 54 mm	54	-	300	45	144	100	9	37515	33438
Kooltherm 45x100 - 60 mm	60	2	330	45	150	100	9	37515	33439
Kooltherm 45x100 - 66 mm	66	-	450	45	156	100	9	37516	33440
Kooltherm 45x100 - 76 mm	76	2 1/2	620	45	166	100	9	37517	33441
Kooltherm 45x100 - 89 mm	89	3	730	45	179	100	4	38751	33442
Kooltherm 45x100 - 108 mm	108	-	900	45	198	100	4	37519	33443
Kooltherm 45x100 - 114 mm	114	4	940	45	204	100	4	37520	33444
Kooltherm 45x100 - 133 mm	133	-	1100	45	223	100	4	37521	33445
Kooltherm 45x100 - 140 mm	140	5	1150	45	230	100	4	37521	33446
Kooltherm 45x100 - 159 mm	159	-	1300	45	249	100	4	37523	33447
Kooltherm 45x125 - 168 mm	168	6	3000	45	258	125	1	37523	33448
Kooltherm 45x125 - 219 mm	219	8	3000	45	309	125	1	37525	33449
Kooltherm 45x125 - 273 mm	273	10	3000	45	363	125	1	37526	33450
Kooltherm 45x200 - 323 mm	323	12	9000	45	413	200	1		33451


Kooltherm insulation - 50 mm

Phenolic insulation blocks to combine with specified FlamcoFix clips. Use of insulation blocks will isolate the pipework from the pipe support and the surrounding environment. It will limit heat transfer from and to the pipework and prevent thermal bridging.

- Insulation thickness: 50 mm.
Faced with reinforced low vapour permeability aluminium foil.
- Insulation value: <0.031 W/(mk) up to 2", <0.036 W/(mk) up to 5", <0.045 W/(mk) up to 12".
- Density:
Kooltherm - 15 - 66 mm: 60 kg/m³
Kooltherm - 76 - 114 mm: 80 kg/m³
- Pressure resistance:
Kooltherm - 15 - 66 mm: 0,17 N/mm²
Kooltherm - 76 - 114 mm: 0,34 N/mm²
- Temperature resistance: from -50 °C to +110 °C.
- Fire rating: B/ BL - s1, d0.
- Over 90% closed cell structure.
- CE Marked in accordance with BS EN 14314.
- Performance, application method and factory production control assessed and certified by KIWA.
- BDA Agrément® BAP 15-036/01/C.
- Covered by LABC EWW382.
- Insulation FM approved (Class 4924).



Type	Ø pipe		Max. working load [N]	Dimensions				Order Code Suitable Clip	Order Code Insulation
	Ext. dia. [mm]	Nom. ["]		A [mm]	B [mm]	C [mm]			
Kooltherm 50x100 - 15 mm	15	-	90	15	115	100	1	37512	32831
Kooltherm 50x100 - 17 mm	17	3/8	100	50	117	100	16	37512	33452
Kooltherm 50x100 - 20 mm	20	-	110	50	120	100	16	37512	33453
Kooltherm 50x100 - 22 mm	22	1/2	120	50	122	100	1	37512	32832
Kooltherm 50x100 - 25 mm	25	-	140	50	125	100	16	37512	33454
Kooltherm 50x100 - 28 mm	28	3/4	150	50	128	100	1	37513	32833
Kooltherm 50x100 - 32 mm	32	-	180	50	132	100	9	37514	33455
Kooltherm 50x100 - 35 mm	35	1	190	50	135	100	1	37514	32834
Kooltherm 50x100 - 40 mm	40	-	230	50	140	100	9	37515	33456
Kooltherm 50x100 - 42 mm	42	1 1/4	230	50	142	100	1	37515	32835
Kooltherm 50x100 - 48 mm	48	1 1/2	270	50	148	100	1	37515	32836
Kooltherm 50x100 - 50 mm	50	-	290	50	150	100	9	37515	33457
Kooltherm 50x100 - 54 mm	54	-	300	50	154	100	1	37516	32837
Kooltherm 50x100 - 60 mm	60	2	330	50	160	100	1	37516	32838
Kooltherm 50x100 - 63 mm	63	-	370	50	163	100	9	37516	33458
Kooltherm 50x100 - 66 mm	66	-	450	50	166	100	1	37517	32839
Kooltherm 50x100 - 76 mm	76	2 1/2	620	50	176	100	1	38751	32840
Kooltherm 50x100 - 84 mm	84	-	690	50	184	100	4	37518	33459
Kooltherm 50x100 - 89 mm	89	3	730	50	189	100	1	37518	32841
Kooltherm 50x100 - 104 mm	104	-	850	50	204	100	4	37520	33460
Kooltherm 50x100 - 108 mm	108	-	900	50	208	100	1	37520	32842
Kooltherm 50x100 - 110 mm	110	-	900	50	210	100	4	37520	33461

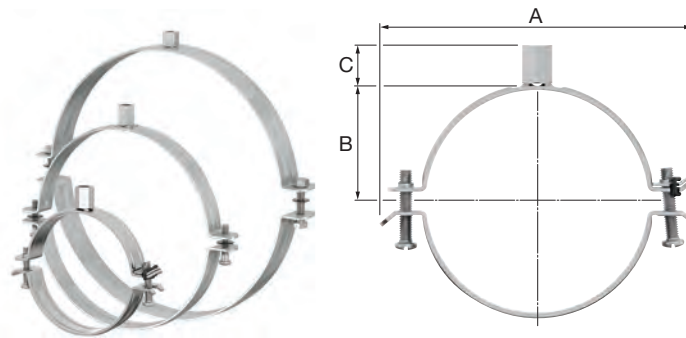
Type	Ø pipe		Max. working load [N]	Dimensions				Order Code Suitable Clip	Order Code Insulation
	Ext. dia. [mm]	Nom. ["]		A [mm]	B [mm]	C [mm]			
Kooltherm 50x100 - 114 mm	114	4	940	50	214	100	1	37520	32843
Kooltherm 50x100 - 125 mm	125	-	1020	50	225	100	4	37521	33462
Kooltherm 50x100 - 129 mm	129	-	1050	50	229	100	4	37521	33463
Kooltherm 50x100 - 133 mm	133	-	1100	50	233	100	1	37523	32844
Kooltherm 50x100 - 140 mm	140	5	1150	50	240	100	1	37523	32845
Kooltherm 50x100 - 154 mm	154	-	1260	50	254	100	1	37523	33464
Kooltherm 50x100 - 159 mm	159	-	3000	50	259	100	1	37523	32846
Kooltherm 50x125 - 168 mm	168	6	3000	50	268	125	1	37524	32847
Kooltherm 50x125 - 200 mm	200	-	3000	50	300	125	1	37525	33465
Kooltherm 50x125 - 204 mm	204	-	3000	50	304	125	1	37525	33466
Kooltherm 50x125 - 219 mm	219	8	3000	50	319	125	1	37525	33467
Kooltherm 50x125 - 250 mm	250	-	3000	50	350	125	1	37526	33468
Kooltherm 50x125 - 254 mm	254	-	3000	50	354	125	1	37526	33469
Kooltherm 50x125 - 273 mm	273	10	3000	50	373	125	1	37526	33470
Kooltherm 50x125 - 304 mm	304	-	7410	50	404	125	1	54236	33471
Kooltherm 50x200 - 315 mm	315	-	7680	50	415	200	1		33472
Kooltherm 50x200 - 323 mm	323	12	9000	50	423	200	1		33473


CK CLIPS

CK Clips

For mounting insulated pipework to wall and ceiling.

- Electrolytically zinc plated.
- Connection CK 0 - 18: M 8/10.
- Connection CK 19 - 26: M 10/12.
- CK 0 - 15: Suited with a quick-locking system and special retaining Phillips head screws.
- CK 16 - 18: Fitted with retaining rings to prevent loss of the Phillips head screws.
- CK 19 - 26: Fitted with hex nuts and bolts for high loads.



Type	Ø clip int. dia. [mm]	Strip dimensions [mm]	Max. working load [N]	Dimensions				Order Code
				A [mm]	B [mm]	C [mm]		
CK 0	35 - 38	20 x 1.5	1000	73	20	15	50	37522
CK 1	41 - 44	20 x 1.5	1000	81	22	15	50	37500
CK 2	46 - 48	20 x 1.5	1000	85	24	15	50	37501
CK 3	50 - 53	20 x 1.5	1000	90	26.5	15	50	37502
CK 4	58 - 61	20 x 1.5	1000	98	30.5	15	50	37503
CK 5	64 - 67	20 x 1.5	1000	104	33.5	15	50	37504
CK 6	67 - 70	20 x 1.5	1000	107	35	15	50	37505
CK 7	73 - 76	20 x 2.0	1300	115	38	15	50	37506
CK 8	80 - 83	20 x 2.0	1300	122	41.5	15	50	37507
CK 9	84 - 89	20 x 2.0	1300	128	44.5	15	50	37508
CK 10	90 - 95	20 x 2.0	1300	134	47.5	15	50	37509
CK 11	96 - 101	20 x 2.0	1300	140	50.5	15	50	37510
CK 12	109 - 115	20 x 2.5	1300	155	57.5	15	50	37511
CK 13	118 - 125	20 x 2.5	1300	165	62.5	15	25	37512
CK 14	121 - 127	20 x 2.5	1300	167	63.5	15	25	37513
CK 15	131 - 136	20 x 2.5	1300	177	68	15	25	37514
CK 16	142 - 150	20 x 2.5	2150	192	75	15	25	37515
CK 17	158 - 163	20 x 2.5	2150	205	81.5	15	25	37516
CK 18	164 - 169	20 x 2.5	2150	211	84.5	15	25	37517
CK 19	183 - 189	20 x 2.5	3000	245	94.5	18	25	37518
CK 20	194 - 202	20 x 2.5	3000	263	101	18	25	37519
CK 21	204 - 211	20 x 2.5	3000	270	105.5	18	25	37520
CK 22	222 - 229	20 x 2.5	3000	288	114.5	18	25	37521
CK 23	235 - 260	40 x 2.5	3000	319	132.5	18	10	37523
CK 24	260 - 285	40 x 2.5	3000	344	145	18	10	37524
CK 25	295 - 325	40 x 2.5	3000	384	165	18	10	37525
CK 26	339 - 375	40 x 2.5	3000	434	190	18	10	37526

FOR STEEL PIPES


BM wall clips are designed for mounting threaded pipes, sprinkler pipes and thin-walled steel pipes to the wall and are made up of three parts, namely the one-piece clip, the sleeve, and a nut. The sleeve has three characteristics. The leading edge is flared to permit easy location. The trailing edge is domed and acts as a travel stop for the nut. Finally, its overall conical shape ensure secure fixture. Thanks to these technical features, BM clips are very easy to mount correctly.

- One-piece clip with fixing materials.
- The fixing is covered by the clip so that it is not visible.
- Rigid fastening.
- Conical sleeve with locating edge for firm clamping.
- BM wall clips are compatible with pipe sizes as per DIN 2448.
- Safety margin for minimum breaking load (V) = 3.
- Clip: Sendzimir galvanized.
- Sleeve, nut and wood screw: electrolytically zinc plated.

BM-HK Wall Clips

- Execution HK: **with short wood screw and plastic plug.**
- Plug sizes:
BM 8 Ø 10 x 50
BM 10 Ø 12 x 60
- Wood screws:
HO 8 x 80
HO 10 x 90



Type	Ø Pipe		Connection	Max. working load [N]	Strip dimensions [mm]	Torx		Order Code
	Nom. ["]	Ext. dia. [mm]						
BM-HK M 8 x 12	-	12	M 8	1300	10 x 1.2	6	10	36110
BM-HK M 8 x 15	-	15	M 8	1300	10 x 1.2	6	10	36112
BM-HK M 8 x 1/2 - 22	1/2	22	M 8	1300	10 x 1.2	6	10	36102
BM-HK M 8 x 28	-	28	M 8	1300	10 x 1.2	6	10	36118
BM-HK M 8 x 35	-	35	M 8	1300	10 x 1.2	6	10	36120
BM-HK M 10 x 1 1/4 - 42	1 1/4	42	M 10	2000	12 x 1.5	8	10	36205
BM-HK M 8 x 30	-	31.8	M 8	1300	10 x 1.2	6	10	36131

FOR COPPER PIPES


BMK wall clips are designed for mounting copper pipes to the wall and are made up of three parts, namely the one-piece clip, the sleeve, and a nut. The sleeve has three characteristics. The leading edge is flared to permit easy location. The trailing edge is domed and acts as a travel stop for the nut. Finally, its overall conical shape ensure secure fixture. Thanks to these technical features, BM clips are very easy to mount correctly.

- One-piece clip with fixing materials.
- The fixing is covered by the clip so that it is not visible.
- Rigid fastening.
- Conical sleeve with locating edge for firm clamping.
- BM wall clips are compatible with pipe sizes as per EN 1057.
- Safety margin for minimum breaking load (V) = 3.
- Clip: Copper.
- Sleeve, nut and wood screw: Electrolytically zinc plated.

BMK-HK Wall Clips

- **With short wood screw and plastic plug.**
- Plug sizes:
BMK 8: Ø 10 x 50
BMK 10: Ø 12 x 60
- Wood screws:
BMK 8: HO 8 x 80
BMK 10: HO 10 x 90



Type	Ø Pipe ext. dia. [mm]	Connection	Max. working load [N]	Strip dimensions [mm]	Torx		Order Code
BMK-HK M 8 x 12 *	12	M 8	1000	10 x 1.2	6	10	38110
BMK-HK M 8 x 15 *	15	M 8	1000	10 x 1.2	6	10	38112
BMK-HK M 8 x 18 *	18	M 8	1000	10 x 1.2	6	10	38114
BMK-HK M 8 x 22 *	22	M 8	1000	10 x 1.2	6	10	38116
BMK-HK M 8 x 28 *	28	M 8	1000	10 x 1.2	6	10	38118
BMK-HK M 8 x 35 *	35	M 8	1000	10 x 1.2	6	10	38120

* KIWA certified certificate BRL-K-627/02 for use with potable water.

kiwa

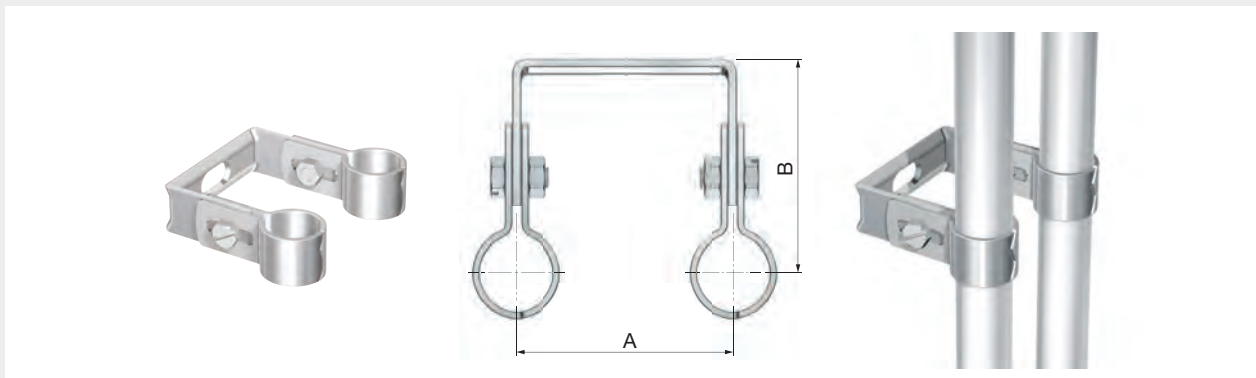
FOR DOUBLE STEEL PIPES


DP clips are designed for mounting steel pipes and thin walled steel pipes to the wall. The double pipe clips are especially designed for mounting return and supply pipework side by side.

- Compatible with pipe sizes as per DIN 2448 and DIN EN 1057.
- Provided with a reinforced backplate with a slot of 18 x 8 mm.
- Depth adjustable and easy adjustment with spanner or screwdriver.

DP Double Pipe Clips

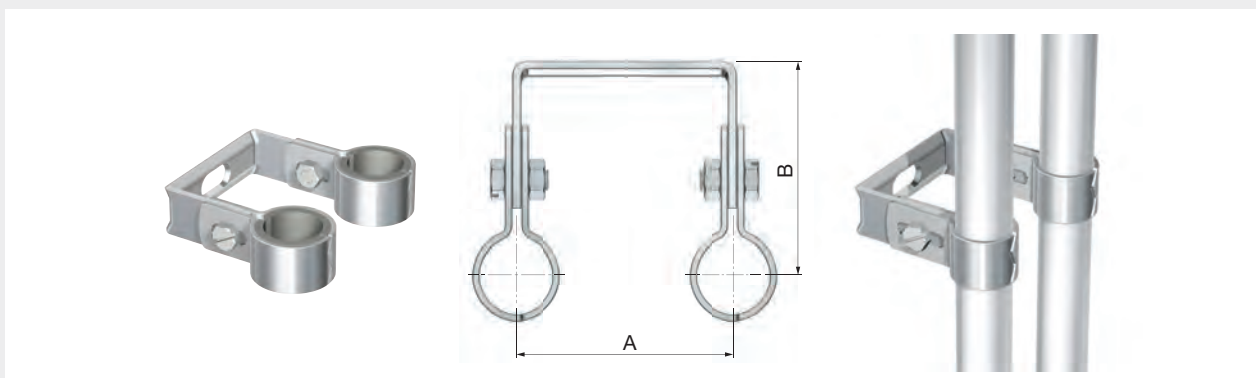
- Without neoprene lining.




Type	Ø Pipe			Dimensions			Order Code
	Ext. dia. [mm]	Nom. ["]	Thin-W. Steel Pipe Ø ext. [mm]	A [mm]	B [mm]		
DP 15 - 60 / 66 - 49	16	-	15	60	66 - 49	10	38017
DP 1/2 - 60 / 69 - 54	21.3	1/2	22	60	69 - 54	10	38019
DP 3/4 - 60 / 68 - 57	26.9	3/4	28	60	68 - 57	10	38021

DP Double Pipe Clips with inlay

- With noise suppression neoprene lining glued in clip.
- Colour of neoprene: grey.

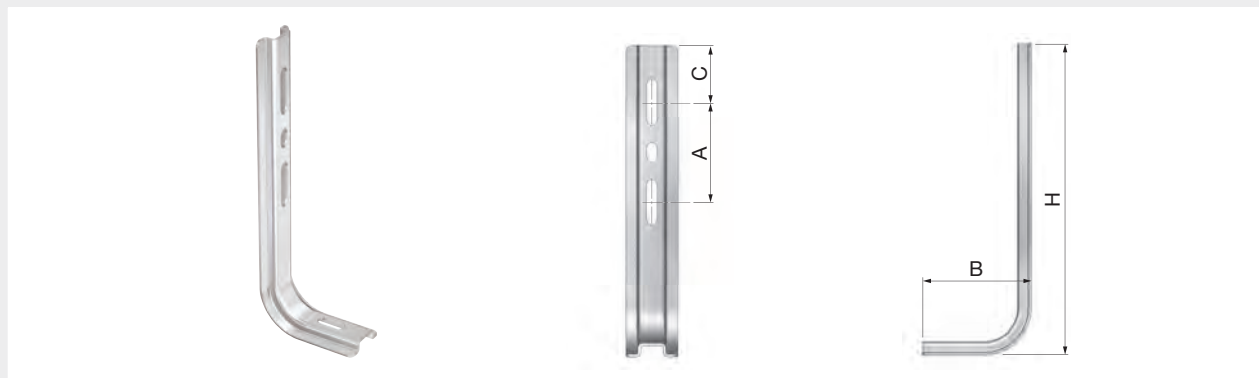



Type	Ø Pipe			Dimensions			Order Code
	Ext. dia. [mm]	Nom. ["]	Thin-W. Steel Pipe Ø ext. [mm]	A [mm]	B [mm]		
DP 15	16	-	15	60	54 - 69	10	38030
DP 1/2	21.3	1/2	22	60	57 - 68	10	38031

DP Clip supporter

DP clips are designed for mounting steel pipes and thin walled steel pipes to the wall. The double pipe clips are especially designed for mounting return and supply pipework side by side.

- Compatible with pipe sizes as per DIN 2448 and DIN EN 1057.
- Provided with a reinforced backplate with a slot of 18 x 8 mm.
- Depth adjustable and easy adjustment with spanner or screwdriver.



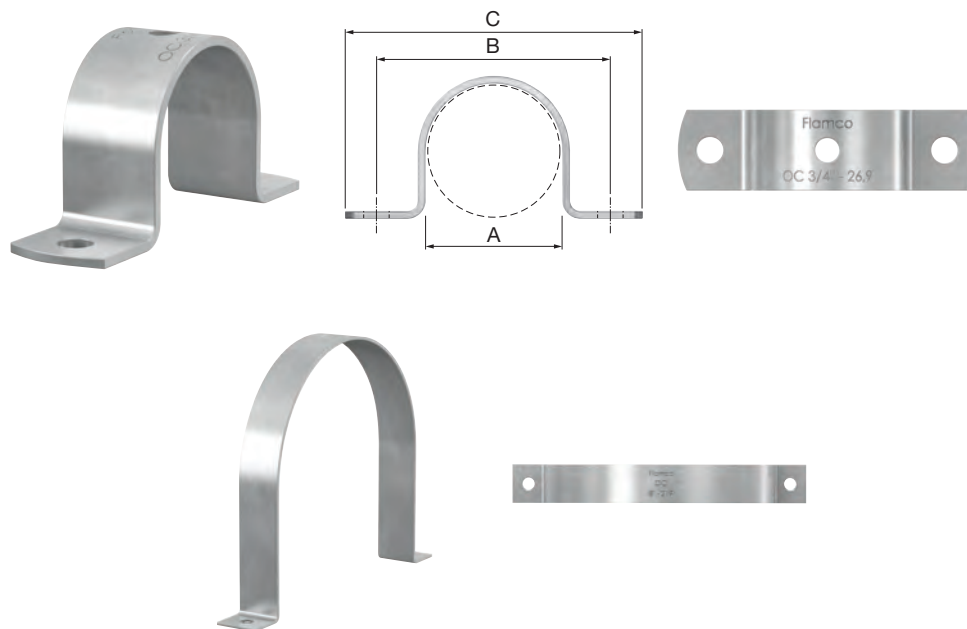
Type	Dimensions [mm]					Code-number
	A [mm]	B [mm]	C [mm]	H [mm]		
Angle bracket	65	70	38	200	10	71770


FOR GAS AND POTABLE WATER PIPES


OC Omega Clip

Extensive and rigid clip range, especially designed for quick and easy wall mounting without gap.

- Electrolytically zinc plated.



Type	Ø Pipe		Strip dimensions [mm]	Suitable with threaded connection	Dimensions [mm]				Order Code
	Nom. ["]	Ext. dia. [mm]			A	B	C		
OC 1/4	1/4	13.5	20 x 2	M 6	13.5	37.5	53.5	50	51390
OC 3/8	3/8	17.2	20 x 2	M 6	17.2	41.2	57.2	50	51391
OC 1/2	1/2	21.3	20 x 2	M 6	21.3	45.3	61.3	50	51392
OC 3/4	3/4	26.9	20 x 2	M 6	26.9	50.9	66.9	50	51393
OC 1	1	33.7	20 x 2	M 6	33.7	57.7	73.7	50	51394
OC 1 1/4	1 1/4	42.4	20 x 2	M 6	42.4	66.4	82.4	50	51395
OC 1 1/2	1 1/2	48.3	20 x 2	M 6	48.3	72.3	88.3	50	51396
OC 2	2	60.3	20 x 2	M 6	60.3	84.3	100.3	50	51397
OC 67	-	67	25 x 3	M 8	67.0	96.0	121.0	50	51550
OC 75 - 2 1/2	2 1/2	75	25 x 3	M 8	75.0	113.0	145.0	50	51551
OC 82	-	82	25 x 3	M 8	82.0	120.0	152.0	50	51552
OC 90 - 3	3	90	25 x 3	M 8	90.0	128.0	160.0	50	51553
OC 100 - 3 1/2	3 1/2	100	25 x 3	M 8	100.0	138.0	170.0	50	51554
OC 108	-	108	25 x 3	M 8	108.0	146.0	178.0	50	51555
OC 115 - 4	4	115	25 x 3	M 8	115.0	153.0	185.0	50	51556
OC 126	-	126	25 x 3	M 10	126.0	164.0	196.0	50	51557
OC 140 - 5	5	140	25 x 3	M 10	140.0	164.0	196.0	50	51558
OC 148	-	148	25 x 3	M 10	148.0	186.0	218.0	50	51559
OC 155	-	155	25 x 3	M 10	155.0	193.0	225.0	50	51560
OC 168 - 6	6	168	25 x 3	M 10	168.0	205.0	237.0	50	51561
OC 179	-	179	25 x 3	M 10	179.0	217.0	249.0	50	51562
OC 190	-	190	38 x 3	M 10	190.0	228.0	260.0	50	51563
OC 205	-	205	38 x 3	M 10	205.0	243.0	275.0	50	51564
OC 219 - 8	8	219	38 x 3	M 10	219.0	257.0	289.0	50	51565
OC 230	-	230	38 x 3	M 10	230.0	268.0	300.0	50	51566
OC 241	-	241	38 x 4	M 16	241.0	291.0	332.0	50	51567


Type	Ø Pipe		Strip dimensions [mm]	Suitable with threaded connection	Dimensions [mm]				Order Code
	Nom. ["]	Ext. dia. [mm]			A	B	C		
OC 263	-	263	38 x 4	M 16	263.0	313.0	354.0	50	51568
OC 273 - 10	10	273	38 x 4	M 16	273.0	323.0	364.0	50	51569
OC 295	-	295	38 x 4	M 16	295.0	345.0	386.0	50	51570
OC 323 - 12	12	323	38 x 4	M 16	323.0	373.0	414.0	50	51571
OC 356 - 14	14	356	50 x 4	M 20	356.0	406.0	447.0	50	51572
OC 374	-	374	50 x 4	M 20	374.0	424.0	465.0	50	51573
OC 406 - 16	16	406	50 x 4	M 20	406.0	456.0	497.0	50	51574
OC 432	-	432	50 x 4	M 20	432.0	482.0	523.0	50	51575
OC 456 - 18	18	456	50 x 4	M 20	456.0	506.0	547.0	50	51576
OC 482	-	482	50 x 4	M 20	482.0	532.0	573.0	50	51577
OC 508 - 20	20	508	50 x 4	M 20	508.0	558.0	599.0	50	51578
OC 533	-	533	50 x 4	M 20	533.0	583.0	624.0	50	51579
OC 559	-	559	50 x 4	M 20	559.0	609.0	650.0	50	51580
OC 583	-	583	50 x 4	M 20	583.0	633.0	674.0	50	51581
OC 610 - 24	24	610	50 x 4	M 20	610.0	660.0	701.0	50	51582

FOR WASTE PIPE

RDZ Clips




- Clip: titan zinc plated.
- Screw stud: hot-dip galvanized.

Type	Ø Pipe		Screw length		Strip dimensions [mm]		Order Code
	Nom. [mm]	Ext. dia. [mm]	Over-all [mm]	Thread [mm]			
RDZ 60 x 120	60	60	120	70	30 x 1.5	25	51106
RDZ 73 x 120	75	73	120	70	30 x 1.5	25	51108
RDZ 98 x 120	100	98	120	70	30 x 1.5	25	51113

RDZ Clips - Insert




- Clip: titan zinc plated.
- Insert nut M 10: Stainless steel 304.

Type	Ø Pipe		Strip dimensions [mm]		Order Code
	Nom. [mm]	Ext. dia. [mm]			
RDZ 50 x M10	50	50	30 / 1.5	25	51105
RDZ 60 x M10	60	60	30 / 1.5	25	51107
RDZ 73 x M10	75	73	30 / 1.5	25	51109
RDZ 98 x M10	100	98	30 / 1.5	25	51114
RDZ 120 x M10	120	120	30 / 1.5	25	51115

RDK Clips




- Copper clip and screw stud.

Type	Ø Pipe ext. dia. [mm]	Screw length		Strip dimen- sions [mm]		Order Code
		Overall [mm]	Thread [mm]			
RDK 50 x 120	50	120	70	30 x 1.5	25	51004
RDK 60 x 120	60	120	70	30 x 1.5	25	51006
RDK 73 x 120	75	120	70	30 x 1.5	25	51008
RDK 98 x 120	100	120	70	30 x 1.5	25	51013
RDK 120 x 120	120	120	70	30 x 1.5	25	51016
RDK 73 x 200	75	200	70	30 x 1.5	25	51028
RDK 98 x 200	100	200	70	30 x 1.5	25	51033
RDK 120 x 200	120	200	70	30 x 1.5	25	51036
RDK 73 x 250	75	250	70	30 x 1.5	25	51048
RDK 98 x 250	100	250	70	30 x 1.5	25	51053
RDK 120 x 250	120	250	70	30 x 1.5	25	51056

RDK Clips - Insert




- Copper clip and insert nut M 10.

Type	Ø Pipe ext. dia. [mm]	Strip dimensions [mm]		Order Code
RDK 50 x M10	50	30 / 1.5	25	51005
RDK 60 x M10	60	30 / 1.5	25	51007
RDK 75 x M10	75	30 / 1.5	25	51009
RDK 100 x M10	100	30 / 1.5	25	51014
RDK 120 x M10	120	30 / 1.5	25	51017

RDC Clips




- Stainless steel 304.

Type	Ø Pipe		Screw length		Strip dimensions [mm]		Order Code
	Nom. [mm]	Ext. dia. [mm]	Over- all [mm]	Thread [mm]			
RDC 50 x 120	50	50	120	70	30 x 1.5	25	51144
RDC 60 x 120	60	60	120	70	30 x 1.5	25	51146
RDC 73 x 120	75	73	120	70	30 x 1.5	25	51148
RDC 98 x 120	100	98	120	70	30 x 1.5	25	51153
RDC 120 x 120	120	120	120	70	30 x 1.5	25	51156
RDC 60 x 200	60	60	200	70	30 x 1.5	25	51166
RDC 73 x 200	75	73	200	70	30 x 1.5	25	51168
RDC 73 x 250	75	73	250	70	30 x 1.5	25	51188
RDC 98 x 200	100	98	200	70	30 x 1.5	25	51173
RDC 98 x 250	100	98	250	70	30 x 1.5	25	51193
RDC 120 x 200	120	120	200	70	30 x 1.5	25	51176

RDC Clips - Insert

- Stainless steel 304 clip and insert nut M 10.




Type	Ø Pipe		Strip dimensions [mm]		Order Code
	Ext. dia. [mm]	Ext. range [mm]			
RDC 50 x M10	50	50	30 / 1.5	25	51145
RDC 60 x M10	60	60	30 / 1.5	25	51140
RDC 73 x M10	75	73	30 / 1.5	25	51141
RDC 98 x M10	100	98	30 / 1.5	25	51142
RDC 120 x M10	120	120	30 / 1.5	25	51143

FOR PLASTIC PIPES

RSE Clips - Short

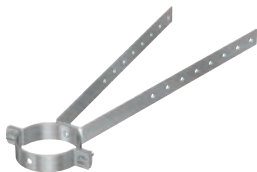
- For floor mounting.
- Without rubber inlay.
- Expanding support.
- Sendzimir galvanized.




Type	Ø Pipe ext. dia. [mm]	Length of support [mm]	Strip dimensions [mm]		Order Code
RSE - short 50	50	150	20 / 2	50	51483
RSE - short 56	56	150	20 / 2	50	51485
RSE - short 63	63	150	20 / 2	50	51487
RSE - short 75	75	150	20 / 2	50	51488
RSE - short 90	90	150	20 / 2	25	51490
RSE - short 110	110	150	20 / 2	25	51491
RSE - short 125	125	150	20 / 2	25	51492

RSE Clips - Long

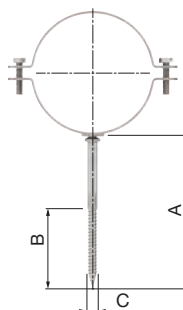
- For floor mounting.
- Without rubber inlay.
- Expanding support.
- Sendzimir galvanized.




Type	Ø Pipe ext. dia. [mm]	Length of support [mm]	Strip dimensions [mm]		Order Code
RSE - long 50	50	300	20 / 2	25	51502
RSE - long 56	56	300	20 / 2	25	51503
RSE - long 63	63	300	20 / 2	25	51504
RSE - long 75	75	300	20 / 2	25	51505
RSE - long 90	90	300	20 / 2	25	51506
RSE - long 110	110	300	20 / 2	25	51507
RSE - long 125	125	300	20 / 2	25	51508

RSK Clips

- Clips for mounting steel or plastic pipes.
- Electrolytically zinc plated.
- Available with wood screw pen.
- With hexagon headed bolts with slot.



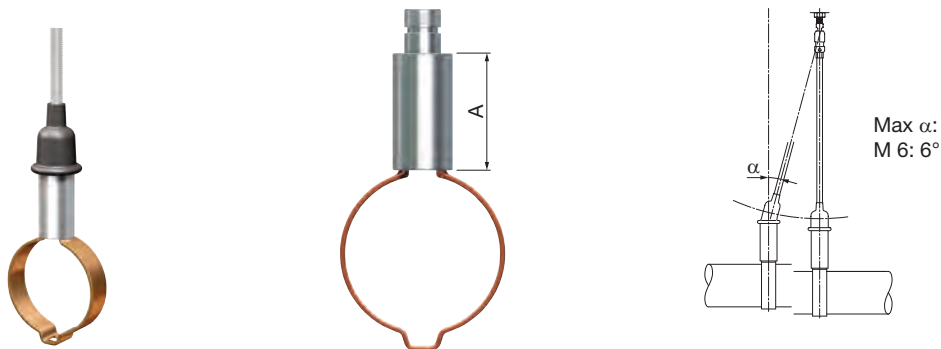
Type	Ø Pipe ext. dia. [mm]		Strip dimen- sions [mm]	Max. working load [N]	Dimensions				Order Code
	Ext. dia. [mm]	Nom. ["]			A [mm]	B [mm]	C [mm]		
RSK 50 - 80	48.5 - 50	1 1/2	20 x 1.5	1500	80	50	8	50	51453
RSK 56 - 80	53 - 58	-	20 x 1.5	1500	80	50	8	50	51455
RSK 63 - 80	59 - 64	2	20 x 1.5	1500	80	50	8	50	51457
RSK 75 - 80	71 - 76	2 1/2	20 x 2	1500	80	50	8	50	51458
RSK 90 - 120	87 - 92	3	20 x 2	1500	120	70	9	25	51460
RSK 110 - 125	108 - 116	4	20 x 2.5	1500	120	70	9	25	51461
RSK 125 - 120	125	-	20 x 2.5	1500	120	70	9	25	51462


FOR COPPER PIPES

BKK Pipe Hangers

BKK pipe hangers are designed for mounting copper pipes to the ceiling. The hanger consists of a ball element, a sleeve and a one piece clip. Due to the ball element, the pipe hangers have an axial movement of up to 6° from vertical in any direction. This allows for unrestricted pipe expansion during fluctuations in temperature, without damaging the installation. The length of the sleeve is designed to enable the pipe to be insulated even after mounting the installation, without restricting the axial movement of the ball element.

- Clip: Copper.
- Sleeve and ball element: Electrolytically zinc plated.
- One-piece clip guarantees a high permissible load.
- Maximum swing of pipe hanger: 6° from vertical in any direction.
- BKK pipe hangers are compatible with pipe sizes as per DIN EN 1057.



Type	Ø Pipe ext. dia. [mm]	Connection	Max. working load [N]	Strip dimensions [mm]	Dimension A [mm]		Order Code
BKK 6 x 12 *	12	M 6	650	12 x 1.5	40	10	34110
BKK 6 x 15 *	15	M 8	650	12 x 1.5	40	10	34112
BKK 6 x 22 *	22	M 6	650	12 x 1.5	40	10	34116
BKK 6 x 28 *	28	M 6	650	12 x 1.5	40	10	34118
BKK 6 x 35 *	35	M 6	650	12 x 1.5	40	10	34120
BKK 6 x 42 *	42	M 6	650	12 x 1.5	40	10	34122
BKK 6 x 54 *	54	M 6	650	12 x 1.5	40	10	34124

* KIWA certified certificate BRL-K-627/02 for use with potable water.

kiwa


FOR SPRINKLER SYSTEMS

BCS Pipe Hangers

BCS pipe hangers are designed for mounting sprinkler system pipes to the ceiling.

- Clip: Sendzimir galvanized (8": Electrolytically zinc plated).
Nut: Electrolytically zinc plated.
- Support nut M 10 up to 4", M 12 up to 8".
- Mounting without any tools.
- Adjustable in height.
- UL/FM Approved.



Type	Ø Pipe		Connec- tion	Approval		Max. working load* [N]	Adjustable height [mm]	Slotted hole [mm]	Strip dimensions [mm]		Order Code
	Ext. dia. [mm]	Nom. ["]		UL	FM						
BCS M 10 x 3/4	26.9	3/4"	M 10	✓	✓	1512	35	-	20 x 1	100	35770
BCS M 10 x 1	33.7	1"	M 10	✓	✓	1824	35	-	20 x 1	100	35771
BCS M 10 x 1 1/4	42.4	1 1/4"	M 10	✓	✓	1913	35	-	20 x 1	100	35772
BCS M 10 x 1 1/2	48.3	1 1/2"	M 10	✓	✓	2313	35	-	20 x 1	100	35773
BCS M 10 x 2	60.3	2"	M 10	✓	✓	2815	35	-	20 x 1	100	35774
BCS M 10 x 2 1/2	76.1	2 1/2"	M 10	✓	✓	4181	40	27 x 12	25 x 1.25	100	35775
BCS M 10 x 3	88.9	3"	M 10	✓	✓	4715	40	27 x 12	25 x 1.25	50	35776
BCS M 10 x 3 1/2	101.6	3 1/2"	M 10	✓	✓	5583	49	27 x 12	25 x 1.5	50	35777
BCS M 10 x 4	114.3	4"	M 10	✓	✓	6561	60	27 x 12	25 x 1.5	50	35778
BCS M 12 x 5	139.7	5"	M 12	✓	✓	8896	73	60 x 15	30 x 2	50	35779
BCS M 12 x 6	168.9	6"	M 12	✓	✓	11632	83	60 x 15	30 x 2	50	35780
BCS M 12 x 8	219.1	8"	M 12	✓	✓	16903	85	60 x 15	30 x 3	25	35781

* Min. breaking load according to FM regulations.



RSF Clips

RSF clips are designed for heavy duty applications and fixed point constructions. The thickness of the material and the reinforcement ribs make the most rigid assemblies possible.

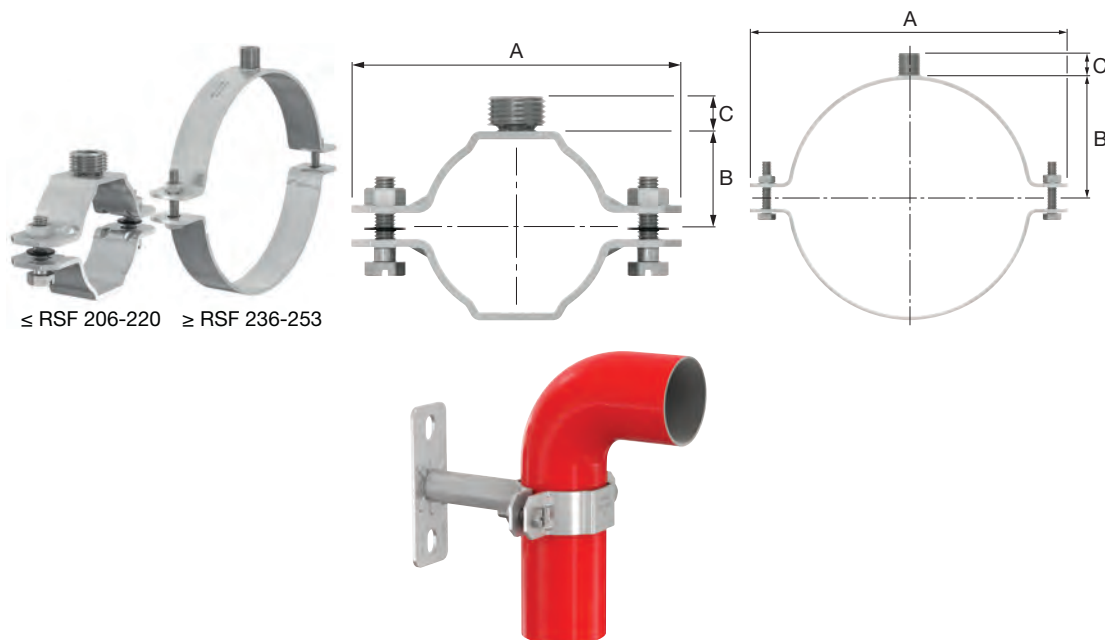
- Complete and comprehensive range.
- A special combinut with outer and inner thread makes a broad range of applications possible in combination with threaded rods and pipes.
- Electrolytically zinc plated.
- Execution:


RSF G ½ M (BSP) / M 10, G ½ M (BSP) / M 12 and G ¾ M (BSP) / M 16:


- Special welded-on nuts on the clip flanges allow high torque on the fixing bolts and permit heavy loads on the clip whilst easing installation.
- Bolt with retaining ring.
- The head of the bolt has a slot, a Pozidriv 2 (PZ2) and hexagon for fast installation with a flat or cross-head screwdriver or a spanner.

RSF G ¾ M (BSP) / M 12/16:

- Equipped with two hexagon bolts.



Type	Ø Pipe		Strip dimensions [mm]	Connection	Max. working load [N]	Dimensions				Order Code
	Ext. dia. [mm]	Nom. ["]				A [mm]	B [mm]	C [mm]		
RSF ½ M / M 10 x 13,5 - 18	13.5 - 18.9	1/4 + 3/8	30 x 3.0	G ½" M / M 10	4000	74	12.0	12	50	54201
RSF ½ M / M 10 x 19 - 23	19 - 23.9	1/2	30 x 3.0	G ½" M / M 10	4000	79	14.5	12	50	54202
RSF ½ M / M 10 x 24 - 28	24 - 28.9	3/4	30 x 3.0	G ½" M / M 10	4000	84	17.0	12	50	54203
RSF ½ M / M 10 x 29 - 33	29 - 33.9	1	30 x 3.0	G ½" M / M 10	4000	89	18.5	12	50	54204
RSF ½ M / M 10 x 34 - 39	34 - 39.9	-	30 x 3.0	G ½" M / M 10	4000	95	22.5	12	50	54205
RSF ½ M / M 10 x 40 - 44	40 - 44.9	1 1/4	30 x 3.0	G ½" M / M 10	4000	100	25.0	12	50	54206
RSF ½ M / M 10 x 45 - 49	45 - 49.9	1 1/2	30 x 3.0	G ½" M / M 10	4000	105	27.5	12	50	54207
RSF ½ M / M 10 x 50 - 55	50 - 55.9	-	30 x 3.0	G ½" M / M 10	4000	111	30.5	12	25	54208
RSF ½ M / M 10 x 56 - 61	56 - 61.9	2	30 x 3.0	G ½" M / M 10	4000	117	33.5	12	25	54209
RSF ½ M / M 10 x 62 - 68	62 - 68.9	-	30 x 3.0	G ½" M / M 10	4000	124	37.0	12	25	54210
RSF ½ M / M 10 x 69 - 76	69 - 76.9	2 1/2	30 x 3.0	G ½" M / M 10	4000	132	41.0	12	25	54211
RSF ½ M / M 10 x 77 - 84	77 - 84.9	-	30 x 3.0	G ½" M / M 10	4000	140	45.0	12	25	54212
RSF ½ M / M 10 x 85 - 91	85 - 91.9	3	40 x 4.0	G ½" M / M 10	5000	159	49.5	12	25	54213
RSF ½ M / M 10 x 92 - 98	92 - 98.9	-	40 x 4.0	G ½" M / M 10	5000	166	53.0	12	25	54214

Type	Ø Pipe		Strip dimensions [mm]	Connection	Max. working load [N]	Dimensions				Order Code
	Ext. dia. [mm]	Nom. ["]				A [mm]	B [mm]	C [mm]		
RSF ½ M / M 10 x 99 - 105	99 - 105.9	-	40 x 4.0	G ½" M / M 10	5000	173	56.5	12	25	54215
RSF ½ M / M 10 x 106 - 114	106 - 114.9	4	40 x 4.0	G ½" M / M 10	5000	182	61.0	12	20	54216
RSF ½ M / M 12 x 115 - 122	115 - 122.9	-	40 x 4.0	G ½" M / M 12	5000	190	65.0	12	20	54217
RSF ½ M / M 12 x 123 - 130	123 - 130.9	-	40 x 4.0	G ½" M / M 12	5000	198	69.0	12	20	54218
RSF ½ M / M 12 x 131 - 139	131 - 139.9	5	40 x 4.0	G ½" M / M 12	5000	207	73.5	12	20	54219
RSF ½ M / M 12 x 140 - 148	140 - 148.9	-	40 x 4.0	G ½" M / M 12	5000	216	78.0	12	20	54220
RSF ½ M / M 12 x 149 - 157	149 - 157.9	-	40 x 4.0	G ½" M / M 12	5000	225	82.5	12	20	54221
RSF ½ M / M 12 x 158 - 166	158 - 166.9	6	40 x 4.0	G ½" M / M 12	5000	234	87.0	12	20	54222
RSF ½ M / M 12 x 167 - 179	167 - 179.9	-	40 x 4.0	G ½" M / M 12	5000	247	93.5	12	20	54223
RSF ¾ M / M 16 x 180 - 192	180 - 192.9	-	40 x 4.0	G ¾" M / M 16	5000	260	100.0	16	10	54224
RSF ¾ M / M 16 x 193 - 205	193 - 205.9	-	40 x 4.0	G ¾" M / M 16	5000	273	106.5	16	10	54225
RSF ¾ M / M 16 x 206 - 220	206 - 220.9	8	40 x 4.0	G ¾" M / M 16	5000	288	114.0	16	10	54226
RSF ¾ M / M 16 x 221 - 235	221.0 - 235.0	-	40 x 4.0	G ¾" M / M 16	5000	303	121.5	16	10	54246
RSF ¾ M / M 12/16 x 236 - 253	236 - 253.9	-	50 x 5.0	G ¾" M / M 12/16	9000	330	133.0	26	1	54227
RSF ¾ M / M 12/16 x 254 - 273	254 - 273.9	10	50 x 5.0	G ¾" M / M 12/16	9000	348	142.0	26	1	54228
RSF ¾ M / M 12/16 x 274 - 286	274 - 286.9	-	50 x 5.0	G ¾" M / M 12/16	9000	361	148.0	26	1	54229
RSF ¾ M / M 12/16 x 287 - 305	287 - 305.9	-	50 x 5.0	G ¾" M / M 12/16	9000	380	158.0	26	1	54230
RSF ¾ M / M 12/16 x 306 - 324	306 - 324.9	12	50 x 5.0	G ¾" M / M 12/16	9000	399	167.0	26	1	54231
RSF ¾ M / M 12/16 x 325 - 337	325 - 337.9	-	50 x 5.0	G ¾" M / M 12/16	9000	412	174.0	26	1	54232
RSF ¾ M / M 12/16 x 338 - 356	338 - 356.9	14	50 x 5.0	G ¾" M / M 12/16	9000	431	183.0	26	1	54233
RSF ¾ M / M 12/16 x 357 - 369	357 - 369.9	-	50 x 5.0	G ¾" M / M 12/16	9000	444	190.0	26	1	54234
RSF ¾ M / M 12/16 x 370 - 387	370 - 387.9	-	50 x 5.0	G ¾" M / M 12/16	9000	462	199.0	26	1	54235
RSF ¾ M / M 12/16 x 388 - 406	388 - 406.9	16	50 x 5.0	G ¾" M / M 12/16	9000	481	208.0	26	1	54236

FLAMCO RAIL

Flamco rail is exceptionally versatile when it comes to one or more suspensions or wall fixings. These can be achieved quickly and skilfully whilst several suspensions can be mounted alongside each other on one rail. Flamco rails are available in several types with differing strength characteristics.

Rail accessories, such as sliding nuts and hammer head bolts make mounting easy, and can be adjusted after installation.

A comprehensive system giving excellent results - fast!


R Flamco Rail

- Material: St 02 Z 275 NA. as per DIN 17162 TL. 1.
- Easy and quick mounting.
- With slotted holes for adjustable mounting.
- Safety margin for minimal breaking load (V) = 3.


Independently tested and certified according to the high safety and quality standards of the RAL Quality Assurance Association for pipe supports (RAL Gütegemeinschaft Rohrbefestigung).

Order in required number of metres.



Type	Stock Length [m]	Ø [cm²]	Point load		Mb [Ncm] *	Ix [cm⁴]	Wx [cm³]	Mass [kg/m]		Order code (priced per metre)
			Max. working load [N]	Rupture load [N]						
R 0 Sendzimir zinc-plated	2	0.86	2000	6000	6850	0.388	0.428	0.66	520 m	50020
R 1 Sendzimir zinc-plated ***	2	1.09	2000	6000	6140	0.315	0.394	0.85	520 m	50010
R 1 Sendzimir zinc-plated ***	3	1.09	2000	6000	6140	0.315	0.394	0.85	780 m	50310
R 1 Sendzimir zinc-plated ***	6	1.09	2000	6000	6140	0.315	0.394	0.85	1200 m	50060
R 1 Black coated (RAL 9005) ***	2	1.09	2000	6000	6140	0.315	0.394	0.85	520 m	50000
R 2 Sendzimir zinc-plated ***	2	1.45	2500	7500	10473	0.705	0.672	1.27	440 m	50011
R 2 Sendzimir zinc-plated ***	3	1.45	2500	7500	10473	0.705	0.672	1.27	660 m	50311
R 2 Sendzimir zinc-plated ***	6	1.45	2500	7500	10473	0.705	0.672	1.27	720 m	50061
R 2 Black coated (RAL 9005) ***	2	1.45	2500	7500	10473	0.705	0.672	1.27	440 m	50001
R 3 Sendzimir zinc-plated	2	2.91	2500	7500	35000	4.040	2.019	2.54	240 m	50012
R 4 Sendzimir zinc-plated	2	2.92	2500	7500	49000	7.139	3.080	2.35	352 m	50013
R 4 Sendzimir zinc-plated	3	2.92	2500	7500	47700	6.914	2.981	2.35	480 m	50313
R 4 Sendzimir zinc-plated	4	2.92	2500	7500	47700	6.914	2.981	2.35	384 m	50014
R 6 Sendzimir zinc-plated	2	4.57	3000	9000	100000	19.004	6.295	3.60	208 m	50017
R 6 Sendzimir zinc-plated	3	4.57	3000	9000	98300	18.548	6.144	3.60	208 m	50027
R 6 Sendzimir zinc-plated	6	4.57	3000	9000	98300	18.548	6.144	3.60	240 m	50037
R 7 Sendzimir zinc-plated ***	2	2.46	2000	6000	41500	5.381	2.605	1.98	456 m	50029
R 7 Sendzimir zinc-plated ***	3	2.46	2000	6000	40613	5.381	2.606	1.98	684 m	50019
R 7 Sendzimir zinc-plated ***	6	2.46	2000	6000	40613	5.381	2.606	1.98	504 m	50039
R 8 Sendzimir zinc-plated	2	1.50	1500	4500	14600	0.970	0.915	1.32	304 m	50218
R 8 Sendzimir zinc-plated	3	1.50	1500	4500	14400	0.957	0.900	1.32	456 m	50318
E 1 Sendzimir zinc-plated	2	1.09	2000	6000	6300	0.315	0.394	0.85	520 m	50610

note: project rail!

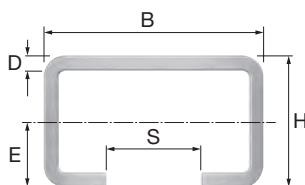
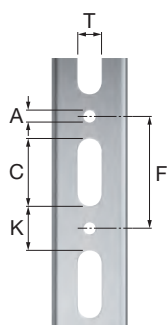
Type	Stock Length [m]	Ø [cm²]	Point load		Mb [Ncm] *	Ix [cm⁴]	Wx [cm³]	Mass [kg/m]		Order code (priced per metre)
			Max. working load [N]	Rupture load [N]						
E 1-9 Sendzimir zinc-plated	2	1.09	2000	6000	6300	0.315	0.394	0.85	520 m	50612 note: project rail!
E 2 Sendzimir zinc-plated	2	1.45	2500	7500	12000	0.781	0.742	1.27	440 m	50611 note: project rail!
E 2-9 Sendzimir zinc-plated	2	1.45	2500	7500	12000	0.781	0.742	1.27	440 m	50613 note: project rail!

*Maximum point load.

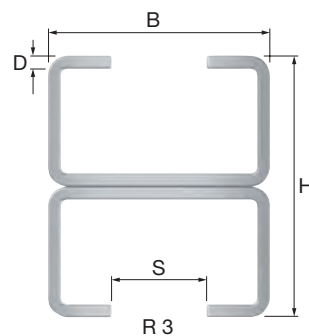
***Independently tested and certified according to the high safety and quality standards of the RAL Quality Assurance Association for pipe supports (RAL Gütegemeinschaft Rohrbefestigung).



Dimensions R Flamco Rail



R 0-2 / R 4-8



Type	Dimensions									
	H [mm]	B [mm]	A [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]	S [mm]	T [mm]
R 0	18	28.0	5,3	20	1.25	9.0	50	30	14.0	8.5
R 1	15	30.5	9	30	2.00	8.0	50	20	14.5	10.5
R 2	20	34.0	9	30	2.40	10.5	50	20	14.5	10.5
R 3	40	34.0	-	30	2.40	-	50	20	14.5	10.5
R 4	46	35.0	9	30	2.50	23.2	50	20	14.5	13.5
R 6	60	40.0	9	30	3.00	30.2	50	20	14.5	13.5
R 7	41	41.0	9	30	2.00	20.7	50	20	14.5	13.5
R 8	21	41.0	9	30	1.80	10.6	50	20	14.5	13.5
E 1	15	30.5	9	30	2.00	8.0	50	20	14.5	10.5
E 2	20	34.0	9	30	2.40	10.5	50	20	14.5	10.5
E 1-9	15	30.5	5,3	30	2.00	8.0	50	20	14.5	9.0
E 2-9	20	34.0	5,3	30	2.40	10.5	50	20	14.5	9.0


RAIL CONSOLES

R . x... Rail Console

For suspension or support directly against a wall.

- Electrolytically zinc plated.
- Stable fastening.



Type	Flamco Rail	Dimensions				Max. load at end point (L) [N]		Order Code
		A [mm]	L [mm]	Base plate [mm]	Slotted hole [mm]			
R 1 x 150	R 1	80	150	115 x 40	11 x 22	400	1	71665
R 1 x 200	R 1	80	200	115 x 40	11 x 22	300	1	71670
R 1 x 300	R 1	80	300	115 x 40	11 x 22	200	1	71666
R 1 x 400	R 1	80	400	115 x 40	11 x 22	150	1	71667
R 2 x 200	R 2	80	200	115 x 40	11 x 22	500	1	71675
R 4 x 150	R 4	90	150	130 x 50	13 x 26	3000	1	71680
R 4 x 250	R 4	90	250	130 x 50	13 x 26	1800	1	71682
R 4 x 350	R 4	90	350	130 x 50	13 x 26	1250	1	71684
R 6 x 480	R 6	134	480	200 x 100	13 x 26	2000	1	71690
R 6 x 750	R 6	134	750	200 x 100	13 x 26	1250	1	71692
R 7 x 200	R 7	90	200	130 x 50	13 x 26	2000	1	71694
R 7 x 300	R 7	90	300	130 x 50	13 x 26	1250	1	71695
R 7 x 400	R 7	90	400	130 x 50	13 x 26	1000	1	71696
R 7 x 500	R 7	90	500	130 x 50	13 x 26	750	1	71697
R 7 x 600	R 7	90	600	130 x 50	13 x 26	500	1	71698
R 7 x 700 *	R 7	440	700	490 x 44	13 x 30	400	1	71699

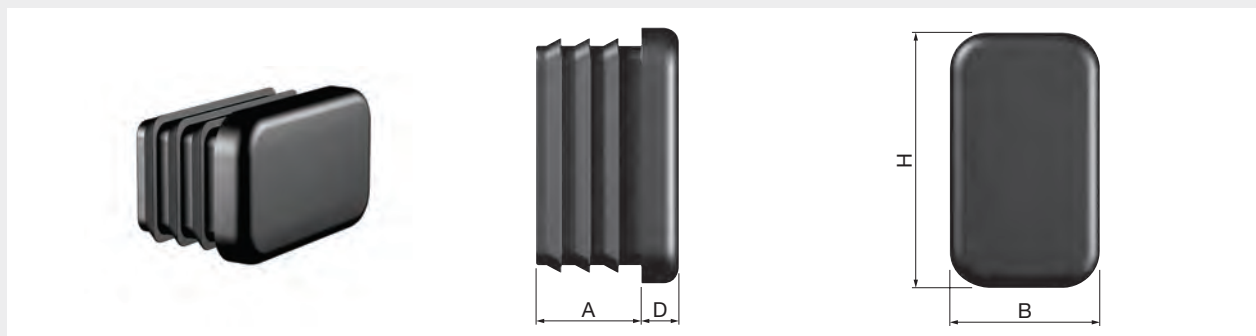
* With shore.


RAIL END CAPS

RD Rail End Cap

For a neat finish to Flamco rail R 1 - 8 and rail consoles. (For a neat finish to Flamco rail R 3, we advise two RD 2 rail end caps.)

- Black plastic.
- Easy to fit and self-securing.



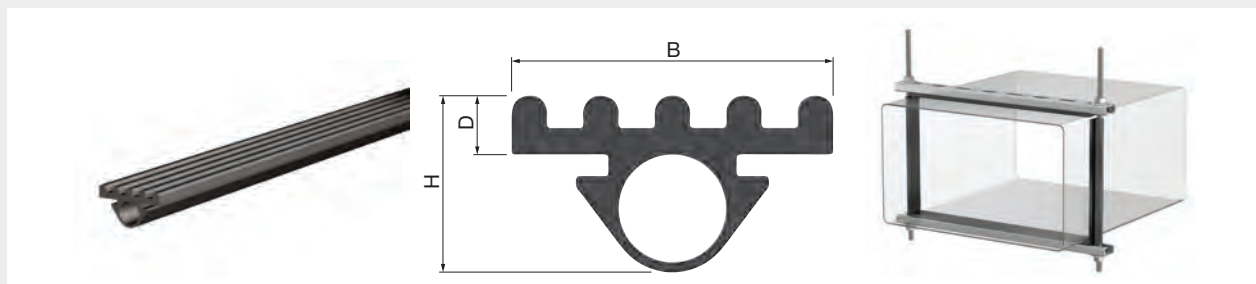
Type	Suitable for rail	Dimensions					Order Code
		A [mm]	B [mm]	D [mm]	H [mm]		
RD 1	R 1	12	15	5	30	100	50501
RD 2	R 2 / R 3	12	20	5	35	100	50502
RD 4	R 4	14	35	5	46	100	50504
RD 6	R 6	14	41	5	60	100	50506
RD 7	R 7	14	40	5	40	100	50507
RD 8	R 8	14	30	5	40	100	50508

NOISE-SUPPRESSION STRIPS

Suitable for Flamco rail and threaded rods.

- Rubber: EPDM.
- At normal frequency and pressure range, noise suppression 20 dB(A).
- Suitable for temperatures from -40 °C up to +120 °C.
- Electrical values: specific resistance: $2 \times 10^9 \Omega \text{cm}^2$.
- Surface resistance: $2 \times 10^9 \Omega$.
- Breaking elongation: 400%.
- Tensile strength: 500 N/cm².
- Impact resilience: 35%.

SR 4 Strips



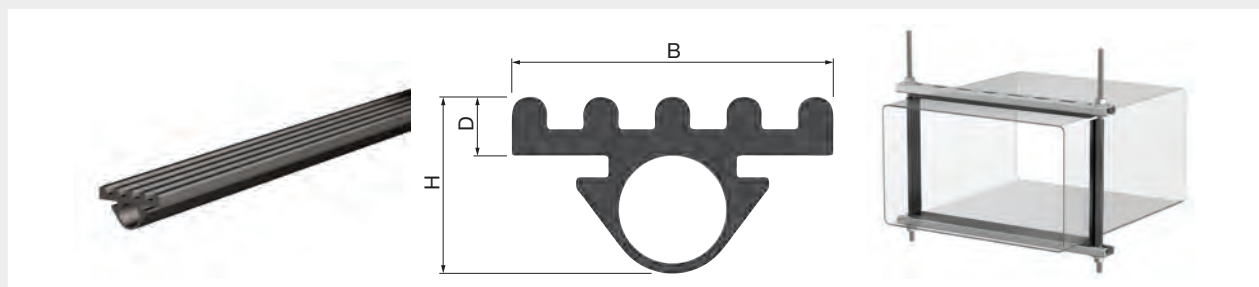
Type	Dimensions			Suitable for		Order Code
	B [mm]	H [mm]	D [mm]			
SR 4	30	16.5	7	Threaded rod M 8 / Rail R 1 - R 8	20 m	71114


NOISE-SUPPRESSION STRIPS

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- Electrical values: specific resistance: $2 \times 10^9 \Omega \text{cm}^2$.
- Surface resistance: $2 \times 10^9 \Omega$.
- Breaking elongation: 400%.
- Tensile strength: 500 N/cm².
- Impact resilience: 35%.

SR 4 Strips



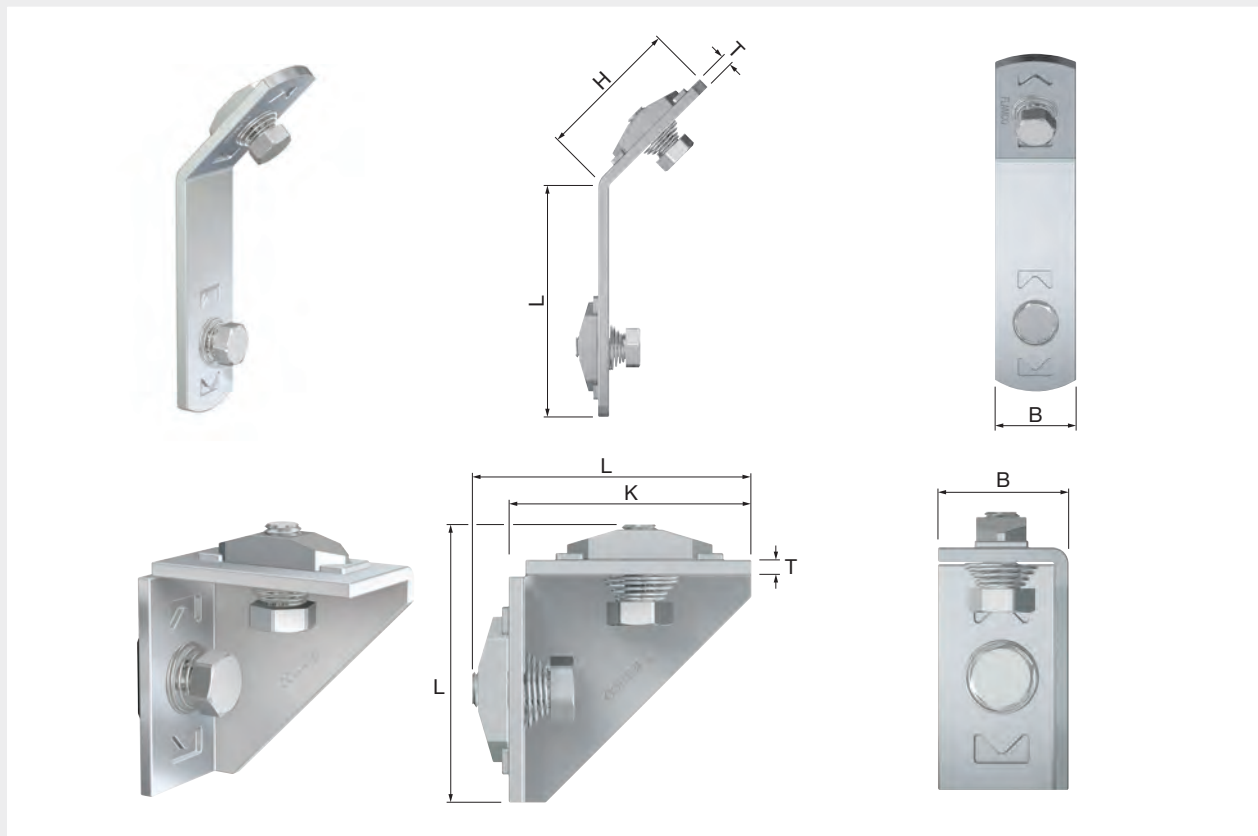
Type	Dimensions			Suitable for		Order Code
	B [mm]	H [mm]	D [mm]			
SR 4	30	16.5	7	Threaded rod M 8 / Rail R 1 - R 8	20 m	71114


MOUNTING ANGLES

ClickConnection RH

For Flamco rail R 0 – 8.

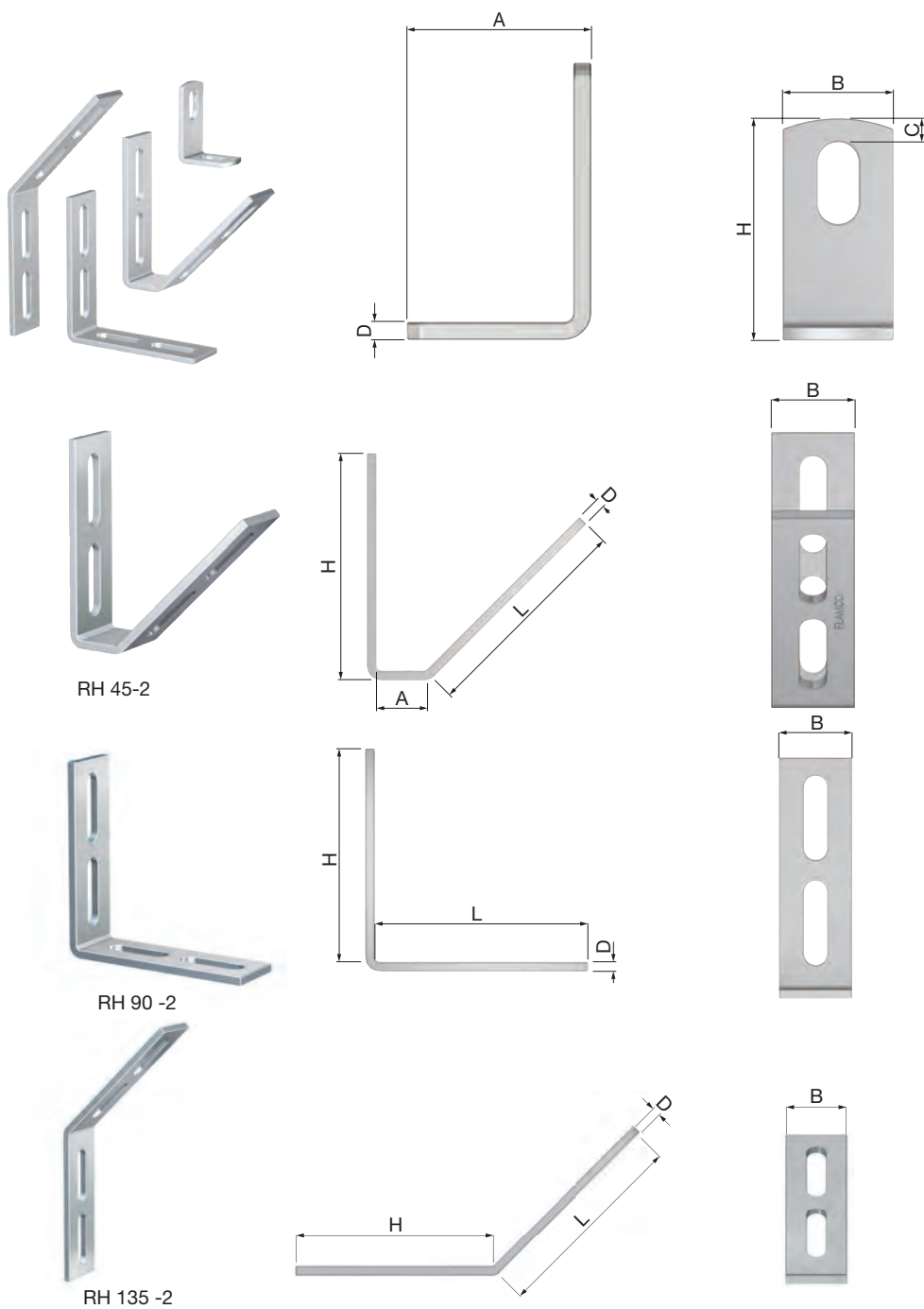
- Easy mounting by pushing and turning the unit in the rail for 45° clockwise.
- Reduced installation time.
- No loose parts like studs, washers and nuts.
- Electrolytically zinc plated.
- Maximum torque: 35 Nm
- Safety margin for minimum breaking load (V) = 3.




Type	Max. working load		Dimensions						Order Code
	Tensile [N]	Shear [N]	L [mm]	K [mm]	B [mm]	T [mm]	H [mm]		
ClickConnection RH 45°	3000	1000	100	-	35	5	60	25	71800
ClickConnection RH 90°	3000	1000	73	65	35	4	-	25	71801

RH Rail Angle

- Electrolytically zinc plated.



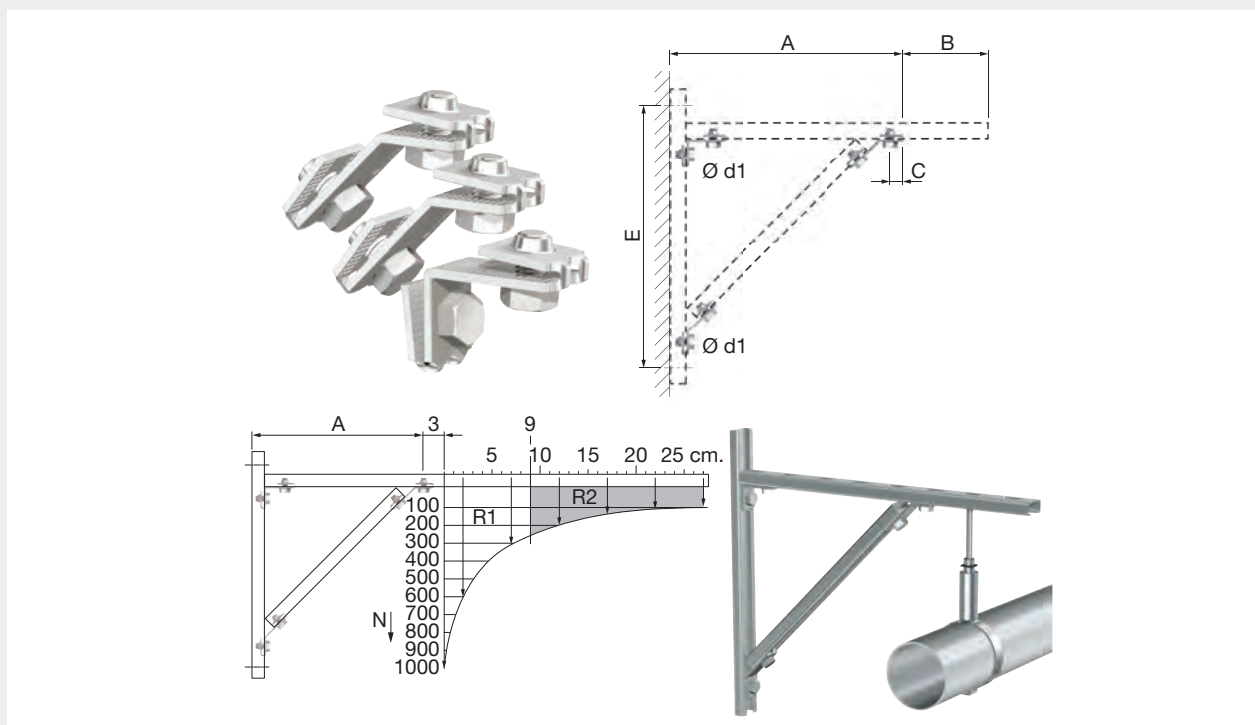
Type	Suitable for rail	Dimensions						Slotted hole [mm]		Order Code
		A [mm]	B [mm]	C [mm]	D [mm]	H [mm]	L [mm]			
RH 90 - 1	R 0 - R 8	40	30	6.5	4	60	-	11 x 22	50	71606
RH 45 - 2	R 0 - R 8	25	35	-	5	110	110	11 x 40	25	71620
RH 90 - 2	R 0 - R 8	-	35	-	5	110	110	11 x 40	25	71621
RH 135 - 2	R 0 - R 8	-	35	-	5	115	115	11 x 40	25	71622


ANGLE SUPPORT

HS 1 Angle Support Set

For making a customised (adjustable) suspension or support in combination with Flamco rail R 1 or R 2.

- Electrolytically zinc plated.
- Consists of one 90° corner bracket, two 135° corner brackets and six M 10 x 15 bolts.
- The rail can be ordered separately.



Type	Suitable for rail		Order Code
HS 1	R 1 - R 2	25	71600

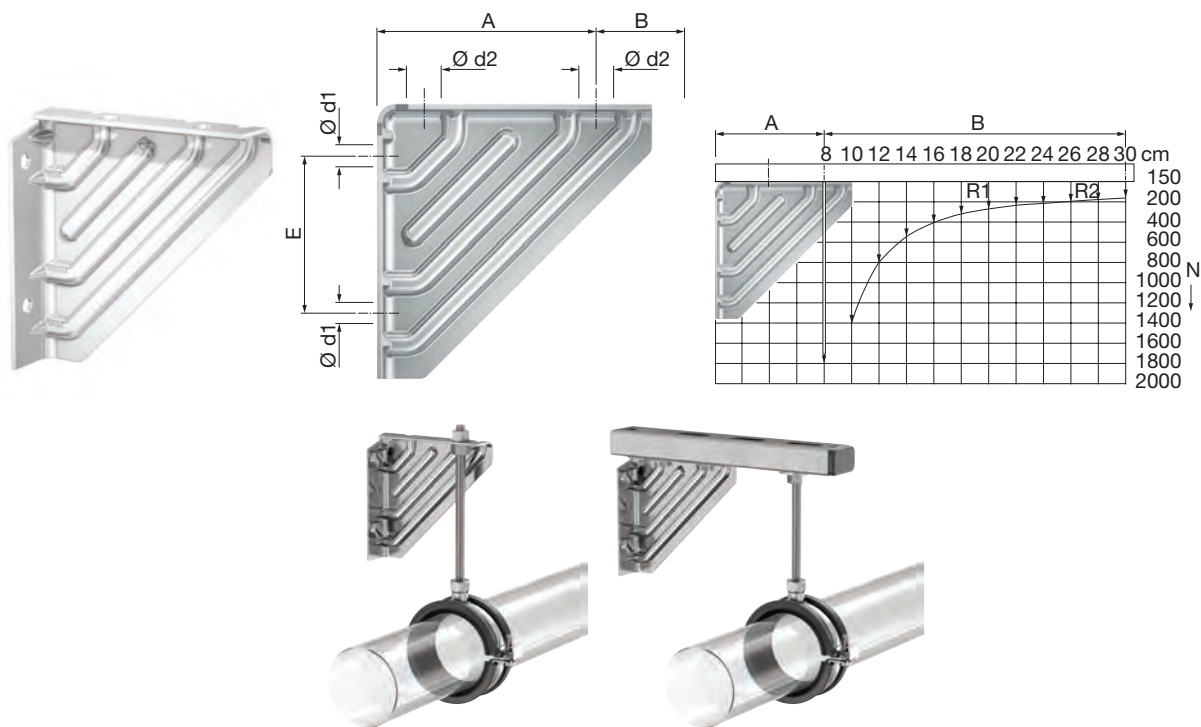
HS 1 - Technical specifications


Type	Suitable for rail	Dimensions					Max. working load	
		A [mm]	B max. [mm]	E [mm]	Ø d1 [mm]	C [mm]	A [N]	A+B [N]
HS 1	R 1	140 - 530	90	A+60	10	30	1000	260
	R 2	155 - 780	270	A+60	10	30	1000	100

HS 2 Angle Support

For making a customised (adjustable) suspension or support in combination with Flamco rail R 0, R 1 or R 2, or with D 6 or D 8 threaded rod.

- Electrolytically zinc plated.
- Material thickness: 2 mm.
- Consists of an angled corner plate with reinforcing ribs and mounting holes.



Type	Suitable for threaded rod or rail		Order Code
HS 2	D 6 - D 8 - R 1 - R 2	25	71602

HS 2 - Technical specifications

Type	Dimensions					Max. working load	
	A [mm]	B max. [mm]	E [mm]	Ø d1 [mm]	Ø d2 [mm]	A [N]	A+ B max. [N]
HS 2	80	220	56	6	9	1800	156

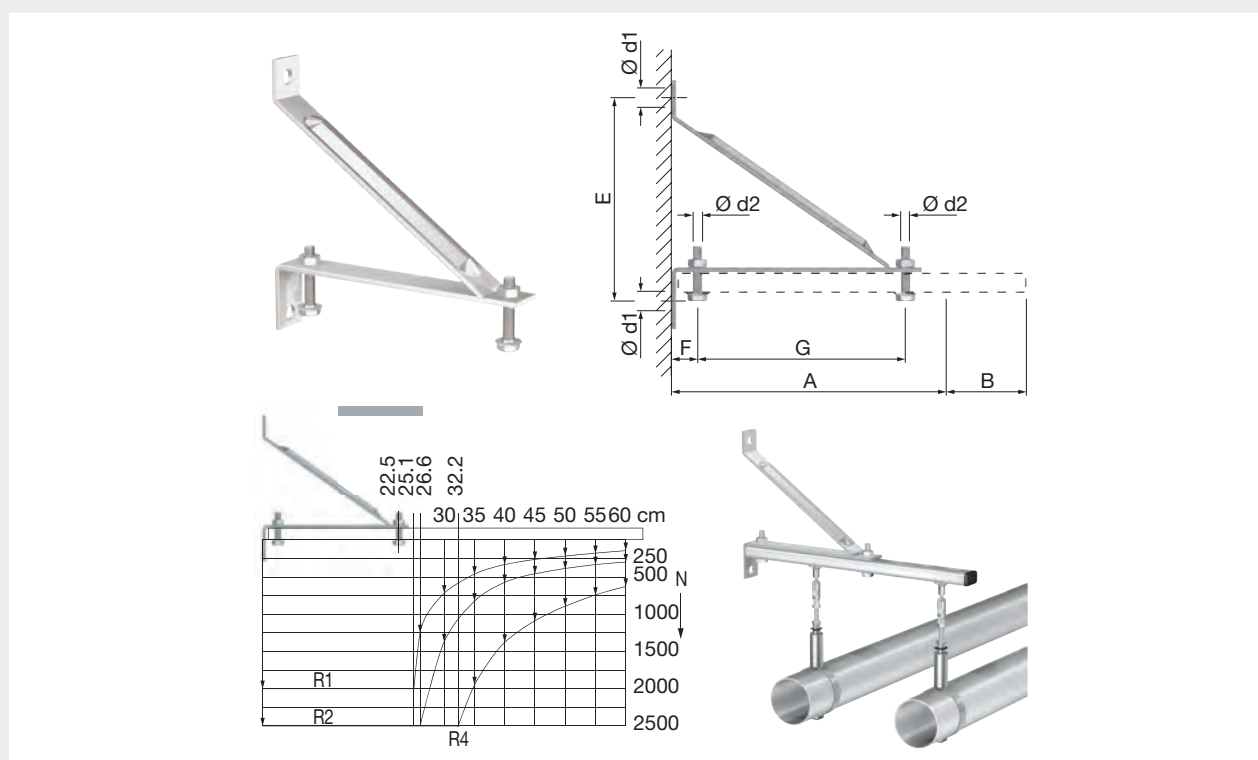
HS 3 Angle Support


The HS 3 Angle Support creates the opportunity to construct a strong suspending or supporting structure to horizontally mount multiple pipes to walls. The supporting structure must be used in combination with Flamco Rail, making it possible to mount the pipes efficiently.

The angle support can be supplied in two versions:

- For Flamco Rail R1 and R2: angle support, two M10 x 35 mm bolts and two washers.
- For Flamco Rail R4: angle support, two M10 x 80 mm bolts, two washers and two clamping plates.
- Electrolytically zinc plated.

***When using the HS 3 angle support in combination with Flamco Rail R6, R7 or R8, additional clamping plates SP 10 SR (80634) are needed.**



Type	Suitable for rail		Order Code
HS 3	R 1 - 2	20	71603
HS 3	R 4 *	20	71604

HS 3 - Technical specifications

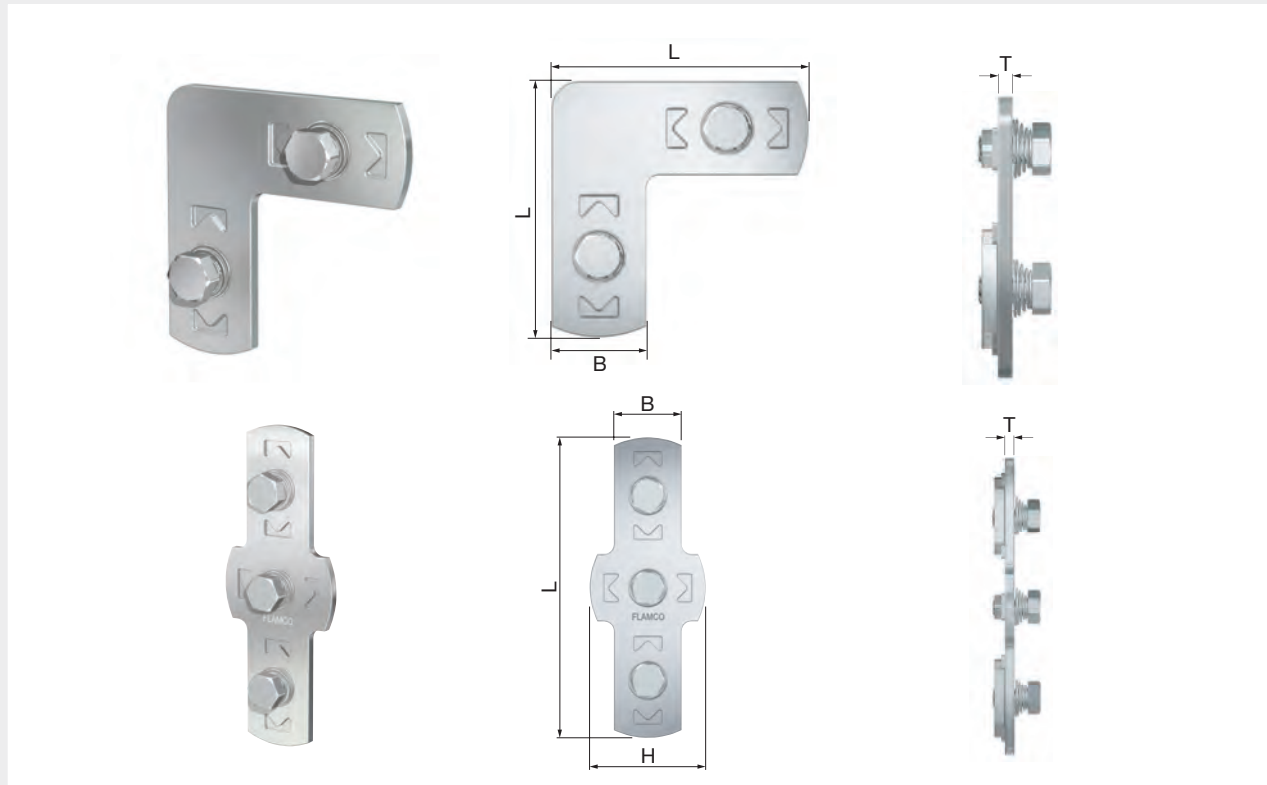
Type	Suitable for rail	Dimensions							Max. working load	
		A [mm]	B max. [mm]	E [mm]	F [mm]	G [mm]	Ø d1 [mm]	Ø d2 [mm]	A [N]	A+B max. [N]
HS 3	R 1	260	340	210	25	200	13	11	2000	194
	R 2	260	340	210	25	200	13	11	2500	260
	R 4	260	340	210	25	200	13	11	2500	625


MOUNTING PLATES AND CORNERS

ClickConnection L/X

For Flamco rail R 0 – 8.

- Easy mounting by pushing and turning the unit in the rail for 45° clockwise.
- Reduced installation time.
- No loose parts like studs, washers and nuts.
- Electrolytically zinc plated.
- Maximum torque: 35 Nm.
- Safety margin for minimum breaking load (V) = 3.

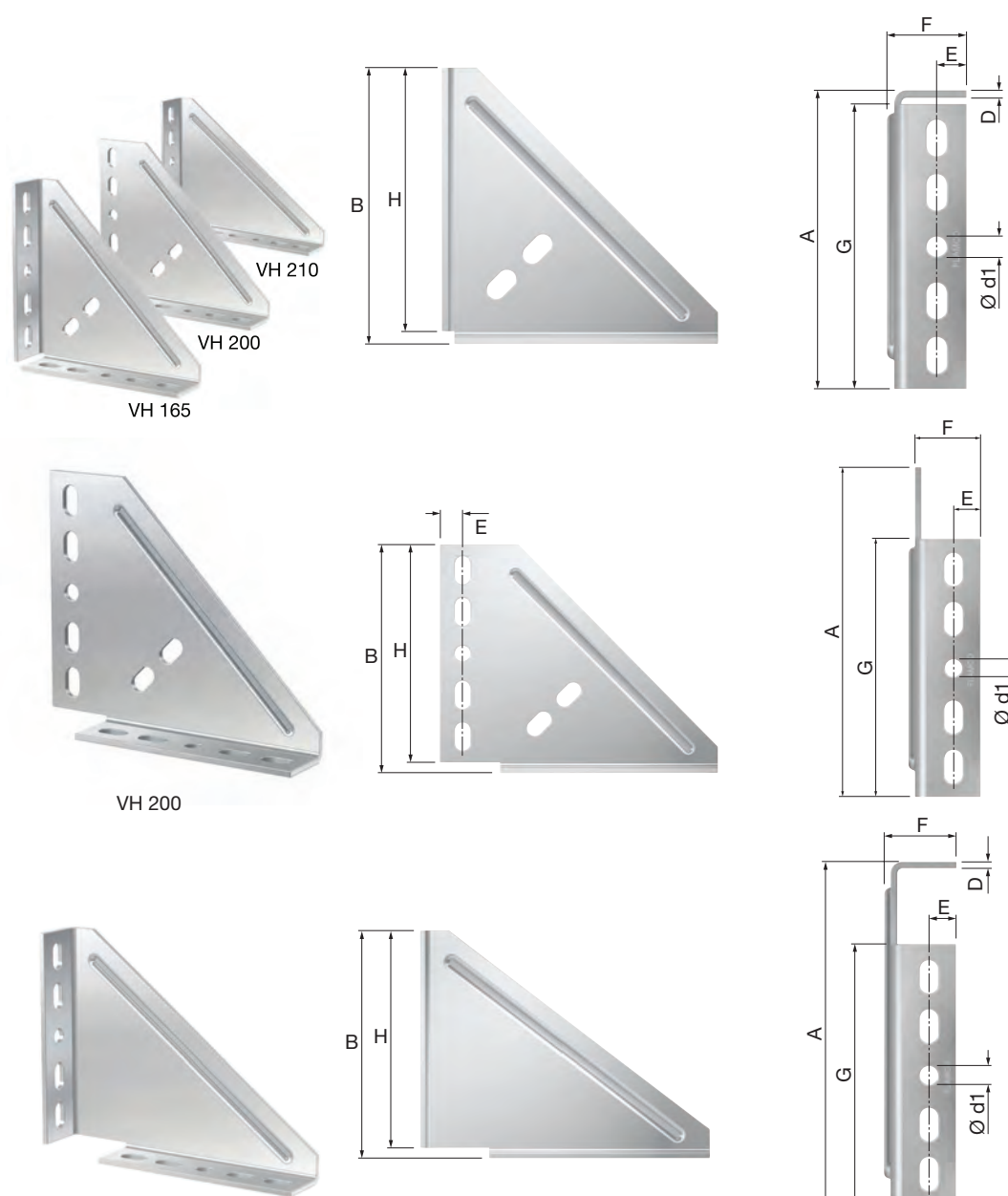



Type	Max. working load		Dimensions					Order Code
	Tensile [N]	Shear [N]	L [mm]	B [mm]	T [mm]	H [mm]		
ClickConnection L	3000	1000	95	35	5	-	10	71802
ClickConnection X	3000	1000	155	35	5	60	10	71803

VH Corner Brackets

For making an adjustable suspension or support construction on the wall, ceiling or floor.

- Electrolytically zinc plated.
- The hole pattern is such that the rail can be fixed with two bolts.

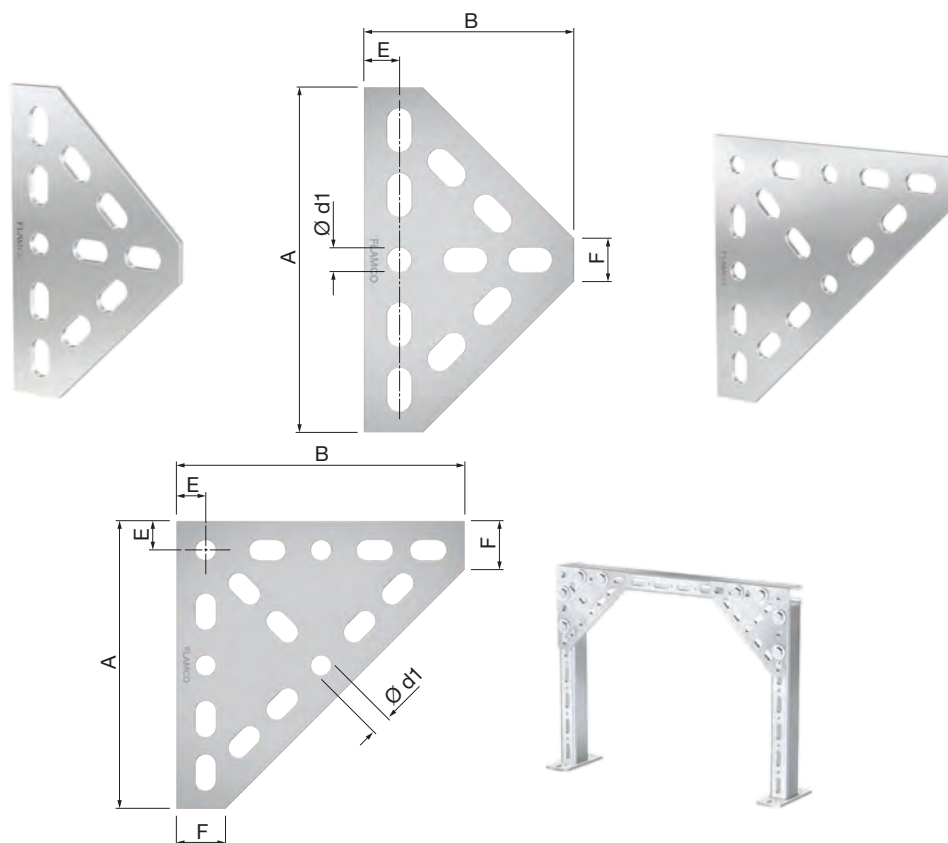



Type	Dimensions								Slotted hole [mm]		Order Code
	A [mm]	B [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	Ø d1 [mm]			
VH 165 x 165 x 4	165	165	4	16.5	40	157.5	157.5	11	11 x 20	10	71612
VH 200 x 165 x 4	200	165	4	16.5	40	157.5	157.5	11	11 x 20	10	71613
VH 210 x 165 x 4	210	165	4	16.5	40	160.5	157.5	11	11 x 20	10	71614

VP Corner Plates

For making an adjustable suspension or support construction on the wall, ceiling or floor.

- Electrolytically zinc plated.
- The hole pattern is such that the rail can be fixed with two bolts (M 10).



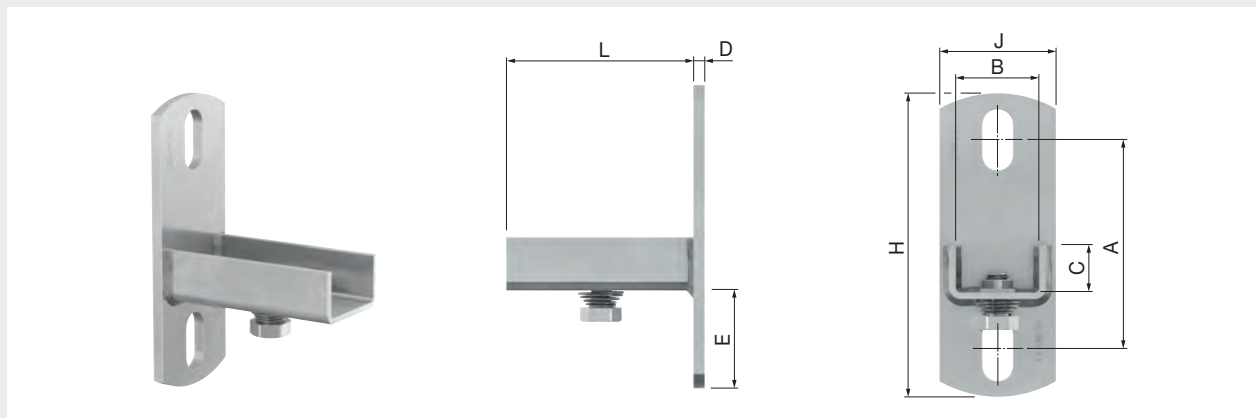
Type	Dimensions					Material thickness [mm]	Slotted hole [mm]		Order Code
	A [mm]	B [mm]	E [mm]	F [mm]	Ø d1 [mm]				
VP 160 x 100 x 4	160	100	16.5	20.0	11	4	11 x 22	25	71610
VP 160 x 160 x 4	160	160	16.5	27.5	11	4	11 x 22	25	71611


RAIL SUPPORT SADDLES

ClickConnection RZ-V

For Flamco rail R 0 – 4.

- Electrolytically zinc plated.
- Maximum torque: 80 Nm.
- Safety margin for minimum breaking load (V) = 3.

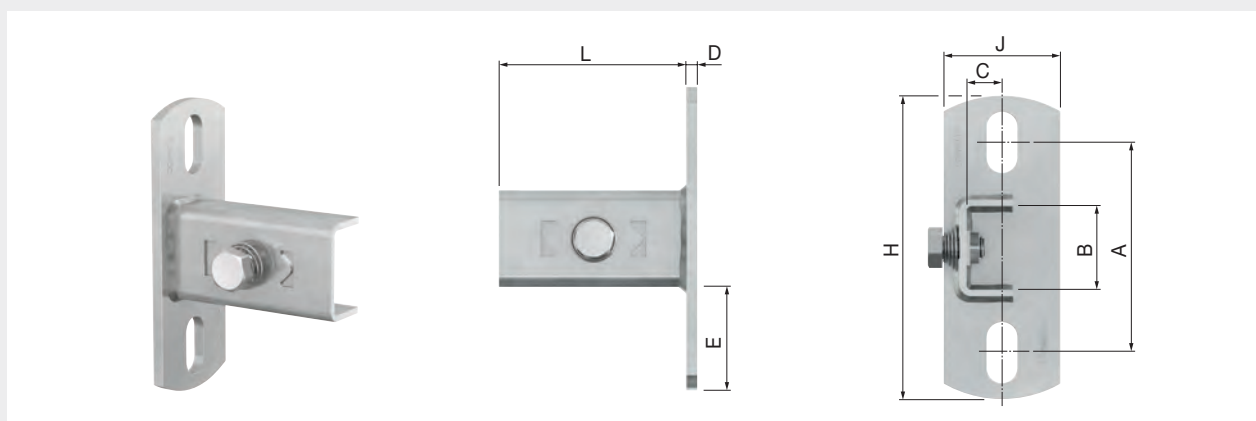



Type	Max. working load		Dimensions										Order Code
	Tensile [N]	Shear [N]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	H [mm]	J [mm]	L [mm]	Slot- ted hole [mm]		
ClickConnection RZ-V90	3000	1000	90	35,5	20	5	42	130	50	80	13 x 26	10	71806

ClickConnection RZ-H

For Flamco rail R 0 – 4.

- Electrolytically zinc plated.
- Maximum torque: 80 Nm.
- Safety margin for minimum breaking load (V) = 3.

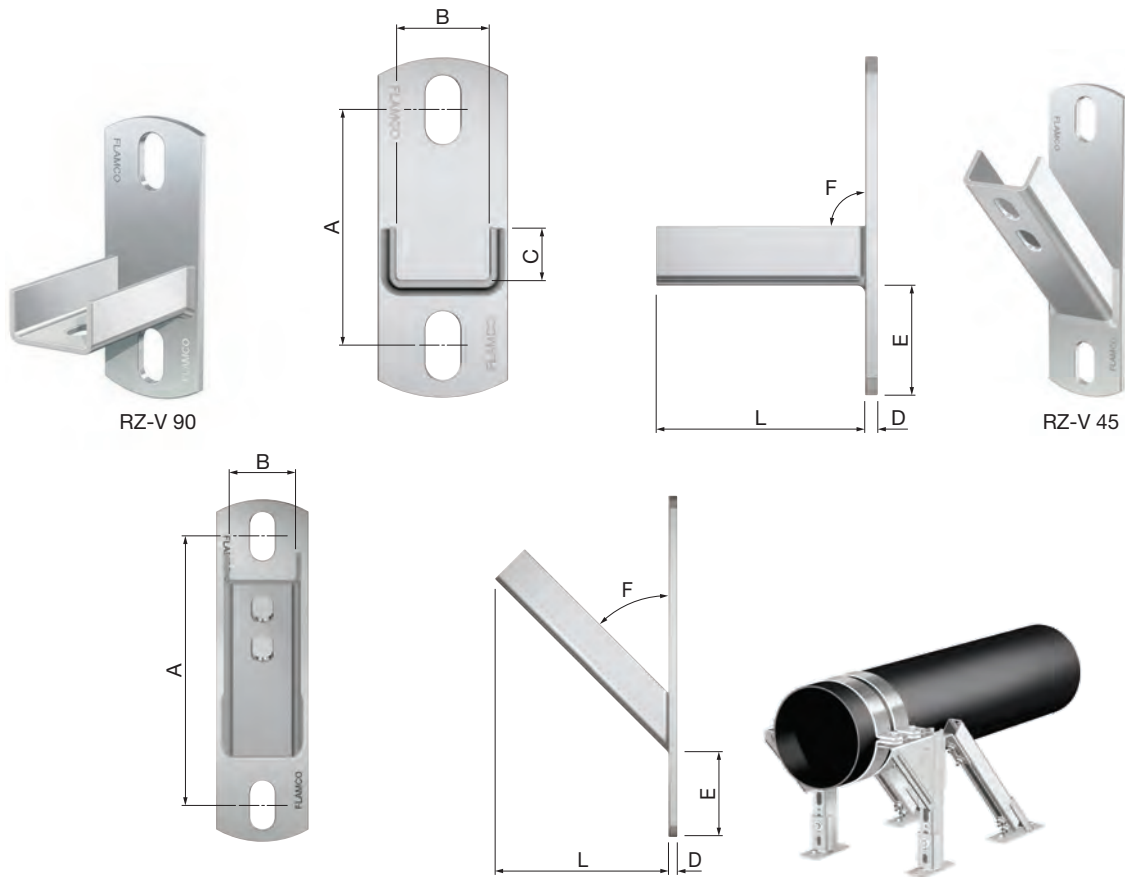



Type	Max. working load		Dimensions										Order Code
	Tensile [N]	Shear [N]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	H [mm]	J [mm]	L [mm]	Slot-hole [mm]		
ClickConnection RZ-H90	3000	1000	90	35,5	15	5	44,25	130	50	80	13 x 26	10	71807

RZ-V Rail Support Saddles

For mounting Flamco rails R 0 - 4 on the wall, ceiling or floor.

- Electrolytically zinc plated.
- One bolt rail fastening because of hole pattern.
- Adjustable through slotted holes.
- Can also be used for fixed point constructions.

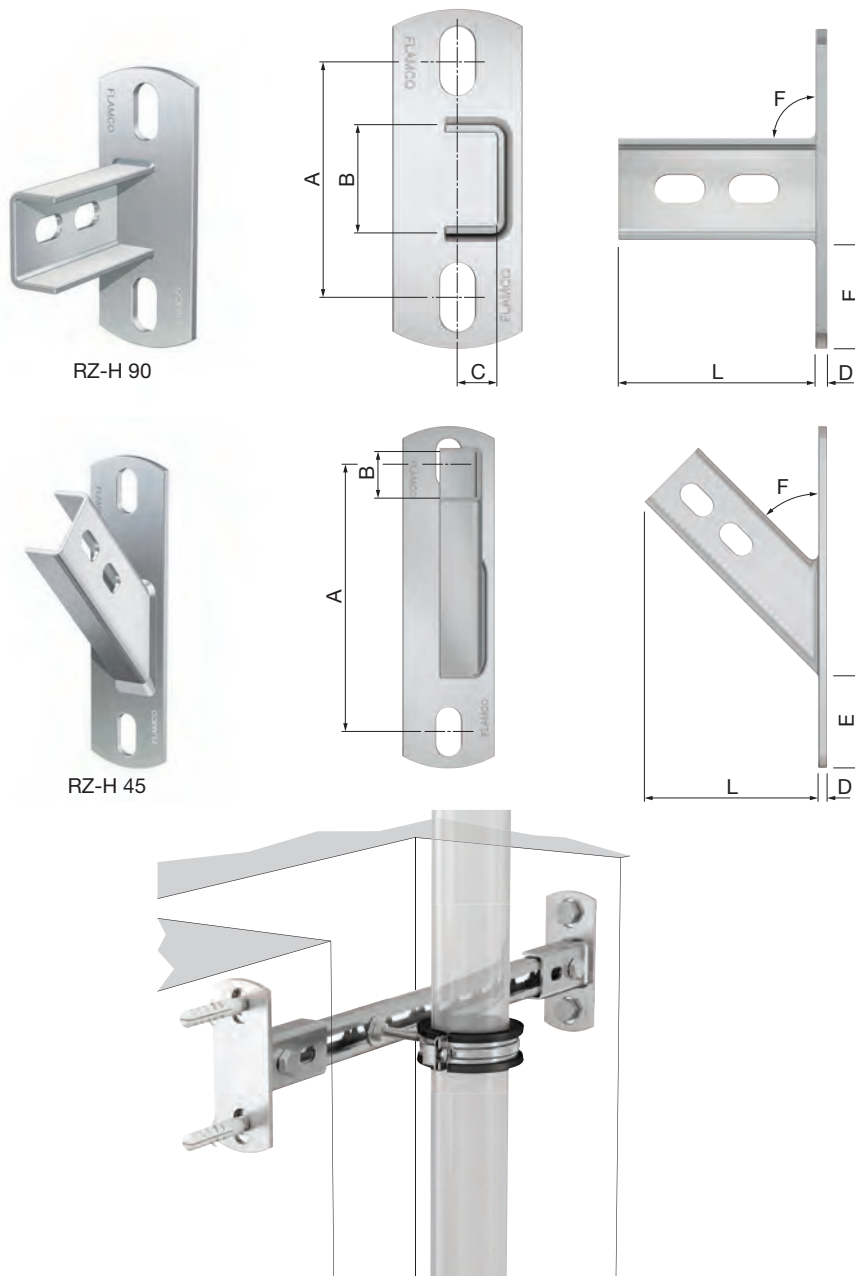



Type	Suitable for rail	Dimensions								Slotted hole			Order Code
		A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [°]	L [mm]	Base Plate [mm]	Base Plate [mm]	Saddle [mm]		
RZ-V 90	R 0 - R 4	90	35.5	20	5	45	90	80	130 x 50	13 x 26	11 x 20	10	71631
RZ-V 45	R 0 - 4	145	35.5	20	5	45	45	94	185 x 50	13 x 26	11 x 20	10	71636

RZ-H Rail Support Saddles

For mounting Flamco rails R 0 - 4 on the wall, ceiling or floor.

- Electrolytically zinc plated.
- One bolt rail fastening because of hole pattern.
- Adjustable through slotted holes.



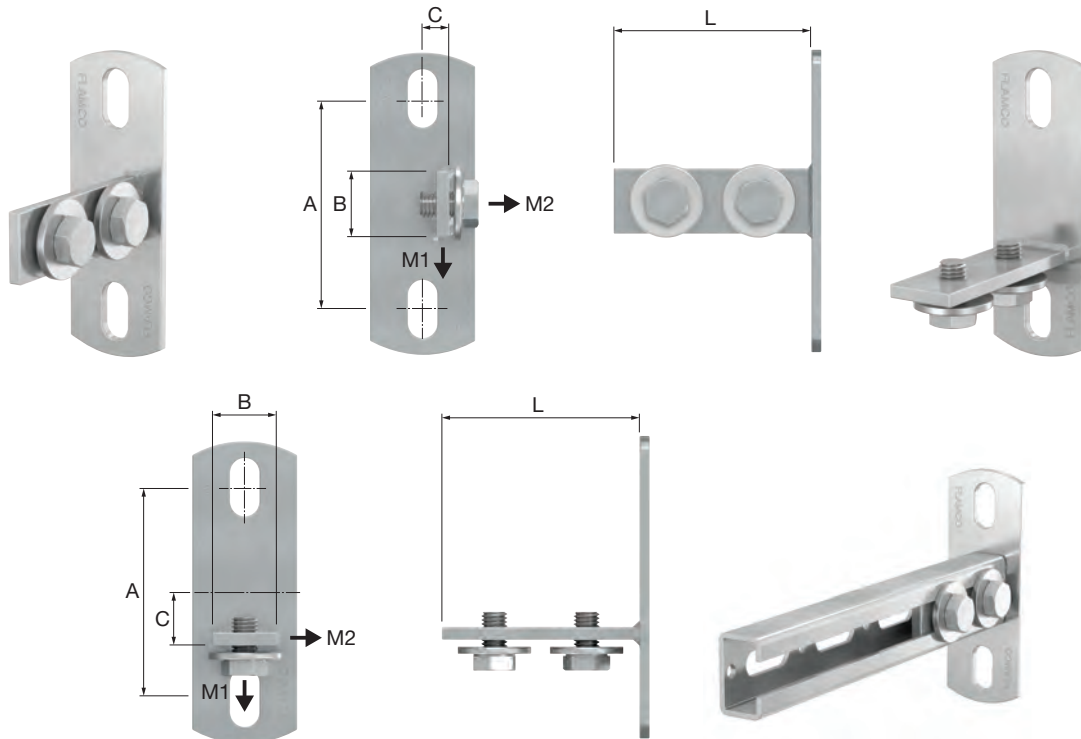
Type	Suitable for rail	Dimensions							Base Plate [mm]	Slotted hole			Order Code
		A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [°]	L [mm]		Base Plate [mm]	Saddle [mm]		
RZ-H 90	R 0 - 4	90	35.5	15	5	45	90	80	130 x 50	13 x 26	11 x 20	10	71630
RZ-H 45	R 0 - 4	145	35.5	15	5	45	45	94	185 x 50	13 x 26	11 x 20	10	71635


RAIL SUPPORT FLANGES

KF Rail Support Flanges

Flamco rail can be mounted rigidly to wall, ceiling and floor with the KF Rail Support Flanges. The available types KF-H and KF-V create the possibility to mount Flamco rail facing upwards, downwards or sideways at maximum working loads.

- Electrolytically zinc-plated.
- Including bolts M10 and washers.



Type	Suitable for rail		Order Code
KF-H	R 0 - 8	10	71640
KF-V	R 0 - 4, R 7, R 8	10	71641

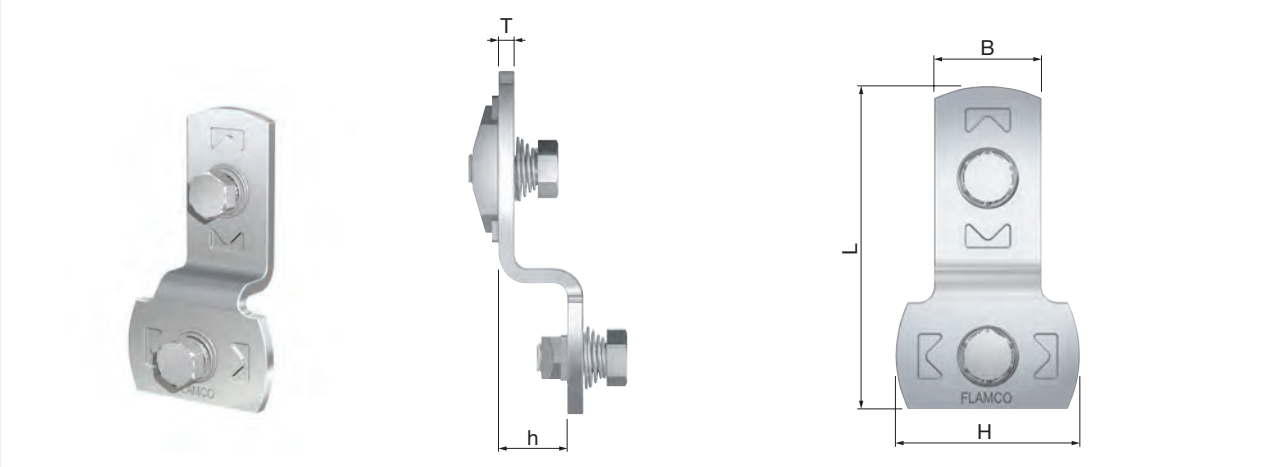
KF - Technical specifications


Type	Dimensions						Max. working load			Bolts
	A [mm]	B [mm]	C [mm]	L [mm]	Base Plate [mm]	Slotted hole [mm]	Bending moment (M1) [Ncm]	Bending moment (M2) [Ncm]	Shear [N]	
KF-H	80	25	10	75	115 x 40	11 x 22	3750	1750	1300	M 10
KF-V	80	25	20	75	115 x 40	11 x 22	1750	3750	1300	M 10

RAIL CLAMP SQUARES

ClickConnection PS31

- For Flamco rail R 0, R 1, R 2 and R 8.
- Easy mounting by pushing and turning the unit in the rail for 45° clockwise.
 - Reduced installation time.
 - No loose parts like studs, washers and nuts.
 - Electrolytically zinc plated.
 - Safety margin for minimum breaking load (V) = 3.



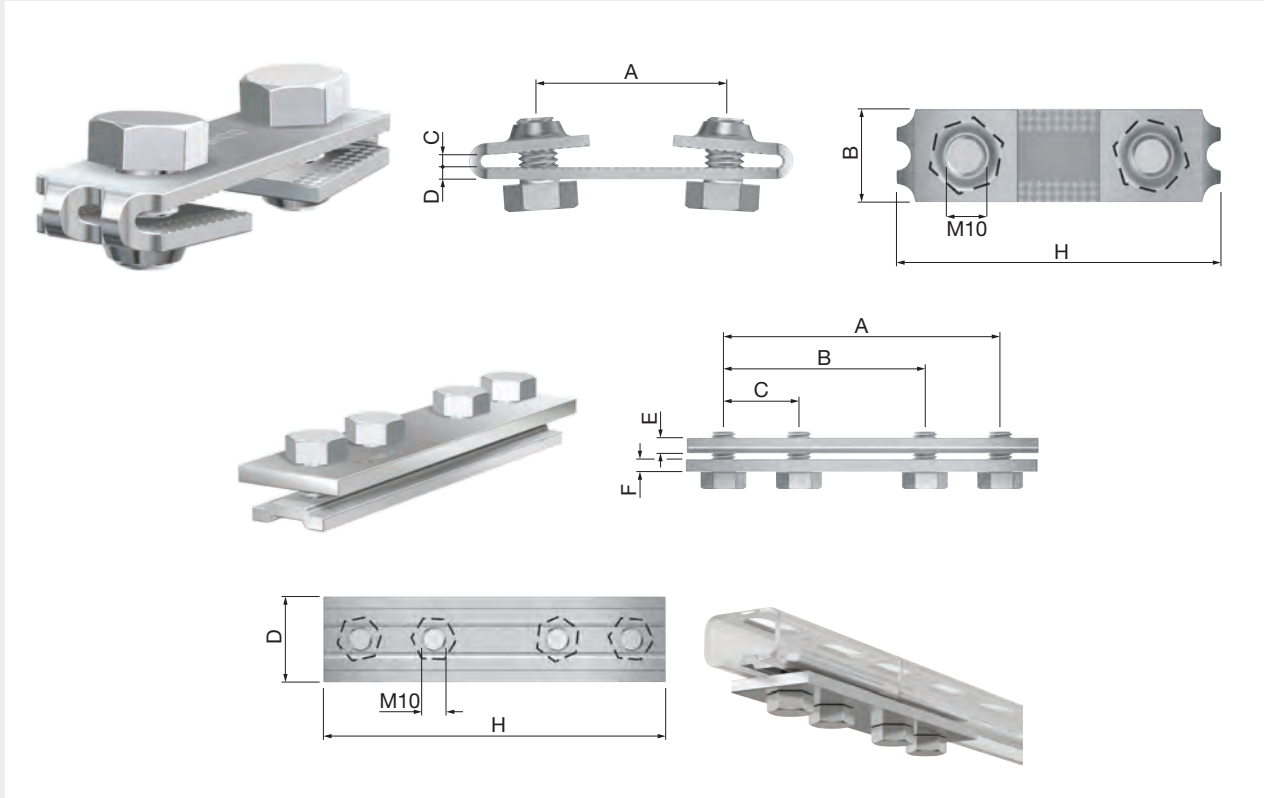
Type	Max. working load		Dimensions							Order Code
	Tensile [N]	Shear [N]	L [mm]	B [mm]	T [mm]	H [mm]	h [mm]			
ClickConnection PS31	3000	1000	105	35	5	60	21	20		71805


RAIL EXTENSIONS

RL Rail Extender

For the in-line connection of two Flamco rails.

- Electrolytically zinc plated.
- Including pre-assembled M 10 bolts.

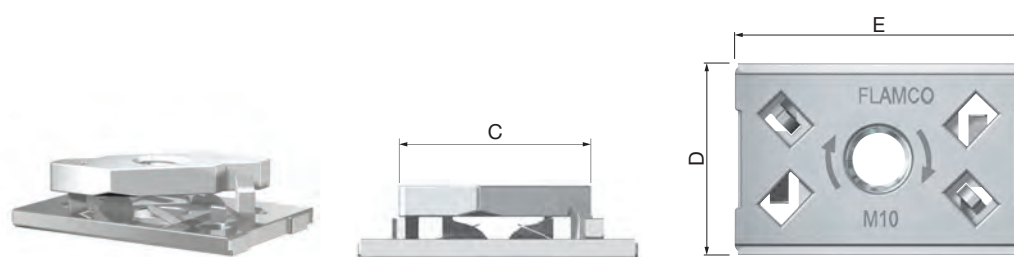



Type	Suitable for rail	Dimensions								Order Code
		A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	H [mm]		
RL 80	R 0 - 8	45	24	3	3	-	-	80	50	71605
RL 140	R 0 - R 8	110	80	30	35	6.2	5	140	50	71608

RAIL NUTS, HAMMER HEAD BOLTS AND SETS

ClickFit M

- For quick mounting of rail nut, hammer head bolts and sets.
- Suitable for any type of Flamco rail.
- Easy mounting by pushing and turning the unit in the rail for 45° clockwise.
- No-return stop (steel).
- Fire resistant (no plastic).
- Reduced installation time.
- No loose parts like studs, washers and nuts.
- Suitable for threaded rod ISO 965-2.
- Electrolytically zinc plated.
- Safety margin for minimum breaking load (V) = 3.

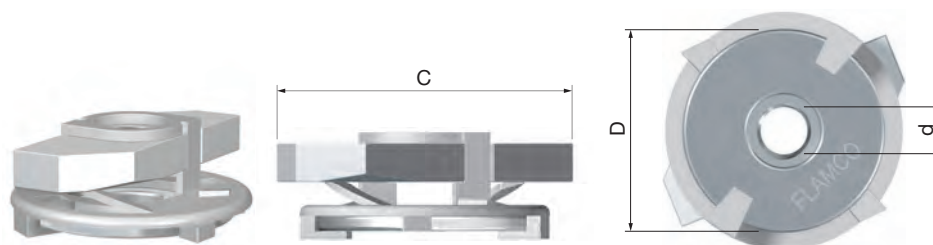



Type	Connection	Max. working load [N]	Max. tightening torque [Nm]	Rail nut (C) [mm]	Locking plate (D x E) [mm]		Order Code
ClickFit M 6	M 6	2100	10	39 x 13.8	30 x 45	100	80306
ClickFit M 8 *	M 8	2100	15	39 x 13.8	30 x 45	100	80307
ClickFit M 10 *	M 10	2100	15	39 x 13.8	30 x 45	100	80308

ClickEasy

For quick mounting of rail nut, hammer head bolts and sets.

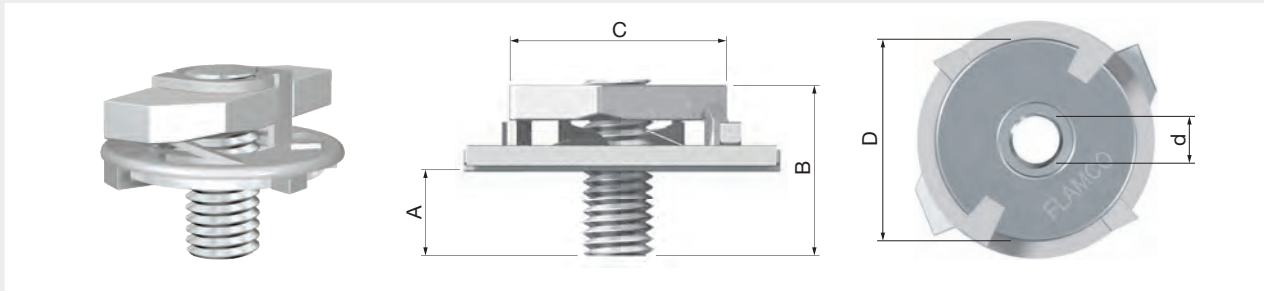
- Suitable for any type of Flamco rail.
- Non-return stop (plastic).
- Reduced installation time.
- No loose parts like studs, washers and nuts.
- Electrolytically zinc plated.
- Safety margin for minimum breaking load (V) = 3.




Type	Connection	Max. working load [N]	Max. tightening torque [Nm]	Rail nut (C) [mm]	Ø (D x d) [mm]		Order Code
ClickEasy M 6	M 6	1800	5	36 x 13.8	28 x 6.6	50	80360
ClickEasy M 8	M 8	1800	10	36 x 13.8	28 x 8.6	50	80361
ClickEasy M 10	M 10	1800	15	36 x 13.8	28 x 10.6	50	80362

ClickEasy HB

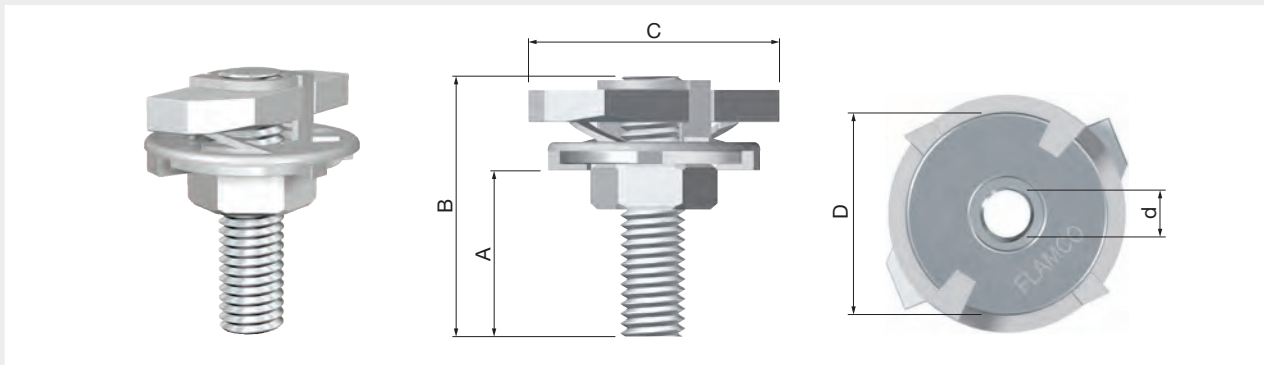
Similar to the ClickEasy, but fitted with threaded pin.




Type	Con- nection	Max. working load [N]	Max. tightening torque [Nm]	Rail nut C [mm]	Ø D x d [mm]	Threaded rod	Dimensions			Order Code
							A [mm]	B [mm]		
ClickEasy HB 8	M 8	1800	10	36 x 13.8	28 x 8.6	M 8 x 18	6	18	50	80366

ClickEasy HBS

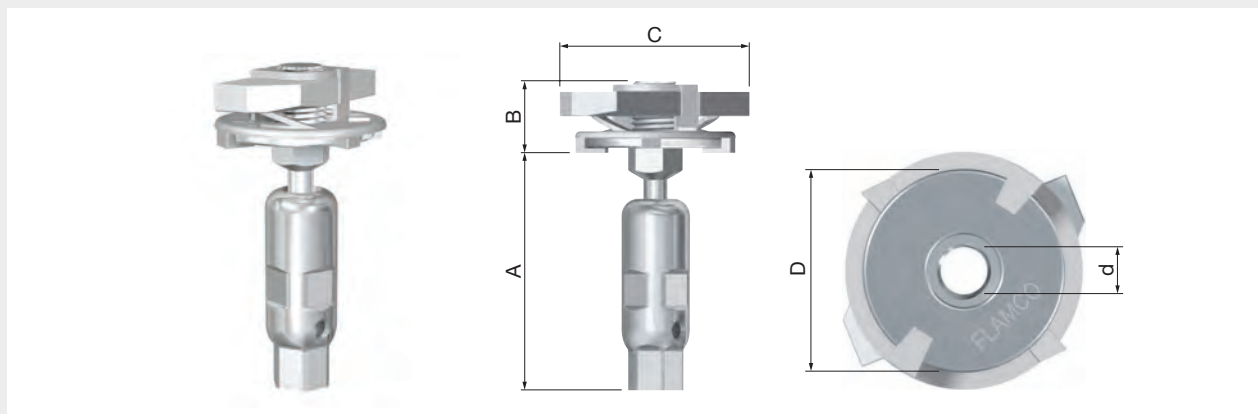
Similar to the ClickEasy, but fitted with threaded pin and locknut.



Type	Conne- ction	Max. working load [N]	Max. tightening torque [Nm]	Rail nut (C) [mm]	Washer (D x d) [mm]	Threaded rod	Dimensions			Order Code
							A [mm]	B [mm]		
ClickEasy HBS 8 x 25	M 8	1800	10	36 x 13.8	28 x 8.6	M 8 x 25	11	25	50	80374
ClickEasy HBS 8 x 30	M 8	1800	10	36 x 13.8	28 x 8.6	M 8 x 30	16	30	50	80375
ClickEasy HBS 8 x 40	M 8	1800	10	36 x 13.8	28 x 8.6	M 8 x 40	26	40	50	80376
ClickEasy HBS 8 x 50	M 8	1800	10	36 x 13.8	28 x 8.6	M 8 x 50	36	50	50	80377
ClickEasy HBS 8 x 80	M 8	1800	10	36 x 13.8	28 x 8.6	M 8 x 80	66	80	50	80384
ClickEasy HBS 8 x 100	M 8	1800	10	36 x 13.8	28 x 8.6	M 8 x 100	86	100	50	80386
ClickEasy HBS 10 x 30	M 10	1800	15	36 x 13.8	28 x 10.6	M 10 x 30	16	30	50	80379
ClickEasy HBS 10 x 40	M 10	1800	15	36 x 13.8	28 x 10.6	M 10 x 40	26	40	50	80380
ClickEasy HBS 10 x 50	M 10	1800	15	36 x 13.8	28 x 10.6	M 10 x 50	36	50	50	80381

ClickEasy K

Similar to the ClickEasy, but fitted with K(S) ball hanger.

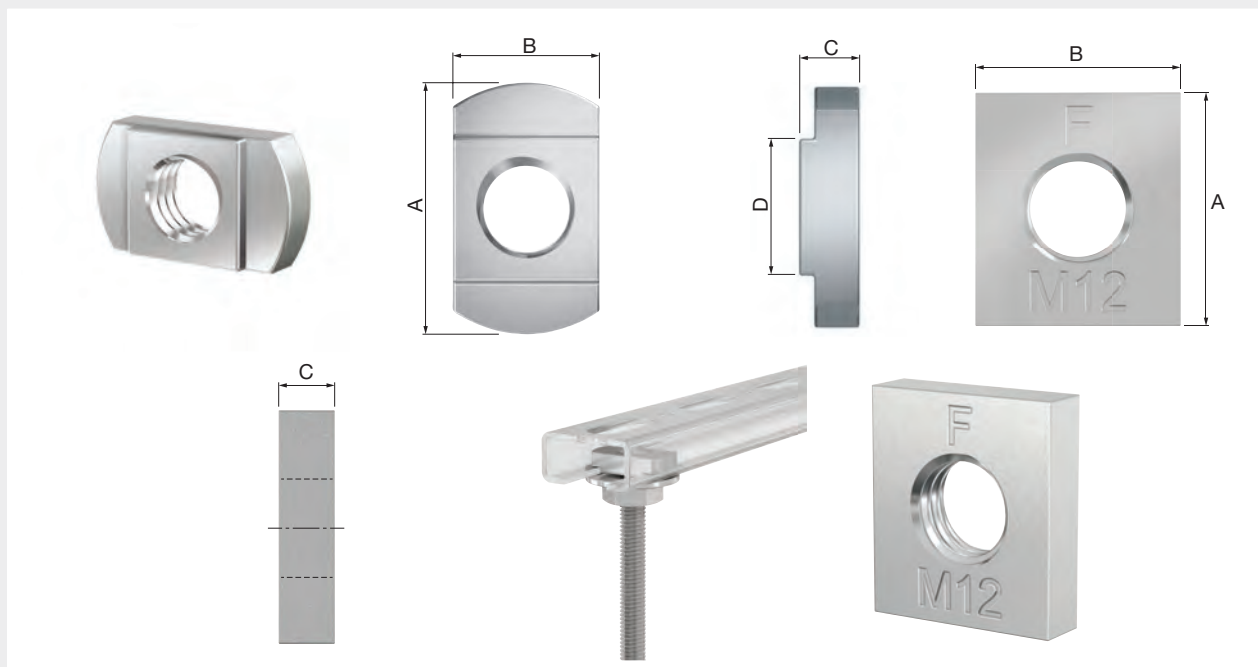


Type	Con- nection	Max. work- ing load [N]	Max. tightening torque [Nm]	Rail nut (C) [mm]	Locking washer (D x d) [mm]	Ball hanger	Dimensions			Order Code
							A [mm]	B [mm]		
ClickEasy K 8	M 8	1800	10	36 x 13.8	28 x 8.6	KS 8 x 8	50	13	50	80391
ClickEasy K 10	M 10	1800	10	36 x 13.8	28 x 10.6	KS 10 x 10	50	13	50	80392

M..s Sliding Nuts

For easy mounting of a suspension in Flamco rail.

- Electrolytically zinc plated.

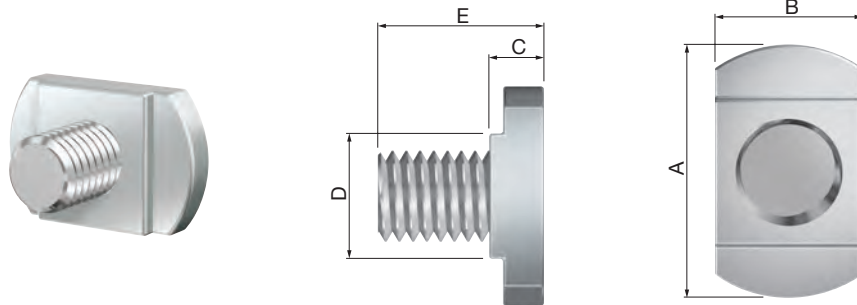



Type	Suitable for rail	Connection	Dimensions					Order Code
			A [mm]	B [mm]	C [mm]	D [mm]		
M 6s	R 0 - 8	M 6	23	15	5	14	1000	80301
M 8s	R 0 - 8	M 8	23	15	5	14	1000	80302
M 10s	R 0 - 8	M 10	23	15	5	14	1000	80303
M 12s	R 0 - 8	M 12	25	22	6	14	250	80304

HB Hammer Head Bolts

For easy mounting of a suspension in Flamco rail.

- Electrolytically zinc plated.

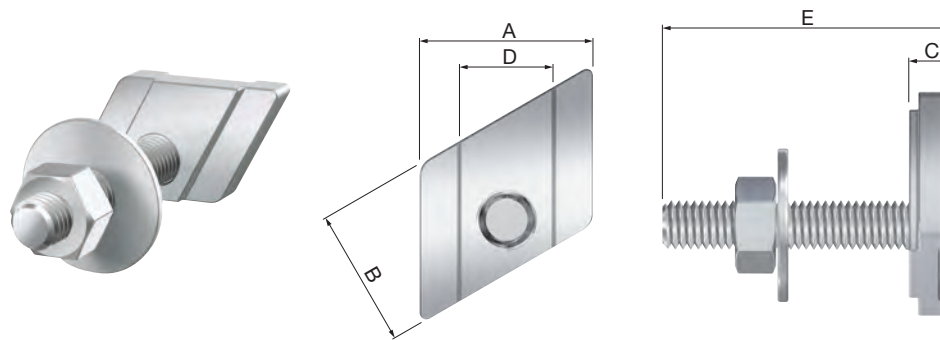



Type	Suitable for rail	Connection	Dimensions						Order Code
			A [mm]	B [mm]	C [mm]	D [mm]	E [mm]		
HB 6	R 0 - 8	M 6	24	14	5	14	14	500	70401
HB 8	R 0 - 8	M 8	24	14	5	14	15	500	70402
HB 10	R 0 - 8	M 10	24	14	5	14	17	500	70403

HBS Hammer Head Bolt Sets

The hammer head bolt set makes simple and fast mounting possible of Flamco pipe mounting material to all types of Flamco rail.

- Supplied complete with nut and washer.
- Electrolytically zinc plated.
- Safety margin for minimal breaking load (V) = 3.



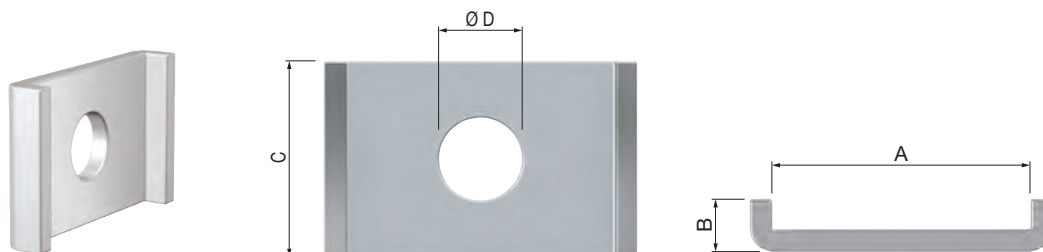
Type	Connection	Max. working load [N]	Dimensions						Order Code
			A [mm]	B [mm]	C [mm]	D [mm]	E [mm]		
HBS 8 x 25	M 8	3000	25	20	6.5	13.5	25	10	70450
HBS 8 x 30	M 8	3000	25	20	6.5	13.5	30	10	70451
HBS 8 x 40	M 8	3000	25	20	6.5	13.5	40	10	70452
HBS 8 x 50	M 8	3000	25	20	6.5	13.5	50	10	70453
HBS 8 x 60	M 8	3000	25	20	6.5	13.5	60	10	70454
HBS 8 x 80	M 8	3000	25	20	6.5	13.5	80	10	70456
HBS 8 x 100	M 8	3000	25	20	6.5	13.5	100	10	70458
HBS 10 x 25	M 10	3000	25	20	6.5	13.5	25	10	70462
HBS 10 x 40	M 10	3000	25	20	6.5	13.5	40	10	70463
HBS 10 x 60	M 10	3000	25	20	6.5	13.5	60	10	70464
HBS 10 x 80	M 10	3000	25	20	6.5	13.5	80	10	70465
HBS 10 x 100	M 10	3000	25	20	6.5	13.5	100	10	70466


CLAMPING PLATES

For easy mounting of a suspension in Flamco rail.

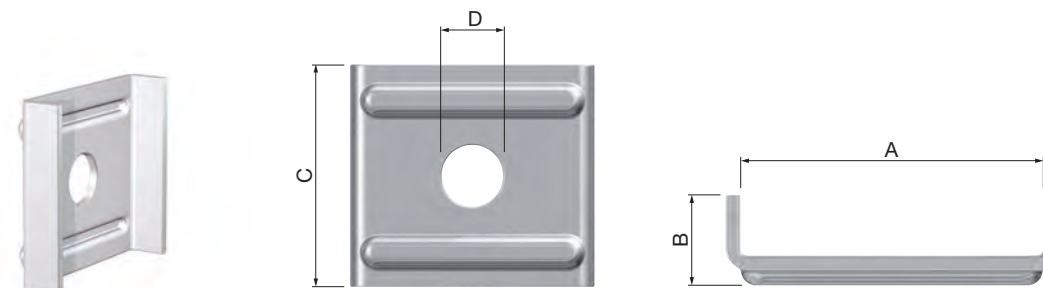
- Electrolytically zinc plated.


SP Clamping Plates



Type	Suitable for rail	Connection	Dimensions					Order Code
			A [mm]	B [mm]	C [mm]	D [mm]		
SP 8	R 2 - 4	M 8	34	7	25	8.5	100	80608
SP 10	R 2 - 4	M 10	34	7	25	10.5	100	80610
SP 12	R 2 - 4	M 12	34	7	25	12.5	100	80612

SP..SR Clamping Plates



Type	Suitable for rail	Connection	Dimensions					Order Code
			A [mm]	B [mm]	C [mm]	D [mm]		
SP 8 SR	R 6 - R 8	M 8	40	12	40	8.5	50	80632
SP 10 SR	R 6 - R 8	M 10	40	12	40	11.5	50	80634
SP 12 SR	R 6 - R 8	M 12	40	12	40	12.5	50	80636

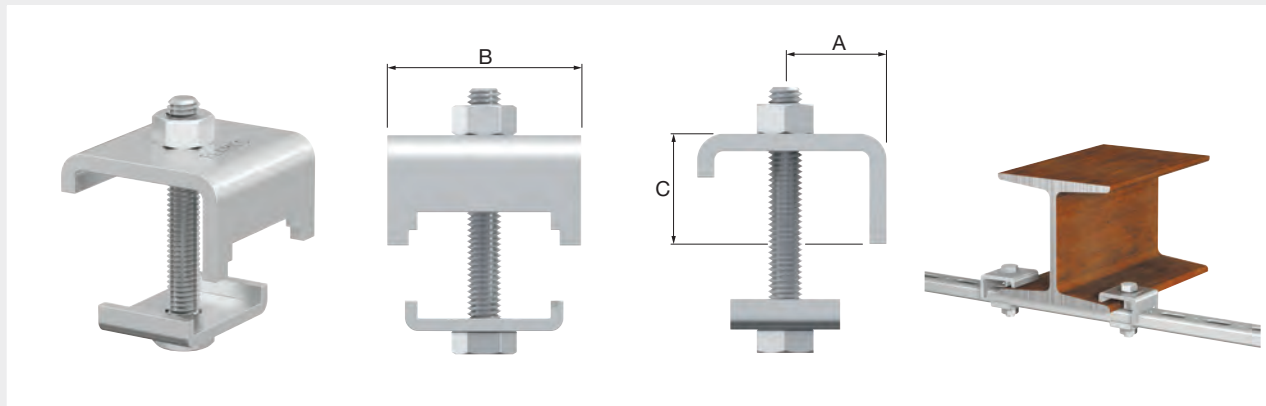
RAIL GIRDER CLIPS


RB Rail Girder Clips

For mounting Flamco rail to steel profiles without drilling or welding.
Can be used in combination with Flamco rails R 1 - 8.

- Electrolytically zinc plated.
- Load depends on Flamco rail.
- Supplied complete with upper plate and lower plate, nut and bolt.

N.B.: Two RB clips per fixing.

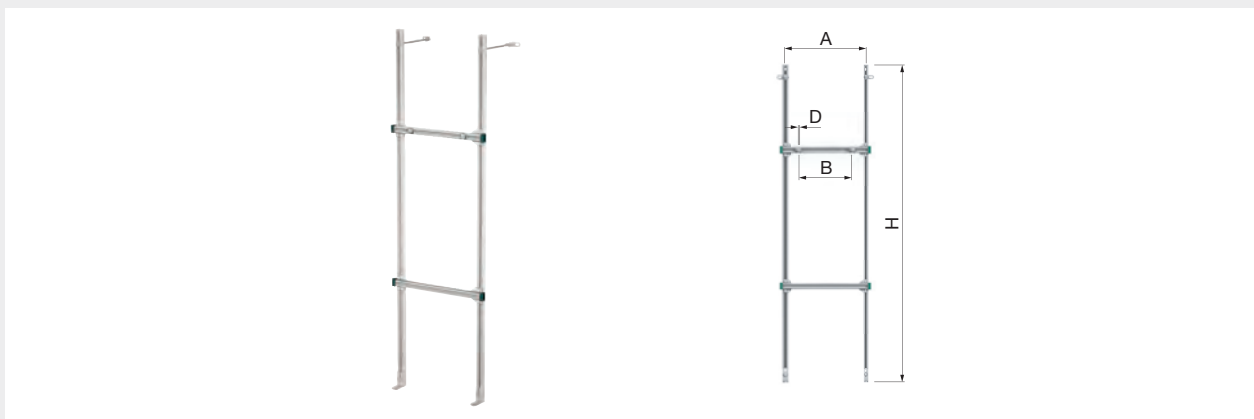



Type	Suitable for rail	Bolt	Max. clamping height C [mm]	Dimensions		Dimensions clamping plate [mm]		Order Code
				A [mm]	B [mm]			
RB 1	R 1	M 8 x 55	15	20	44	36 x 25	50	80601
RB 2	R 2	M 8 x 55	15	20	44	40 x 25	50	80602
RB 3 / 4	R 3 - 4	M 10 x 80	15	20	44	40 x 25	50	80604
RB 6	R 6	M 10 x 100	15	20	50	44 x 40	50	80603
RB 7 / 8	R 7 - 8	M 10 x 80	15	20	50	44 x 40	10	80605

GAS WALL BOILER CONSOLES

GWK Boiler Console

- Parts zinc plated, uprights galvanized.
- HS brackets for making various structures with Flamco rail.
- HS brackets are zinc plated.



Type	Connection (D)	Dimensions				Order Code
		A [mm]	B [mm]	H [mm]		
GWK 490	M 8	490	460	1700	1	71750
GWK 650	M 8	650	620	1700	1	71751


THREADED RODS AND TUBES

D Threaded Ends



Pre-cut pieces of threaded rod in various lengths as connection pieces between clips, rails, backplates, anchors, etc.

- Electrolytically zinc-plated (in compliance with European directive 2002/95/EC "ROHS").
- DIN 976/A, tolerance class 6g.
- Steel Fe37 - 1.0037, quality 4.8.
- Length tolerance from 25 to 400 mm: +0/-1mm.

Type	Connection	L. [mm]		Order Code
D 8 x 25	M 8	25	100	70750
D 8 x 40	M 8	40	100	70751
D 8 x 70	M 8	70	100	70752
D 8 x 80	M 8	80	100	70753
D 8 x 100	M 8	100	100	70754
D 8 x 150	M 8	150	100	70760
D 8 x 200	M 8	200	100	70761
D 10 x 25	M 10	25	100	70755
D 10 x 40	M 10	40	100	70756
D 10 x 50	M 10	50	100	70765
D 10 x 60	M 10	60	100	70757
D 10 x 80	M 10	80	100	70758
D 10 x 100	M 10	100	100	70759
D 10 x 120	M 10	120	100	70762
D 10 x 150	M 10	150	100	70763
D 10 x 200	M 10	200	100	70764

Threaded Tube Female




- Female thread.
- In accordance with ISO 228-1.

Type	Connection	L. [mm]		Order Code
Threaded pipe 1/2 x 1 m	G 1/2" F	1000	5	51615

Threaded Tube Male



- Male thread.
- In accordance with ISO 228-1.


Type	Size	L. [mm]		Order Code
Threaded pipe 1/2 x 2 m	G 1/2" M	2000	10	51611
Threaded pipe 3/4 x 2 m	G 3/4" M	2000	5	51612
Threaded pipe 1 x 2 m	G 1" M	2000	5	51613

D Threaded Rods



For all fixing and constructions requiring threaded rod.

- Produced according to current standards with 60 ° top angle for maximum load.
- Electrolytically zinc plated, except order code 70095.
- Steel grade 4.8.
- Material S235JR EN 10250/2.
- In accordance with DIN 976-1.


Type	Connection	Length [m]	Max. working load [N]		Order Code
D 6	M 6	1	2500	100m	70011
D 8	M 8	1	4500	50m	70012
D 8	M 8	3	4500	75m	70042
E M 6 (project article)	M 6	1	2500	100m	70091
E M 8 (project article)	M 8	1	4500	50m	70092
E M 10 (project article)	M 10	1	7000	25m	70093
E M 12 (project article)	M 12	1	10000	20m	70094
D 8	M 8	2	4500	50m	70032
D 10	M 10	1	7000	25m	70013
D 10 copper	M 10	1	7000	1m	70095
D 10	M 10	2	7000	40m	70033
D 10	M 10	3	7000	60m	70043
D 12	M 12	1	10000	20m	70014
D 12	M 12	2	10000	30m	70034
D 12	M 12	3	10000	45m	70044
D 16	M 16	1	18000	10m	70015
D 20	M 20	1	25000	5m	70016

MOUNTING STRIPS

LB Mounting Strip

- The plastic coating is stuck to the steel core, so that it cannot slide.
- Can be cut easily to the right length.
- Quick and easy to install.
- High mechanical tensile strength.
- Maximum working temperature: 120 °C.
- Distance between the holes (centres): 15 mm.



Type	In cassette	Roll [m]	Dimensions		Max. working load [N]		Order Code
			Width [mm]	Perforations [mm]			
LB 17 galv.	✓	10	17	Ø 6.5	800	1	71015
LB 17 galv.	-	25	17	Ø 6.5	800	1	71020
LB 19 coated	✓	10	19	Ø 6.5	800	1	71016

EB Eye Bolts



For easy mounting of LB mounting strip to the ceiling.

- Electrolytically zinc plated.
- EB 6 x 25 recommended for LB 17 and LB 19.
- EB 8 x 20 recommended for LB 27.

Type	Characteristics	Connection		Order Code
EB 8 x 20	Metric thread and round hole	M 8 x 20	100	71027

EB Female Suspension Eye



Forged cast iron, zinc plated.

Type	Connection		Order Code
EB 25 - 8	M 8	250	33267


NUTS

For easy mounting of a suspension in Flamco rail.

- Electrolytically zinc plated.


M Nuts



Type	Spanner size (SW)	Connection	Height of nut [mm]		Order Code
M 6	10	M 6	5	1000	70201
M 8	13	M 8	6.5	1000	70202
M 10	17	M 10	8	1000	70203
M 12	19	M 12	10	500	70204
M 16	24	M 16	13	250	70205
M 20	30	M 20	16	100	70206

M..h Nuts



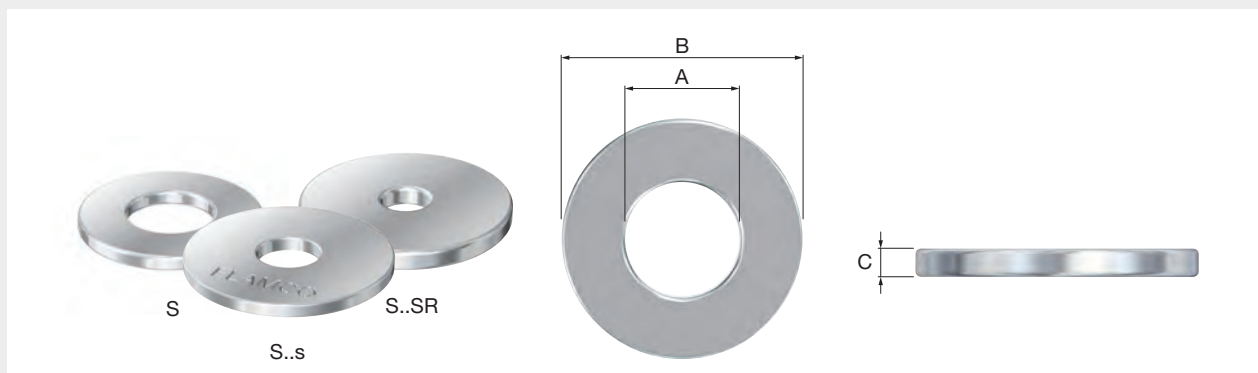
Type	Spanner size (SW)	Connection	Height of nut [mm]		Order Code
M 8h	13	M 8	3	1000	70102
M 10h	17	M 10	4	1000	70103


WASHERS

For easy mounting of a suspension in Flamco rail.

- Electrolytically zinc plated.

S Washers




Type	Connection (A)	Dimensions			Order Code
		B [mm]	C [mm]		
S 6	M 6	14	0.8	250	70801
S 8	M 8	18	1.5	250	70802
S 10	M 10	22	1.5	250	70803
S 12	M 12	28	2.0	1000	70804
S 16	M 16	33	2.0	250	70805
S 20	M 20	40	2.5	250	70806
S 6s	M 6	25	2.0	1000	70811
S 8s	M 8	28	2.0	1000	70812
S 10s	M 10	28	2.0	1000	70813
S 8 SR	M 8	40	3.5	100	70832
S 10 SR	M 10	40	3.5	100	70833
S 12 SR	M 12	40	5.0	100	70834

ANCHORS, PLUGS AND SCREWS

SCS Self Tapping Concrete Screw

- For installation on top of the rail.
- Suitable for installation in i.a. cracked and non-cracked concrete, pavers, natural stone, sand-lime bricks and clay bricks.
- Complies with the requirements of VdS CEA 4001.
- With hexagonal head.
- Electrolytically zinc plated.



Type	Dimensions		Spanner size (SW)	Drill diameter [mm]	Drill depth [mm]	Rec. tension load * [kN]		Order Code
	Ø [mm]	L. [mm]						
SCS 7.5 x 50	7.5	50	13	6	55	3.7	100	82050
SCS 7.5 x 60	7.5	60	13	6	55 / 65	3.7 / 5.3	100	82051
SCS 7.5 x 80	7.5	80	13	6	55 / 65	3.7 / 5.3	50	82052

* In non-cracked concrete C20/25.



F 120


SCS - Fire performance

Type	Max. working load [N]			
	30 min.	60 min.	90 min.	120 min.
SCS 7.5 x 50	500	500	500	400
SCS 7.5 x 80	1100	800	500	400
SCS 7.5 x 60	1100	800	500	400

SCS-I Self-tapping Concrete Screw

- Suitable for installation in cracked and non-cracked concrete, pavers, natural stone, sand-lime bricks and clay bricks.
- Complies with the requirements of VdS CEA 4001.
- Electrolytically zinc plated.
- With internal thread.
- With removable combination nut (M 8/10).



Type	Dimensions		Spanner size (SW)	Drill diameter [mm]	Drill depth [mm]	Rec. tension load * [kN]		Order Code
	Ø [mm]	L. [mm]						
SCS-I 7.5 x 35	7.5	35	13	6	45	1,9	50	82044
SCS-I 7.5 x 60	7.5	60	13	6	65	5.3	40	82054

* In non-cracked concrete C20/25.



F 120


SCS-I - Fire performance

Type	Max. working load [N]			
	30 min.	60 min.	90 min.	120 min.
SCS-I 7.5 x 35	900	800	600	400
SCS-I 7.5 x 60	900	800	600	400

SCS-P Self-tapping Concrete Screw

- For installation inside the rail.
- Suitable for installation in cracked and non-cracked concrete, pavers, natural stone, sand-lime bricks and clay bricks.
- Complies with the requirements of VdS CEA 4001.
- With panhead.
- Electrolytically zinc plated.



Type	Dimensions		Torx	Drill diameter [mm]	Drill depth [mm]	Rec. tension load * [kN]		Order Code
	Ø [mm]	L. [mm]						
SCS-P 7.5 x 25 **	7.5	25	30	6	30	1.2	200	82058
SCS-P 7.5 x 45	7.5	45	30	6	55	3.7	100	82059

* In non-cracked concrete C20/25.

** No part of the certification.



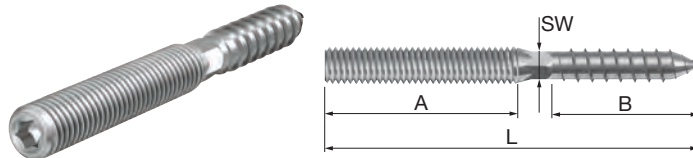
SCS-P - Fire performance


Type	Max. working load [N]			
	30 min.	60 min.	90 min.	120 min.
SCS-P 7.5 x 45	900	800	600	400

HO Dowel Screws

Metric thread to wood thread dowel screws for fixing BM wall clips and BS universal clips.

- Without plug.
- Electrolytically zinc plated.
- As per DIN 13, part 12, rolled thread.
- With torques.
- Without collar.
- With hexagonal midsection.
- Steel grade 4.8.

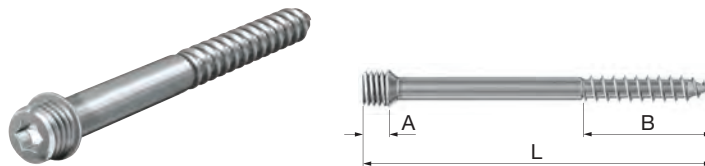



Type	Threaded Connection (D)	L [mm]	A [mm]	Dimensions B [mm]	Spanner size (SW)	Ø (wood thread) [mm]	Torx		Order Code
HO 8 x 50	M 8	50	15	30	6	7	25	100	70607
HO 8 x 80	M 8	80	40	30	6	7	25	100	70601
HO 8 x 100	M 8	100	40	40	6	7	25	100	51702
HO 8 x 120	M 8	120	50	50	6	7	25	100	70604
HO 8 x 160	M 8	160	50	50	6	7	25	100	51705
HO 8 x 200	M 8	200	50	45	6	8	25	50	51715
HO 10 x 80	M 10	80	20	50	8	9	25	100	51707
HO 10 x 90	M 10	90	30	50	8	9	25	100	70602
HO 10 x 100 (without Torx)	M 10	100	30	60	8	9	-	100	51708
HO 10 x 120	M 10	120	40	55	8	10	25	100	70605

* With two-sided midsection.

HO-K Dowel Screws With Collar

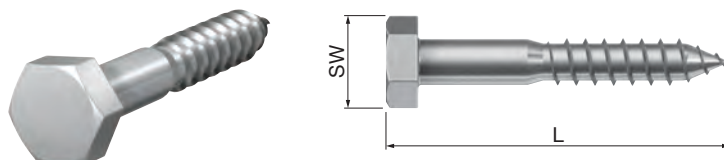
- Electrolytically zinc plated.
- As per DIN 13, part 12, rolled thread.
- With torques.
- With collar.
- With rounded midsection.




Type	Connection	L [mm]	Dimensions A [mm]	B [mm]	Ø [mm]		Order Code
HO-K 10 x 50	M 10	50	7	35	7	100	51730
HO-K 10 x 80	M 10	80	7	55	7.5	100	51731
HO-K 10 x 100	M 10	100	7	55	7.5	100	51732
HO-K 10 x 120	M 10	120	7	55	7.5	100	51733

HZ Lag Bolts

- With hexagonal head.
- Electrolytically zinc plated.
- As per DIN 13, part 12, rolled thread.
- Steel grade 4.8.
- In accordance with DIN 571.




Type	Dimensions		\emptyset [mm]		Order Code
	Spanner size [SW]	L [mm]			
HZ 8 x 50	13	50	8	50	70606

AS Wedge Anchors

- Suitable for use in non-cracked concrete and natural stone.
- AS 8 x 75 to AS 8 x 115 with marking for standard and reduced anchoring depth.
- AS 8 x 75 to AS 8 x 115 with ETA approval. With extra large S 8s 8 x 28 washer as standard.
- Electrolytically zinc plated.



Type	Connection	Dimensions		Drill hole \emptyset [mm]		Order Code
		L [mm]	Spanner size (SW)			
AS 8 x 50 **	M 8	50	13	8	100	82030
AS 8 x 75	M 8	75	13	8	100	82035
AS 8 x 90	M 8	90	13	8	100	82036

** Without ETA approval.



AS - Technical specifications

Type	Standard anchorage depth					Reduced anchorage depth				
	Drill depth [mm]	Setting depth [mm]	Ancho- rage depth [mm]	Shear Load [kN]	Pull-out Load [kN]	Drill depth [mm]	Setting depth [mm]	Ancho- rage depth [mm]	Shear Load [kN]	Pull-out Load [kN]
AS 8 x 50	45	35	24	5	5	-	-	-	-	-
AS 8 x 75	65	59.5	48	5.3	5	50	46.5	35	5.3	4.2
AS 8 x 90	65	59.5	48	5.3	5	50	46.5	35	5.3	4.2
AS 8 x 115	65	59.5	48	5.3	5	50	46.5	35	5.3	4.2

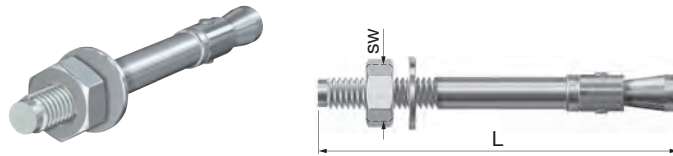
AS - Fire performance


Type	Setting depth [mm]	Max. working load [N]			
		30 min.	60 min.	90 min.	120 min.
AS 8 x 75	59.5	800	660	520	450
AS 8 x 90	59.5	800	660	520	450
AS 8 x 115	59.5	800	660	520	450

AS-S Seismic Wedge Anchors

Certified for seismic loading, performance categories C1 and C2 (at standard anchoring depth).

- Approved for use in cracked and non-cracked concrete, steel beams, base plates channels, tracks and wood structures.
- Suitable for use in compression resistant natural stone (without approval).
- Two effective anchoring depths for greater flexibility.
- Electrolytically zinc plated.



Type	Connection	Dimensions		Drill hole Ø [mm]		Order Code
		L [mm]	Spanner size (SW)			
AS-S 8 x 75	M 8	75	13	8	100	82070
AS-S 8 x 95	M 8	95	13	8	100	82071
AS-S 8 x 115	M 8	115	13	8	100	82072
AS-S 10 x 90*	M 10	90	13	10	50	82073
AS-S 10 x 130*	M 10	130	13	10	50	82074

* FM approved.



AS-S - Technical specifications

Type	Standard anchorage depth					Reduced anchorage depth				
	Drill depth [mm]	Setting depth [mm]	Ancho- rage depth [mm]	Shear Load [kN]	Pull-out Load [kN]	Drill depth [mm]	Setting depth [mm]	Ancho- rage depth [mm]	Shear Load [kN]	Pull-out Load [kN]
AS-S 8 x 75	60	52	46	7	5	49	41	35	7	5
AS-S 8 x 95	60	52	46	7	5	49	41	35	7	5
AS-S 8 x 115	60	52	46	7	5	49	41	35	7	5
AS-S 10 x 90	75	68	60	11.5	9	55	48	40	10.4	7.5
AS-S 10 x 130	75	68	60	11.5	9	55	48	40	10.4	7.5

AS-S - Fire performance

Type	Standard Setting depth [mm]	Max. working load [N]				Reduced Setting depth [mm]	Max. working load [N]			
		30 min.	60 min.	90 min.	120 min.		30 min.	60 min.	90 min.	120 min.
AS-S 8 x 75	52	1500	1100	800	700	41	1500	1100	800	600
AS-S 8 x 95	52	1500	1100	800	700	41	1500	1100	800	600
AS-S 8 x 115	52	1500	1100	800	700	41	1500	1100	800	600
AS-S 10 x 90	68	2600	1900	1400	1200	48	2600	1900	1300	1000
AS-S 10 x 130	68	2600	1900	1400	1200	48	2600	1900	1300	1000

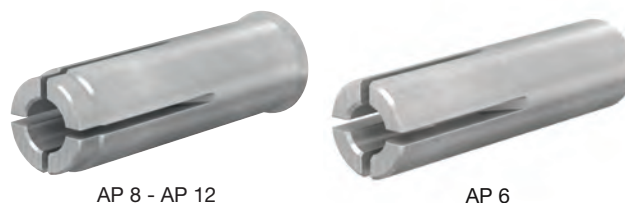
AP Drop In Anchors

For indoor use. Suitable for:

- Reinforced and non-reinforced concrete according to EN 206-1: 200.
- Suitable for cracked and non-cracked concrete.
- Concrete with strength classes from C20/25 to C50/60.
- Suitable for environments that require fire safety.
- With collar (AP 8 - AP 12) to prevent the anchor being struck too deep into the hole.
- With metric internal thread for use in combination with threaded rods and bolts.
- Electrolytically zinc plated.
- For use in combination with an APP pin only.


AP 10 - 12: With FM approval.

AP 10 - 12: In full compliance with the guideline VdS CEA 4001: 2014-04 (05) for applications of water extinguishing systems on concrete elements.



AP 8 - AP 12

AP 6

Type	Connection	Drill diameter [mm]	Drill depth [mm]	Rec. tensile load * [kN]	Min. mutual distance at max. workload [mm]	Min. distance to concrete edge at max. workload [mm]		Order Code
AP 6	M 6	8	30	3.0	55	95	100	82000
AP 8	M 8	10	33	3.0	60	95	100	82001
AP 10 **	M 10	12	44	4.8	100	135	100	82002
AP 12 **	M 12	15	54	6.4	120	165	50	82003

* In non-cracked concrete C20/25 - C50/60.

** FM approval.




AP - Fire performance

Type	Setting depth [mm]	Max. working load [N]			
		30 min.	60 min.	90 min.	120 min.
AP 6	30	400	300	300	300
AP 8	30	900	800	600	500
AP 10	40	1600	1300	1000	800
AP 12	50	2300	1900	1400	1200

APP Pin

For AP push-in anchor.




Type	Connection		Order Code
APP 8	M 8	1	82006
APP 10	M 10	1	82007

AB Brass Drop In Anchor

For indoor and outdoor applications.

- Corrosion resistant.
- Can be applied without using a hammering pin. The anchor expands when screwing in bolts / threaded rod.
- With metric internal thread.



Type	Connection		Order Code
AB 8	M 8	100	82011
AB 10	M 10	100	82012

AT Tipping Dowels

Special dowel for fastening to cavity walls and ceilings, suspended ceilings and corrugated roofing sheets. The turnable treaded rod allows each fastening point to be levelled individually.

- With large washer.




Type	Connection	L. [mm]	Drill diameter [mm]	Max. working load [N]		Order Code
AT 8 x 100	M 8	100	20	4000	50	82025
AT 10 x 100 *	M 10	100	25	6500	25	82026

* With FM-approval.



PP Plastic Plug



Type	Dimensions		Drill diameter [mm]	Drill depth [mm]	Suitable for		Order Code
	Ø [mm]	L. [mm]					
PP 10 x 50	10	50	10	60	M 8	100	70702
PP 12 x 60	12	60	12	70	M 10	100	70703
PP 14 x 70	14	70	14	80	M 12	100	70704

MOUNTING TOOLS

For the easy tightening of wood screw studs, coach screws and studs.

Drive Tool



- Electrolytically zinc plated.
- One assembly spanner with four different thread sizes.
- Rotating lever.

Type	Connection		Order Code
Drive tool	M 6 / M 8 / M 10 / M 12	50	71400

Flamco threaded end bit set

Threaded end bit set supplied in a soft case.



Type	Connection		Order Code
Flamco threaded end bit set	M 6 / M 8 / M 10 / M 12	20	71401


CONNECTORS

AD Adapters

For a rigid construction with a BS universal clip.

- Electrolytically zinc plated.
- Can be used in conjunction with a GP 1/2" backplate.

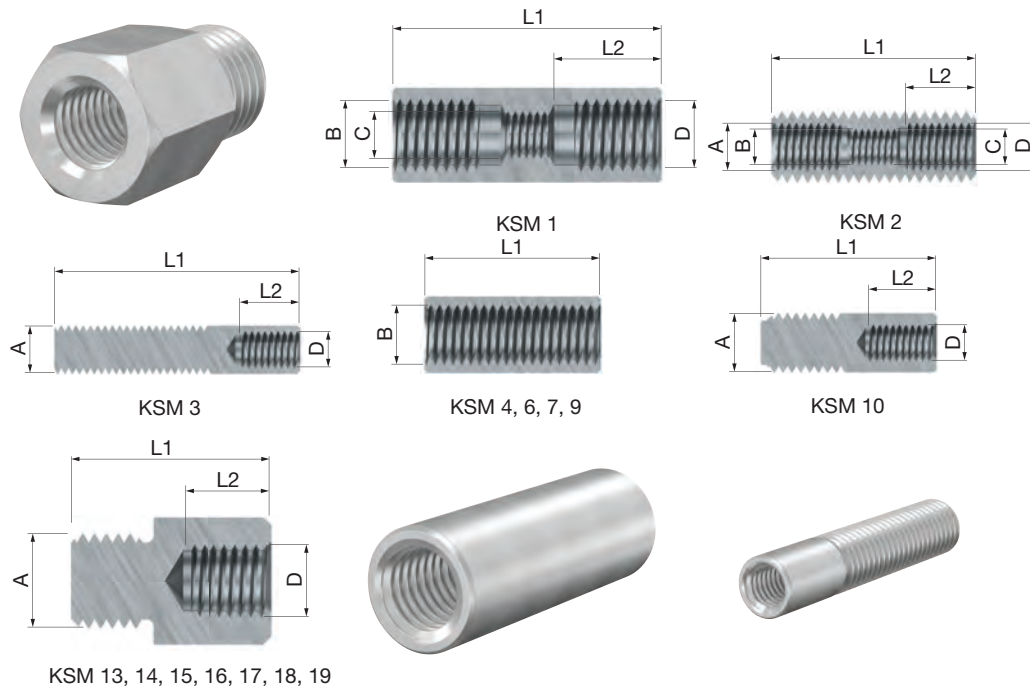



Type	Connection		Dimensions			Order Code
	D1	D2	B [mm]	L [mm]		
AD 8 x 1/2	M 8 M	1/2" F	26	31	100	70914
AD 10 x 1/2	M 10 M	1/2" F	26	33	100	70915
AD 1/2 x 3/4	1/2" F	3/4" F	31.5	26	100	70922

KSM Connectors

For connecting BK pipe hangers under each other, two threaded rods, or BS universal clips.

- Electrolytically zinc plated.
- As per DIN 13, part 12, rolled thread.



Type	Connection				Dimensions		Shape		Order Code
	A (M)	B (F)	C (F)	D (F)	L 1 [mm]	L 2 [mm]			
KSM 1	-	M 12	M 8	M 12	46	15	round	25	70901
KSM 2	M 12	M 8	M 6	M 8	35	10	round	25	70902
KSM 3	M 8	-	-	M 6	42	8	round	25	70903
KSM 4	-	M 10	-	-	30	-	hex.	25	70904
KSM 6	-	M 6	-	-	20	-	hex.	25	70906
KSM 7	-	M 8	-	-	25	-	hex.	25	70907
KSM 9	-	M 12	-	-	30	-	hex.	25	70909
KSM 10	M 10	-	-	M 6	30	10	round	500	70910
KSM 13	M 8	-	-	M 10	22	7	hex.	25	70913
KSM 14	M 10	-	-	M 12	25	7	hex.	25	70917
KSM 15	M 12	-	-	M 10	23	7	hex.	25	70918
KSM 17	M 12	-	-	M 16	35	12	hex.	25	70919
KSM 18	M 16	-	-	M 12	34	12	hex.	25	70920
KSM 19	M 10	-	-	M 8	21.5	8	hex.	25	70921

Sleeve




To make connections between clips, backplates and threaded tubes.

Type	Connection		Order Code
Sleeve 1/2	1/2" F	100	52810

Reducing Connector

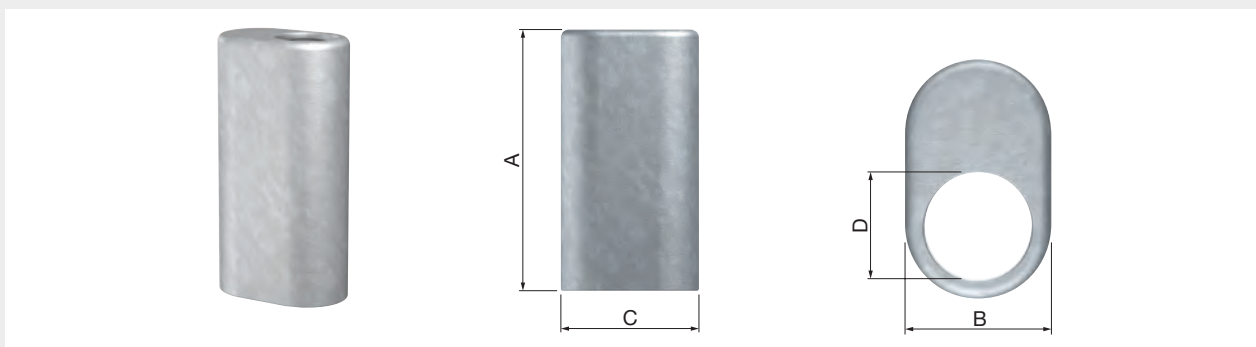



Type	Connection			Order Code
	From	To		
3/4 - 1/2 adapter	3/4"	1/2"	100	52417
1/2 - M 10 adapter	1/2"	M 10	100	52418

PV Parallel Connectors

For the easy and fast connection of two threaded rods of the same diameter.

- Zamac.
- Vertical adjustment possible.
- Safety margin for minimum breaking load (V) = 3.

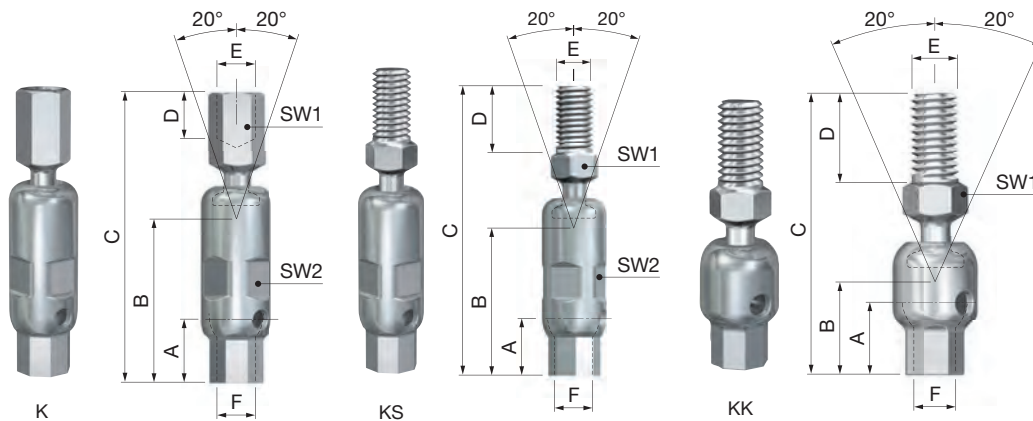



Type	Connection	Dimensions				Max. working load [N]		Order Code
		A [mm]	B [mm]	C [mm]	D [mm]			
PV 8	M 8	34	11	18.5	8	2800	50	70951
PV 10	M 10	35	14	23	10	2800	50	70952

K Ball Hangers

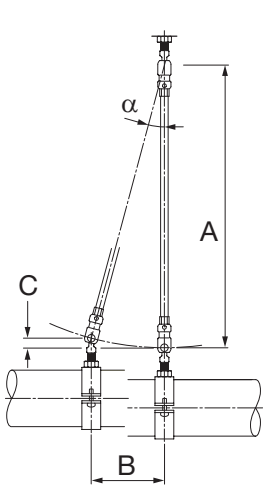
For a flexible and vertically adjustable suspension.

- Electrolytically zinc plated.
- Maximum swing of the ball element: $2 \times 20^\circ$.
- Vertically adjustable by turning lowest part of the ball hanger after fitting the pipe.
- Inspection hole for checking length of rod inside the hanger.
- Safety margin for minimum breaking load (V) = 3.



Type	Connection		Dimensions						Max. working load [N]		Order Code
	E	F	C [mm]	A [mm]	B [mm]	D [mm]	SW1 [mm]	SW2 [mm]			
K 6 x 6	M 6 F	M 6 F	58	8	30	8	10	12	1500	50	80103
K 8 x 8	M 8 F	M 8 F	58	8	30	9	10	12	2500	50	80104
K 12 x 12	M 12 F	M 12 F	90	8	30	13	19	24	5000	50	80105
KS 8 x 6	M 8 M	M 6 F	63	8	30	15	10	12	1500	50	80110
KS 8 x 8	M 8 M	M 8 F	63	8	30	15	10	12	2500	50	80111
KS 10 x 10	M 10 M	M 10 F	64	8	30	15	13	13	2500	50	80106
KK 8 x 8	M 8 M	M 8 F	46	8	29	15	10	-	2500	50	80107
KK 10 x 10	M 10 M	M 10 F	47	8	30.5	15	13	-	2500	50	80108

A [cm]	B ($\alpha = 20^\circ$) [cm]	C ($\alpha = 20^\circ$) [cm]
5	1,82	0,30
10	3,64	0,60
15	5,46	0,90
20	7,28	1,21
25	9,10	1,51
30	10,92	1,81
35	12,74	2,11
40	14,56	2,41
45	16,38	2,71
50	18,20	3,02
55	20,02	3,32
60	21,84	3,62
65	23,66	3,92
70	25,48	4,22
75	27,30	4,52
80	29,12	4,82
85	30,94	5,13
90	32,76	5,43
95	34,58	5,73
100	36,40	6,03



EYE BOLTS

EB Female Suspension Eye




Forged cast iron, zinc plated.

Type	Connection		Order Code
EB 25 - 8	M 8	250	33267

Eye Bolts



Type	Version	Connection thread		Order Code
Copper screw eye	Copper	M 6 x 24	100	52808
Chrome/nickel alloy screw eyes	Chrome/nickel alloy	M 6 x 24	100	52806

EB Eye Bolts



For easy mounting of LB mounting strip to the ceiling.

- Electrolytically zinc plated.
- EB 6 x 25 recommended for LB 17 and LB 19.
- EB 8 x 20 recommended for LB 27.

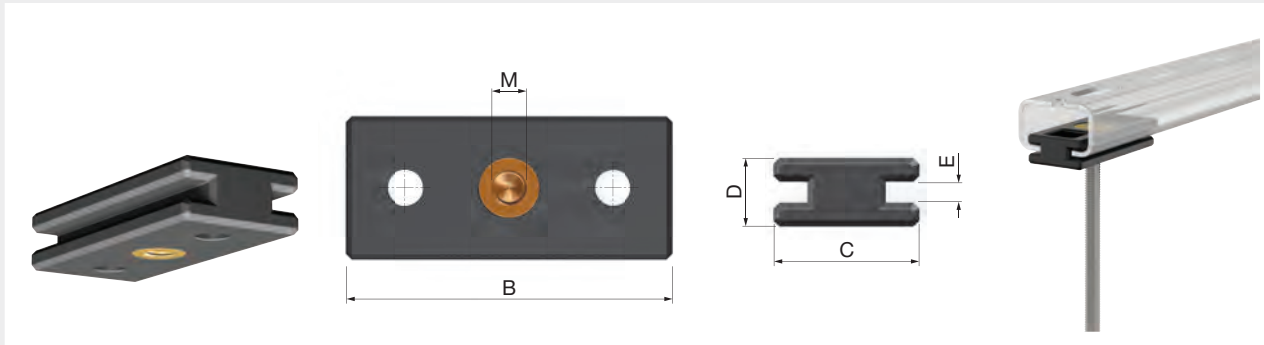
Type	Characteristics	Connection		Order Code
EB 8 x 20	Metric thread and round hole	M 8 x 20	100	71027


EXPANSION UNITS

The expansion units are specially designed to allow for thermal expansion along the length of the pipe. This makes for a superb and solid joint which if necessary can move with the pipe.

GK 50 Expansion Units

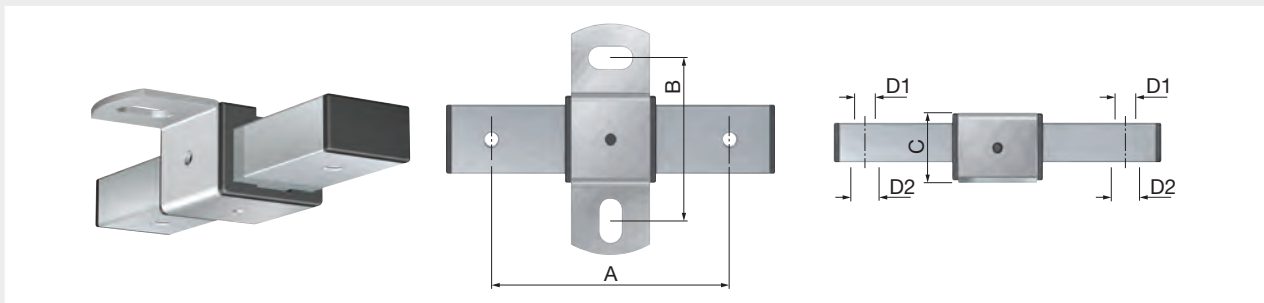
- Sliding block: nylon PA 6.
- Threaded connection: brass.
- Suitable for any type of Flamco rail.
- Maximum axial movement depends on rail length.




Type	Connection (M)	Dimensions				Max. working load [N]		Order Code
		B [mm]	C [mm]	D [mm]	E [mm]			
GK 50 - M 8	M 8	55	24	11	3.4	500	50	71722

GK 150 Expansion Units

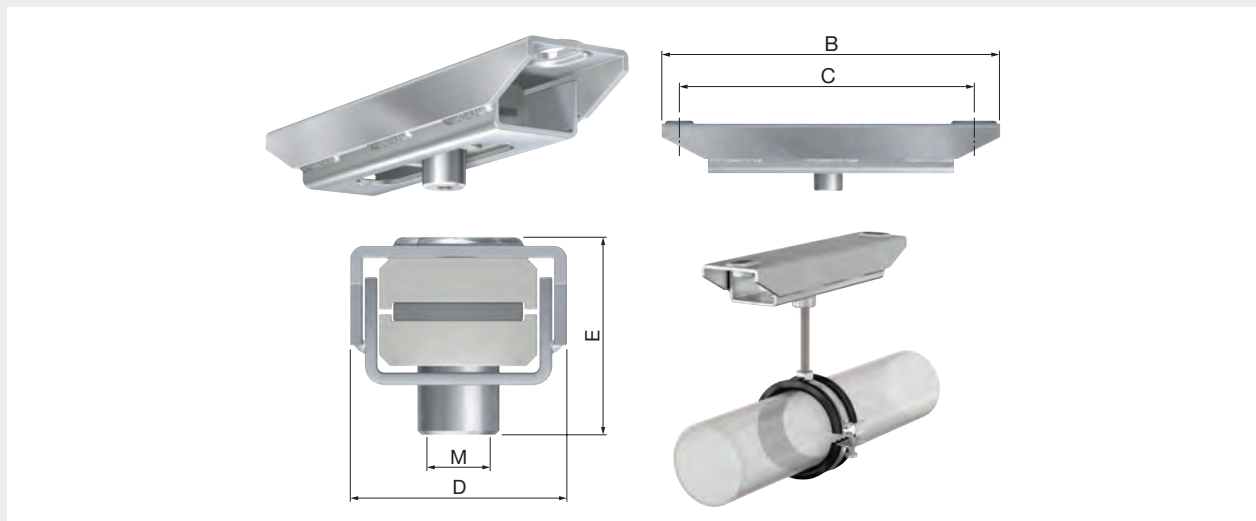
- Backplate S235JR EN 10250/2: electrolytically zinc plated.
- Carriage holder: nylon PA 6.
- Tube S235JR EN 10250/2: electrolytically zinc plated.
- Plate stop: plastic.
- Standard axial movement 60 mm.
- Enlarged axial movement when Flamco rail R 2 is used instead of pipe.
- Slotted holes for accurate adjustment of the expansion unit.
- Suitable for different threaded connections.




Type	Connection		Dimensions					Max. working load [N]		Order Code
	D1	D2	A [mm]	B [mm]	C [mm]	Ground plate [mm]	Slotted hole [mm]			
GK 150 - M 8/10	M 8	M 10	120	82	35	117 x 140	11 x 22	1500	10	71724

GK 500 Expansion Units

- Carriage holder S235JR EN 10250/2: electrolytically zinc plated.
- Sliding block: nylon PA 6.
- Pressure plate S235JR EN 10250/2: electrolytically zinc plated.
- Maximum axial movement 90 mm.
- Pressure plate completely enclosed in sliding block.
- Slotted holes for accurate adjustment of the expansion unit.



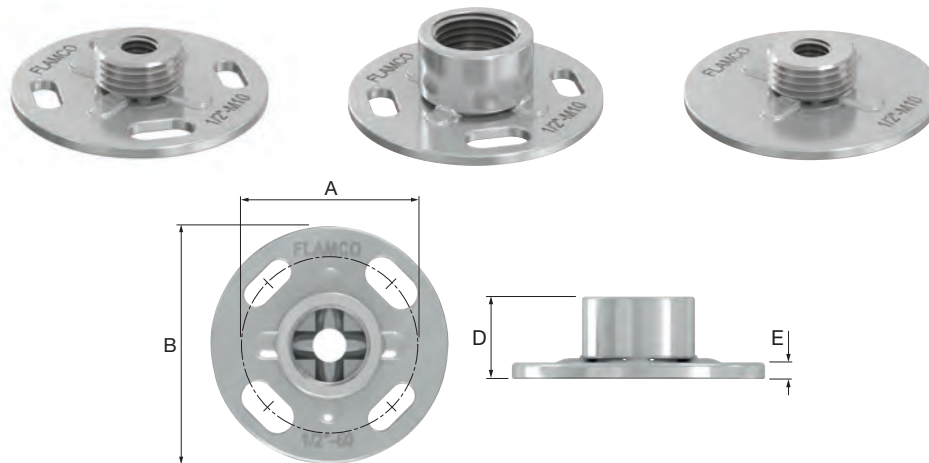
Type	Connection (M)	Dimensions					Max. working-load [N]		Order Code
		B [mm]	C [mm]	D [mm]	E [mm]	Slotted hole [mm]			
GK 500 - M 10	M 10	220	195	50	45	11 x 22	5000	10	71714
GK 500 - M 12	M 12	220	195	50	45	11 x 22	5000	10	71716


BACKPLATES

For a rigid wall or ceiling fastening of a clip by means of a threaded rod/pipe.

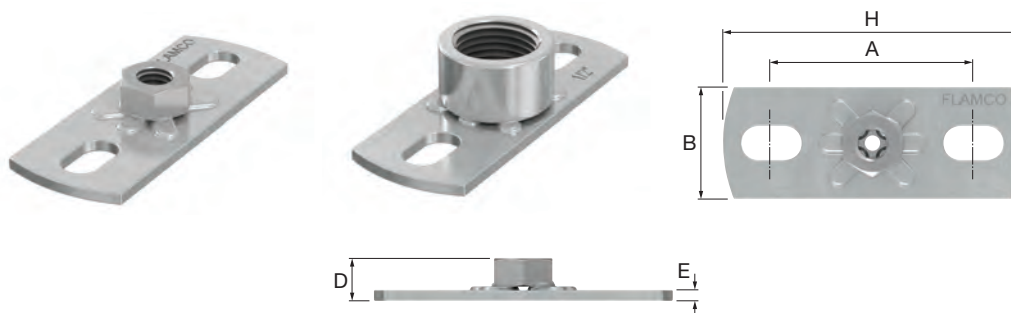
- Electrolytically zinc plated.
- Slotted holes for fixing.
- Can also be used in fixed point constuctions, in combination with KB clips or BVP bracket, fixed point.


GP Backplates Ø 60



Type	Connection	Dimensions				Slotted hole [mm]		Order Code
		A [mm]	B [mm]	D [mm]	E [mm]			
GP 1/2 - 60	1/2" F	44	Ø 60	18	3	15 x 8 / 14 x 6	50	39416
GP round with slotted hole	1/2" M / M 10 F	44	Ø 60	13	3	15 x 8 / 14 x 6	50	39422
GP round without slotted hole	1/2" M / M 10 F	-	Ø 60	13	3	-	50	39423

GP Backplates 80 x 30

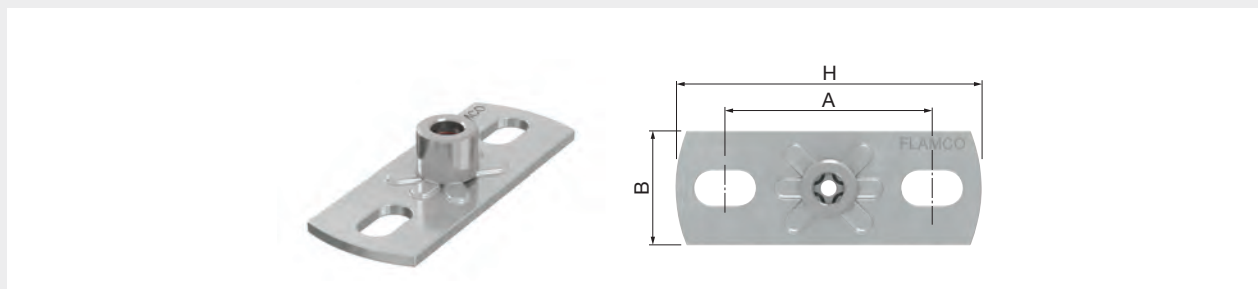



Type	Connection	Dimensions					Slotted hole [mm]		Order Code
		A [mm]	B [mm]	H [mm]	D [mm]	E [mm]			
GP 8 / 10 - 80 x 30	M 8 / 10	54	30	80	18	3	9 x 16	50	39410
GP 8 - 80 x 30 *	M 8	54	30	80	11	3	9 x 16	50	39417
GP 10 - 80 x 30 *	M 10	54	30	80	13	3	9 x 16	50	39413
GP 12 - 80 x 30	M 12	54	30	80	15	3	9 x 16	50	39415
GP 1/2 - 80 x 30 *	1/2" F	54	30	80	18	3	9 x 16	50	39418
GP 1/2 / M 10 - 80 x 30 *	1/2" M / M 10 F	54	30	80	11	3	9 x 16	50	39409

*Also available in stainless steel (Inox V 4 A, 1.4435).

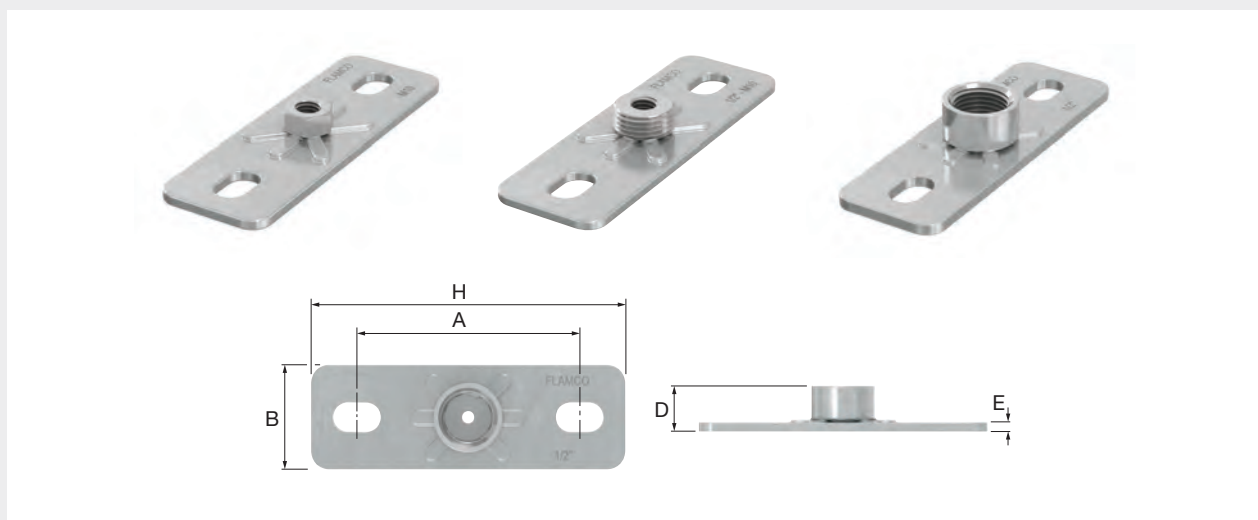
GP-C Backplates 80 x 30


- Safety margin for minimum breaking load (V) = 3.



Type	Connection	Max. working load [N]	Max. torque [Ncm]	Dimensions				Order Code
				A [mm]	B [mm]	H [mm]		
GP-C M 8 - 80 x 30	M 8	600	1250	54	30	80	50	39400

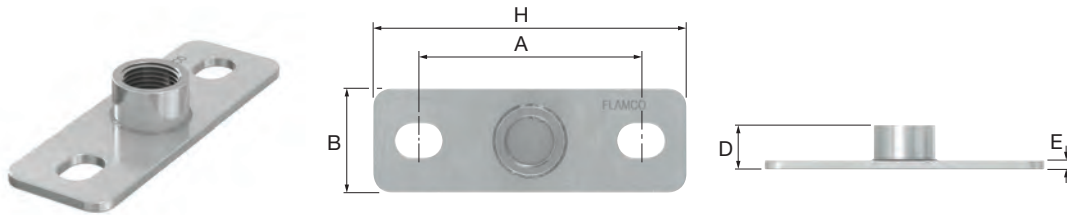
GP Backplates 120 x 40




Type	Connection	Max. vert. working load [N]	Dimensions					Slotted hole [mm]		Order Code
			A [mm]	B [mm]	H [mm]	D [mm]	E [mm]			
GP 8 - 120 x 40	M 8	2000	85	40	120	12	4	11 x 18	50	39432
GP 10 - 120 x 40	M 10	2500	85	40	120	14	4	11 x 18	50	39433
GP 1/2" / M 10 - 120 x 40	1/2" M / M 10 F	4500	85	40	120	12	4	11 x 18	50	39442
GP 12 - 120 x 40	M 12	3000	85	40	120	16	4	11 x 18	50	39434
GP 1/2" - 120 x 40	1/2" F	10000	85	40	120	19	4	11 x 18	50	39419
GP 3/4" - 120 x 40	3/4" F	6000	85	40	120	19	4	11 x 18	50	39411
GP 1" - 120 x 40	1" F	6500	85	40	120	25	4	11 x 18	50	39412

GPS Backplates 120 x 40

- Welded all around.



Type	Connection	Dimensions					Slotted hole [mm]		Order Code
		A [mm]	B [mm]	H [mm]	D [mm]	E [mm]			
GPS 1/2 - 120 x 40	G 1/2" F	85	40	120	19	4	13 x 18	50	39437
GPS 3/4 - 120 x 40	G 3/4" F	85	40	120	21	4	13 x 18	50	39438
GPS 1 - 120 x 40	G 1" F	85	40	120	25	4	13 x 18	50	39439

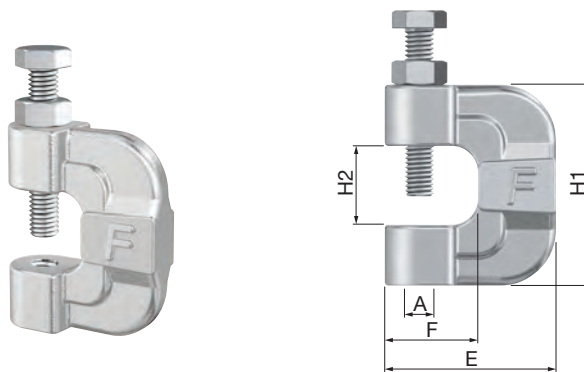
PROFILE FIXINGS


For fixing a single suspension under a steel profile, without the need for drilling or welding. They are available in different threaded connections and some versions may be adjusted vertically after fixing.

KC Profile Clamps

For securing a single mounting next to or under a steel profile without welding or drilling.

- Forged steel C 22/C 35 - DIN 17200.
- Bolt: steel DIN 564-8.8.
- Electrolytically zinc plated.

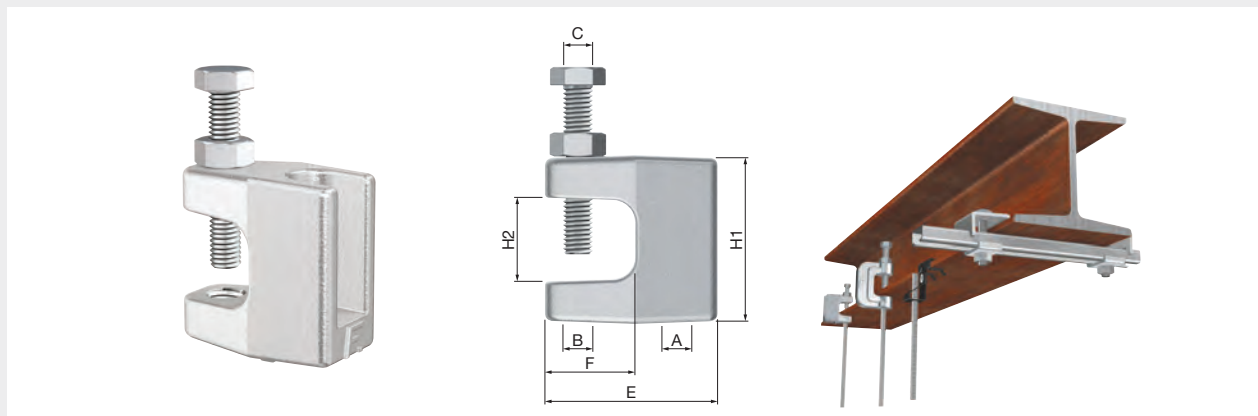



Type	Con- nec- tion A	Max flange thickness [mm]	Bolt	Max. working load [N]	Dimensions				Treatment		Order Code
					H1 [mm]	H2 [mm]	E [mm]	F [mm]			
KC 6	M 6	18	M 8 x 45	2100	54	21	46	25	zinc plated	25	71521
KC 8	M 8	18	M 8 x 45	3800	54	21	46	25	zinc plated	25	71522
KC 10	M 10	18	M 10 x 45	5000	54	21	46	25	zinc plated	25	71523

KCK Profile Clamps

For securing a single mounting next to or under a steel profile without welding or drilling.

- Malleable cast iron, KCK GTS 45 - DIN 1692.
- Steel bolt: steel DIN 564-8.8.
- Electrolytically zinc plated.
- Vertically adjustable.
- The bottom provided with two different threaded connections.



Type	Connection (A - B)	Max flange thickness [mm]	Bolt	Max. working load [N]	Dimensions				Treatment	Approval		Order Code
					H1 [mm]	H2 [mm]	E [mm]	F [mm]				
KCK 6	M 6 - M 8	18	M 6 x 35	2100	45	21	46	24	zinc plated	-	25	71535
KCK 8	M 8 - M 10	18	M 8 x 45	3800	45	21	46	24	zinc plated	-	25	71536
KCK 10	M 10 - M 8	18	M 10 x 45	4500	45	21	46	24	zinc plated	FM	25	71537
KCK 12	M 12 - M 12	18	M 10 x 45	5000	45	21	46	24	zinc plated	FM	25	71538



AS Anchor strips

Anchor strips for use with BC and KCK profile clamps.

May be required for VdS approval. See VdS certificates of profile clamps (on website) for details.

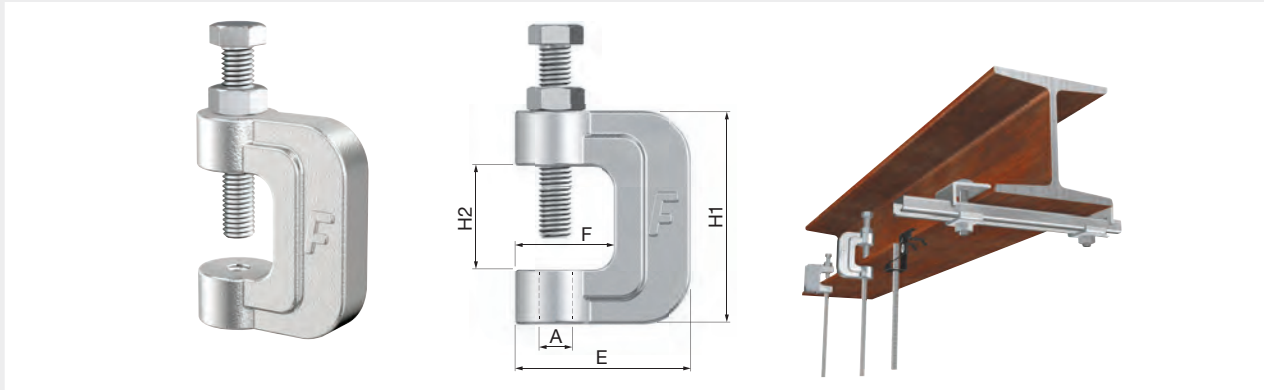


Type	Suitable for		Order Code
AS 1	BC/KCK 8/10/12	50	71700

KCH Profile Clamps

For securing a single mounting next to or under a steel profile without welding or drilling.

- Forged steel C 22/C 35 - DIN 17200.
- Bolt: steel DIN 564-8.8.
- Electrolytically zinc plated.

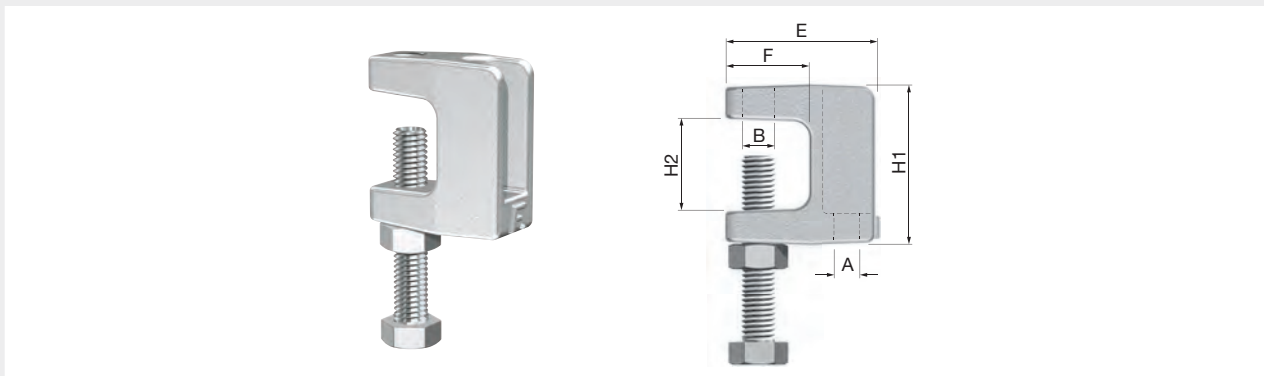


Type	Conne- tion (A)	Max. flange thickness [mm]	Bolt	Max. working load [N]	Dimensions					Order Code
					H1 [mm]	H2 [mm]	E [mm]	F [mm]		
KCH 8	M 8	30	M 10 x 60	3800	65	32	54	30	25	71541
KCH 10	M 10	30	M 10 x 60	6000	65	32	54	30	25	71542
KCH 12	M 12	30	M 12 x 60	6000	65	32	54	30	25	71543
KCH 16	M 16	30	M 12 x 60	6000	65	32	54	30	25	71544

KCL Profile Clamps

For securing a single mounting next to or under a steel profile without welding or drilling.

- Malleable cast iron, KCL GTS 35 - DIN 1692.
- Steel bolt: steel DIN 564-8.8.
- Electrolytically zinc plated.
- Vertically adjustable.
- The bottom is provided with two different threaded connections.

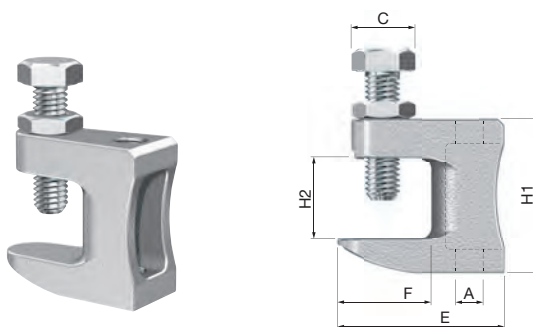



Type	Connection		Max flange thick- ness [mm]	Bolt	Max. working load [N]	Dimensions				Treatment		Order Code
	A [mm]	B [mm]				H1 [mm]	H2 [mm]	E [mm]	F [mm]			
KCL 6	M 6	M 6	18	M 6 x 35	2100	39	21	36	20	zinc plated	25	71570
KCL 8	M 8	M 8	18	M 8 x 45	2500	39	21	36	20	zinc plated	25	71571

BC Profile Clamps

For securing a single mounting next to or under a steel profile without welding or drilling.

- Malleable cast iron.
- Electrolytically zinc plated.



Type	Connection A [mm]	Bolt (C)	Max. working load [N]	H1 [mm]	H2 [mm]	E [mm]	F [mm]	Approval		Order Code
BC 8	M 8	M 8 x 30	1200	37	18	38	21	VdS *	50	71506
BC 10	M 10	M 10 x 40	2500	42	19	44	23	VdS * / FM	50	71507
BC 12	M 12	M 10 x 40	3500	54	25	58	35	VdS * / FM	50	71508
BC 9	Ø 9	M 8 x 30	1200	37	18	38	21	-	50	71510
BC 11	Ø 11	M 10 x 40	2500	42	19	44	23	FM	50	71511

* See VdS certificate (on website) for specific VdS validity. AS anchor strip (71700) may be required.



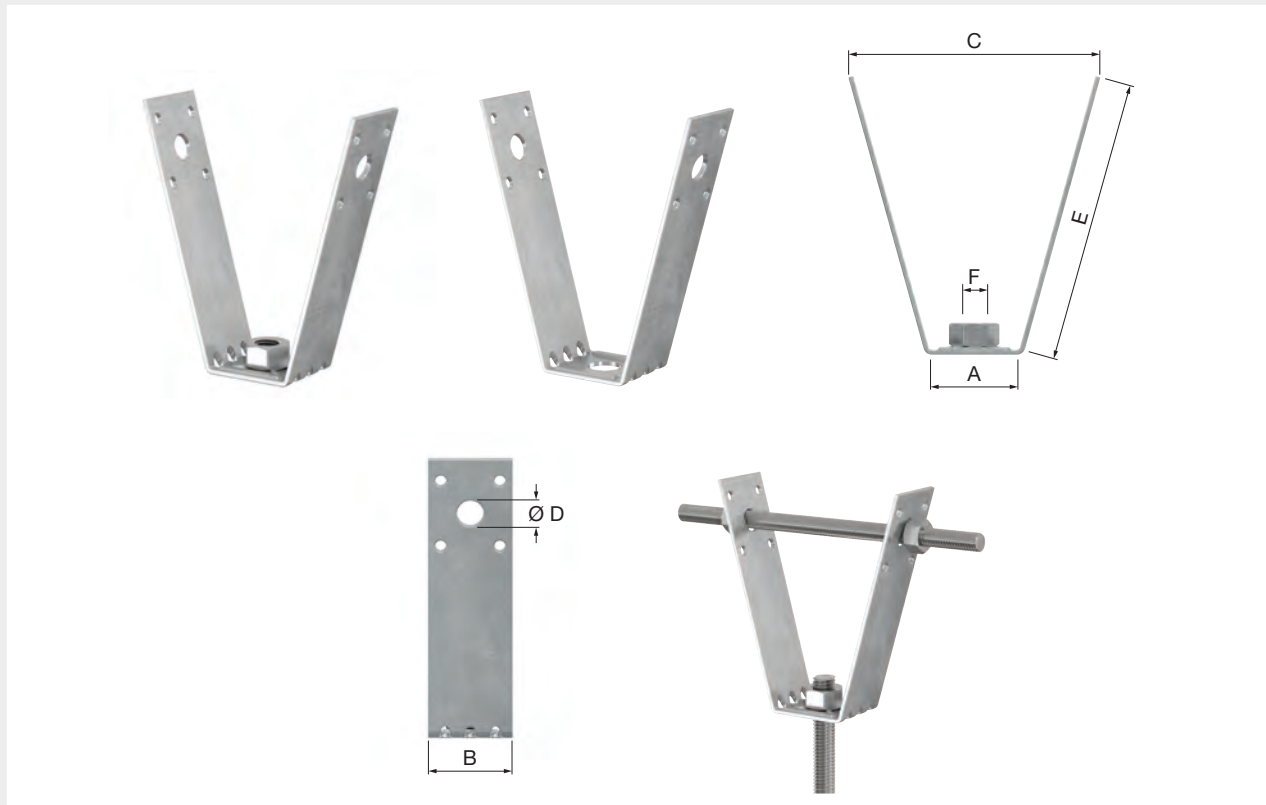
TRAPEZIUM FIXINGS


For mounting threaded rod to steel roof profiles.

- Electrolytically zinc plated.
- LT : threadless opening.
- LTM: with welded nut.
- LTV: vertical re-adjustment by turning the lowest part of the threaded bush, after mounting the threaded rod.

Trapezium Fixings

- Threaded rod not included.
- Maximum working load: 1.6 kN (for roof profile thickness of 1 mm).



Type	Dimensions					Connection (F)		Order Code
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]			
LTM 8	32	30	90	10.5	100	M 8	10	71910
LTM 10*	32	30	90	10.5	100	M 10	10	71912

* LTM 10 FM approved in combination with clips ranging from ¾" to 3".




AT Tipping Dowels

Special dowel for fastening to cavity walls and ceilings, suspended ceilings and corrugated roofing sheets. The turnable treaded rod allows each fastening point to be levelled individually.

- With large washer.



Type	Connection	L. [mm]	Drill diameter [mm]	Max. working load [N]		Order Code
AT 8 x 100	M 8	100	20	4000	50	82025
AT 10 x 100 *	M 10	100	25	6500	25	82026

* With FM-approval.



BACKPLATE ASSEMBLIES

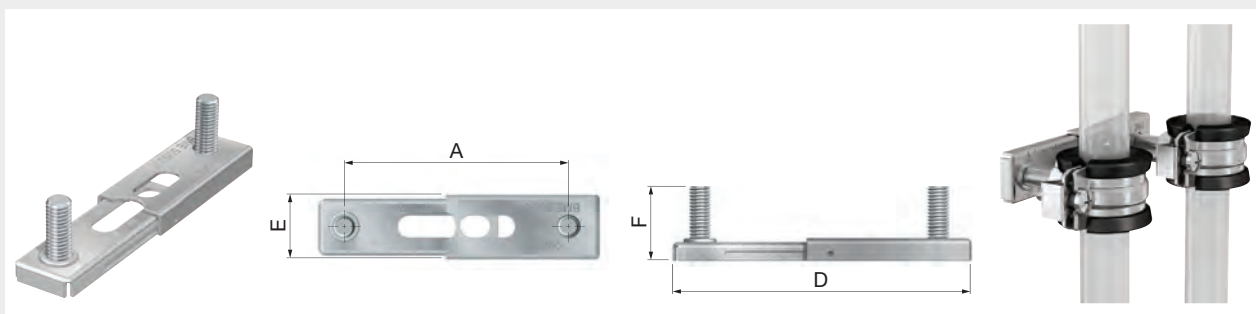
For use in combination with Flamco BS universal clips.


- Electrolytically zinc plated.

BME Backplate Assembly

For double wall clip mounting.

- Rigid pipe installation as a result of fixed centres.
- Relative centres adjustable.

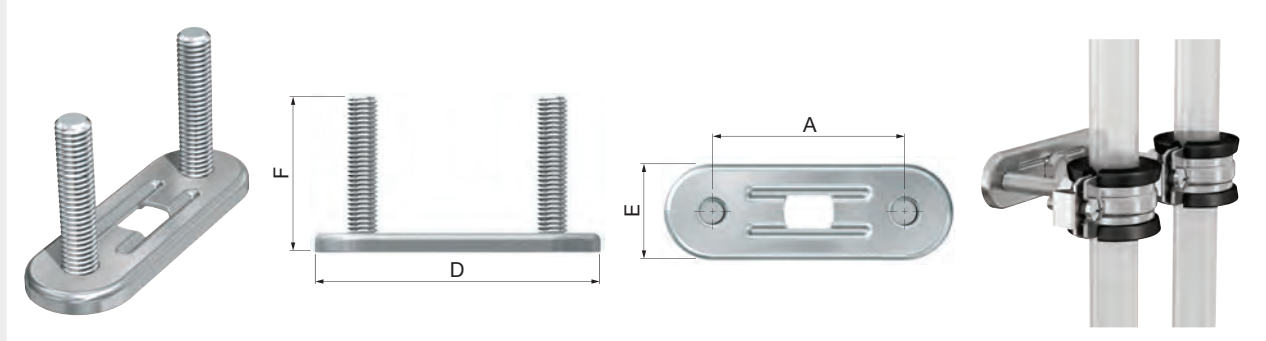



Type	Connection	Dimensions						Order Code
		Ø hole [mm]	A [mm]	D [mm]	E [mm]	F [mm]		
BME 8 x 50/90	M 8	8	50 - 90	72 - 112	25	29	100	39420

BMD Backplate Assemblies

For double wall clip mounting.

- Rigid pipe installation as a result of fixed centres.
- Complete with wood screw stud, washer and plastic plug.
- Electrolytically zinc plated.

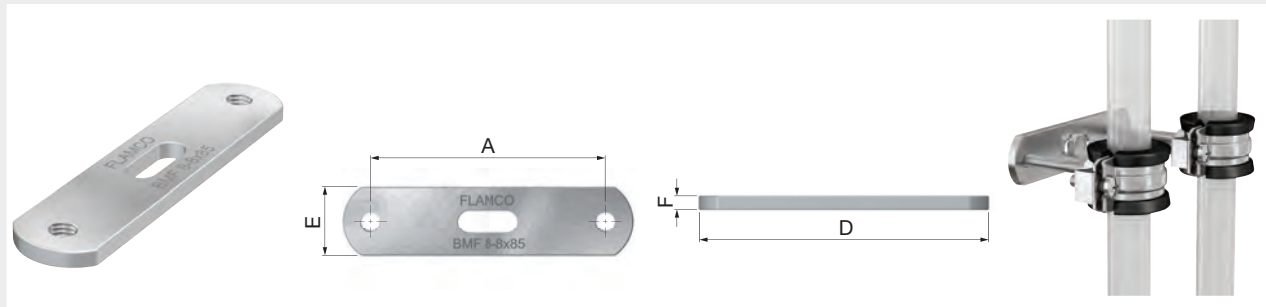



Type	Connection	Dimensions						Order Code
		Ø hole [mm]	A [mm]	D [mm]	E [mm]	F [mm]		
BMD 8 x 50	M 8	8	50	76	25	40	100	39424
BMD 8 x 70	M 8	8	70	96	25	40	100	39426
BMD 8 x 90	M 8	8	90	116	25	40	100	39428

BMF Backplate Assemblies

For use with two wall clips.

- Slotted hole for fixing.
- Threaded connections M 8 for DS threaded nipples.
- In combination with DS threaded nipples, suitable for BS universal clips.
- Realisation of two different centres to the wall per backplate assembly possible.



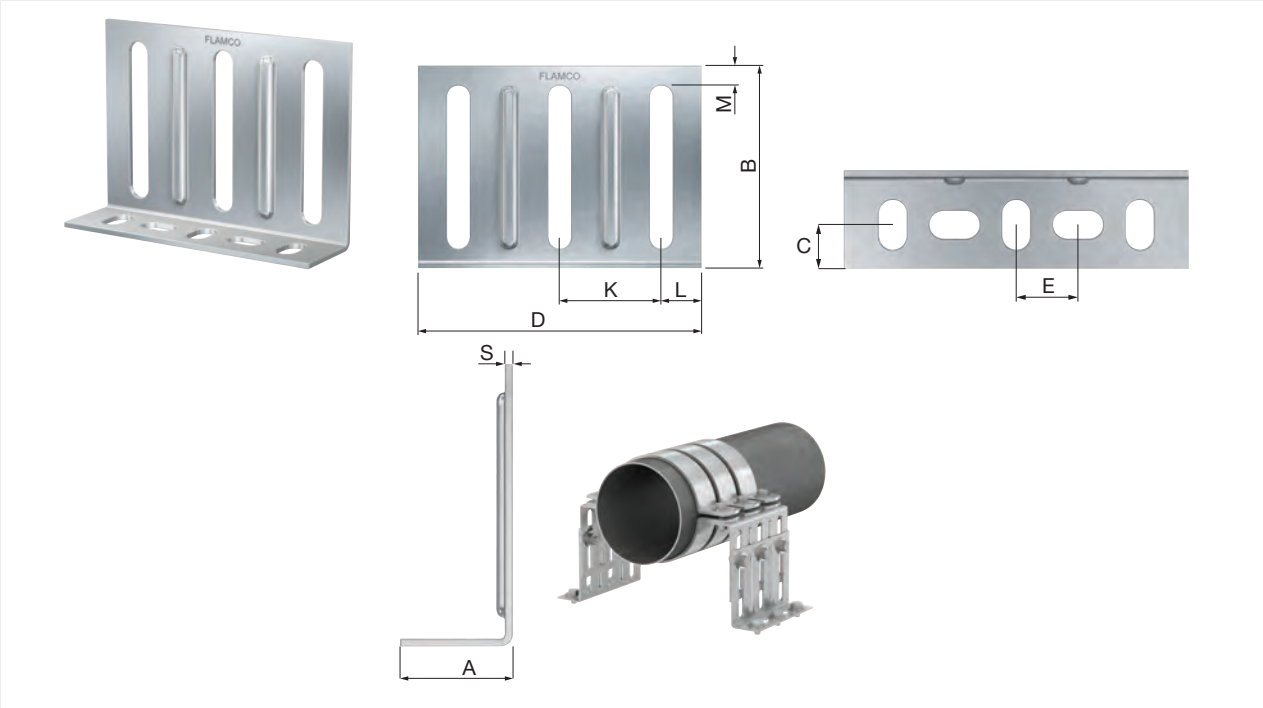
Type	Connection	Slotted hole [mm]	Dimensions					Order Code
			A [mm]	D [mm]	E [mm]	F [mm]		
BMF 8 - 8 x 65	M 8	8.2 x 22	65	85	25	5	50	37952
BMF 8 - 8 x 85	M 8	8.2 x 22	85	105	25	5	50	37953
BMF 8 - 8 x 105	M 8	8.2 x 22	105	125	25	5	50	37954


FIXED POINT CONSTRUCTIONS

VG Angle Plate

For construction of heavy fixed points, adjustable suspensions and supports.

- Specially suited for fixed point constructions in combination with fixed point clips (RSF clips 3" - 12" / KB clips up to 12").
- Supplied with slotted holes.
- Sleeves suitable for M 10.
- Up to three brackets can be mounted side by side on the VG angle plate.
- Electrolytically zinc plated.
- Maximum adjustable height: 170 mm.

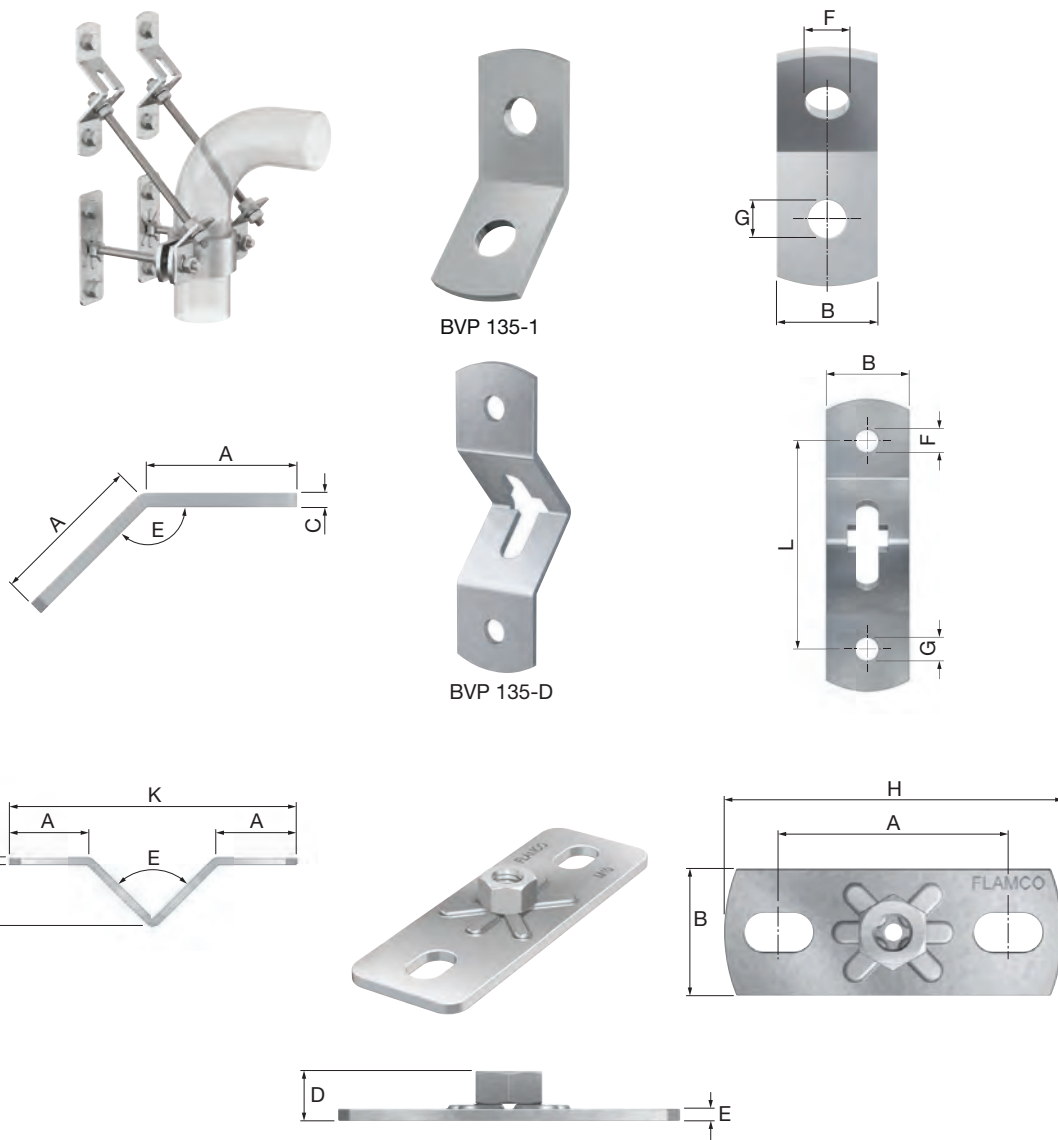


Type	Dimensions											Order Code
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	K [mm]	L [mm]	M [mm]	S [mm]			
VG 140 x 100 x 3	40	100	18.5	140	25	50	11	10	3	11	71616	

* Set consists of 4 VG angle plates, 6 tap bolts, 6 nuts and 12 washers.

BVP Fixed Point Construction Set

- Consisting of 2x BVP-1, 2x BVP-D en 2x GP 10 120 x 40.
- Electrolytically zinc plated.
- For fixed point clips from 2".



Type

BVP Fixed Point Construction Set



10

Order Code

71629

Dimensions BVP

Type	Dimensions										
	A [mm]	B [mm]	C [mm]	D [mm]	E	F [mm]	G [mm]	H [mm]	K [mm]	L [mm]	Slotted hole [mm]
BVP 135-1	40	30	4	-	135°	Ø 11	Ø 13	-	-	-	11 x 13
BVP 135-D	39	40	4	30	90°	Ø 11	Ø 11	-	140	100	11 x 11
GP 10 - 120 x 40	85	40	-	14	4 mm	-	-	120	-	-	11 x 18


NOISE-SUPPRESSION FIXTURES

For a noise reducing suspension.

DA Noise-suppression Fixtures

- Housing: electrolytically zinc plated.
- Noise suppression: 20 dB(A), see TNO-TH 807/410/1 report.
- Suitable for temperatures of -50 °C up to +110 °C.
- Hardness of rubber: 65 - 70 ° Shore A.



Type	Dimensions						Max. working load [N] *		Order Code
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]			
DA 8	M 8	Ø 40 x 30	Ø 8.5	32	55	-	500	50	80801
DA 12	M 12	Ø 50 x 40	M 12	-	99	21	2000	50	80802

* At 20 dB(A) noise reduction.

PIPE IDENTIFICATION LABELLING SYSTEMS

Label card holders for pipe identification.

The identification of pipe contents in piping installations is of great importance. In case of emergency it is crucial to have quick access to the information about the contents and flow direction of pipes. In addition, pipe identification ensures quick maintenance of the installation.

KH Card Holder

Label card holder with transparent cover plate for do-it-yourself labelling for pipe identification.

Suitable for horizontal and vertical pipes in the dimensions DN 8 to DN 50 including 100% insulation (in accordance with EnEV2014 and DIN 4108-4:2013), which corresponds to an external diameter of 10 to 220 mm.

- Including tie wrap for quick and easy assembly.
- Heat resistant PA; corrosion-free.
- For standard labels/stickers with size 70 x 50.8 mm and with a maximum thickness of 0.8 mm.
- Suitable for pipes with surface temperatures of up to +90 °C.
- Suitable for ambient temperatures of +40 °C.
- KH Label template can be downloaded at **'Extra documentation'** on the website.



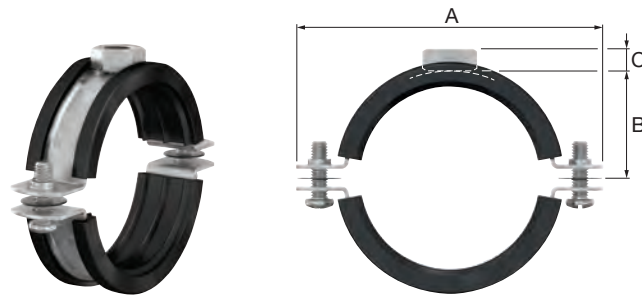
Type	Dimension card [mm]	Suitable for: Outside pipe diameter [mm]		Order Code
KH 70 x 50.8	70 x 50.8	10 - 220	10	71101


UNIVERSAL CLIPS FOR ALL TYPES OF PIPE

BSI-HDG Clips

Hot-dip galvanized rubber lined universal clips for sustainable pipe fixing outdoors and in environments with demanding atmospheric conditions.

- The thickness of the coating and its cathodic protection provide extensive protection against corrosion, even when the clip gets scratched.
- Suitable for both horizontal and vertical fixing of pipes.
- Fitted with retaining rings to prevent loss of bolts.
- Reinforcement ribs for additional strength and maintenance of shape.
- Hot-dip galvanized according to EN-ISO 1461:2009.
- Noise suppressing rubber lining (EPDM): 17 dB(A) according to ISO 3822-1.
- Suitable for temperatures from -40 °C up to +120 °C.
- Bolts with slot and cross head.
- Safety margin for minimal breaking load (V) = 3.
- Equipped with Philips / slotted head screws.



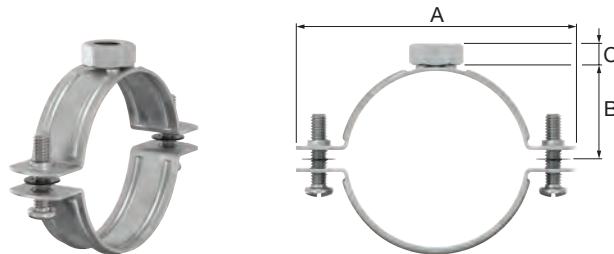
Type	Ø Pipe		Connec- tion	Strip dimensi- ons [mm]	Max. working load [N]	Dimensions				Order Code
	Ext. dia. [mm]	Nom. ["]				A [mm]	B [mm]	C [mm]		
BSI-HDG M 10 x 8 - 10	8 - 10	1/8	M 10	20 x 1.5	1000	53	13	14	50	38830
BSI-HDG M 10 x 12 - 14	12 - 14	1/4	M 10	20 x 1.5	1000	58	15	14	50	38831
BSI-HDG M 10 x 15 - 19	15 - 19	3/8	M 10	20 x 1.5	1000	62	18	14	50	38832
BSI-HDG M 10 x 20 - 25	20 - 25	1/2	M 10	20 x 1.5	1000	69	21	14	50	38833
BSI-HDG M 10 x 26 - 30	26 - 30	3/4	M 10	20 x 1.5	1000	74	23	14	50	38834
BSI-HDG M 10 x 32 - 36	32 - 36	1	M 10	20 x 1.5	1000	81	26	14	50	38835
BSI-HDG M 10 x 38 - 43	38 - 43	1 1/4	M 10	20 x 1.5	1000	87	30	14	50	38836
BSI-HDG M 10 x 44 - 49	44 - 49	1 1/2	M 10	20 x 1.5	1000	94	33	14	50	38837
BSI-HDG M 10 x 50 - 55	50 - 55	-	M 10	20 x 1.5	1000	103	36	14	50	38838
BSI-HDG M 10 x 56 - 61	56 - 61	2	M 10	20 x 1.5	1000	106	39	10	50	38839
BSI-HDG M 10 x 62 - 67	62 - 67	-	M 10	20 x 2.0	1300	113	42	10	50	38840
BSI-HDG M 10 x 68 - 73	68 - 73	-	M 10	20 x 2.0	1300	123	45	10	50	38841
BSI-HDG M 10 x 75 - 80	75 - 80	2 1/2	M 10	20 x 2.0	1300	128	48	10	50	38842
BSI-HDG M 10 x 82 - 86	82 - 86	-	M 10	20 x 2.0	1300	134	51	10	50	38843
BSI-HDG M 10 x 87 - 92	87 - 92	3	M 10	20 x 2.0	1300	141	54	10	50	38844
BSI-HDG M 10 x 95 - 102	95 - 102	3 1/2	M 10	20 x 2.5	2150	158	58	10	50	38845
BSI-HDG M 10 x 108 - 116	108 - 116	4	M 10	20 x 2.5	2150	170	65	10	25	38846
BSI-HDG M 10 x 121 - 127	121 - 127	-	M 10	20 x 2.5	2150	185	70	10	25	38847
BSI-HDG M 10 x 131 - 141	131 - 141	5	M 10	20 x 2.5	2150	195	77	10	25	38848
BSI-HDG M 10 x 159 - 163	159 - 163	-	M 10	20 x 2.5	2150	215	88	10	25	38849
BSI-HDG M 10 x 165 - 169	165 - 169	6	M 10	20 x 2.5	2150	226	91	10	25	38850
BSI-HDG M 10 x 192 - 202	192 - 202	-	M 10	20 x 3.0	3000	265	107	10	25	38851
BSI-HDG M 10 x 210 - 220	210 - 220	8	M 10	20 x 3.0	3000	274	117	10	25	38852


UNIVERSAL CLIPS FOR STEEL PIPES

BSU-HDG Clips

Hot-dip galvanized universal clips for sustainable pipe fixing outdoors and in environments with demanding atmospheric conditions.

- The thickness of the coating and its cathodic protection provide extensive protection against corrosion, even when the clip gets scratched.
- Suitable for both horizontal and vertical fixing of pipes.
- Fitted with retaining rings to prevent loss of bolts.
- Reinforcement ribs for additional strength and maintenance of shape.
- Hot-dip galvanized according to EN-ISO 1461:2009.
- Suitable for temperatures from -40 °C up to +250 °C.
- Bolts with slot and cross head.
- Safety margin for minimal breaking load (V) = 3.
- Equipped with Philips / slotted head screws.



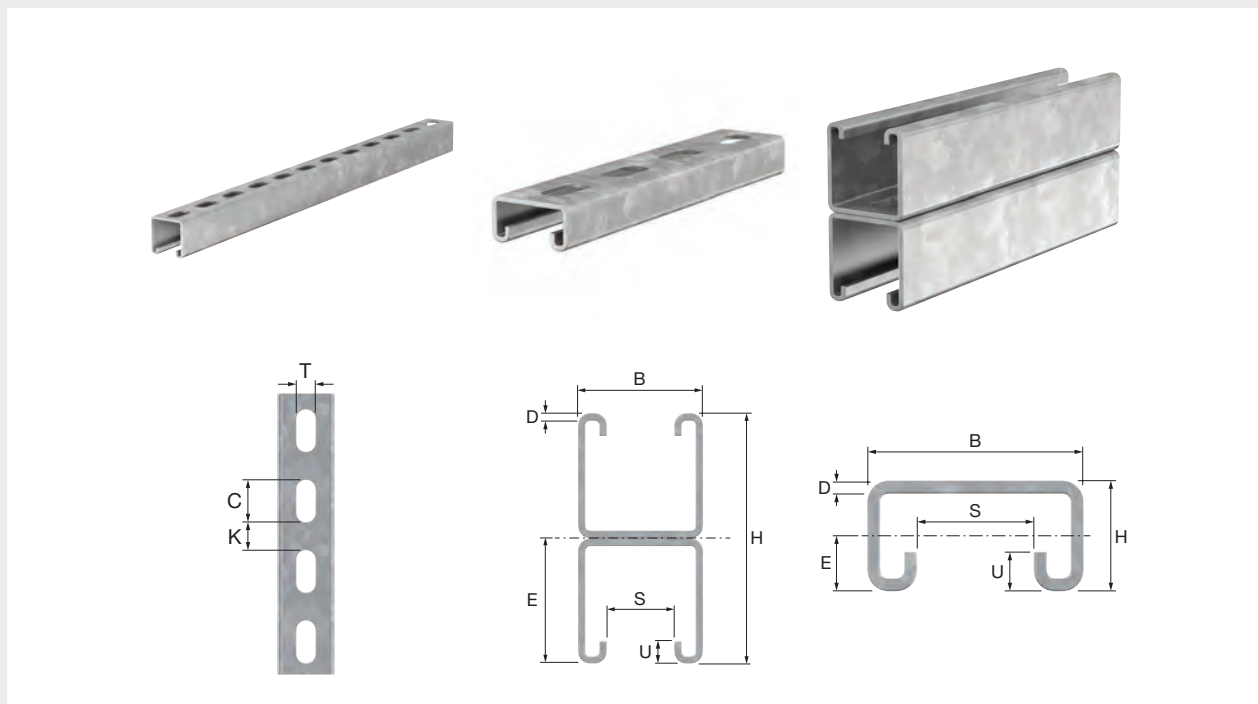
Type	Ø Pipe		Connec- tion	Strip dimen- sions [mm]	Max. working load [N]	Dimensions				Order Code
	Ext. dia. [mm]	Nom. ["]				A [mm]	B [mm]	C [mm]		
BSU-HDG M 10 x 15 - 19	15 - 19	3/8	M 10	20 x 1.5	1000	53	9	14	50	38860
BSU-HDG M 10 x 20 - 25	20 - 25	1/2	M 10	20 x 1.5	1000	60	12	14	50	38861
BSU-HDG M 10 x 26 - 30	26 - 30	3/4	M 10	20 x 1.5	1000	65	14	14	50	38862
BSU-HDG M 10 x 32 - 36	32 - 36	1	M 10	20 x 1.5	1000	72	17	14	50	38863
BSU-HDG M 10 x 38 - 43	38 - 43	1 1/4	M 10	20 x 1.5	1000	78	21	14	50	38864
BSU-HDG M 10 x 44 - 49	44 - 49	1 1/2	M 10	20 x 1.5	1000	85	24	14	50	38865
BSU-HDG M 10 x 50 - 55	50 - 55	1 3/4	M 10	20 x 1.5	1000	94	27	14	50	38866
BSU-HDG M 10 x 56 - 61	56 - 61	2	M 10	20 x 1.5	1000	97	30	14	50	38867
BSU-HDG M 10 x 62 - 67	62 - 67	-	M 10	20 x 1.5	1000	104	33	10	50	38868
BSU-HDG M 10 x 68 - 73	68 - 73	2 1/4	M 10	20 x 1.5	1000	114	36	10	50	38869
BSU-HDG M 10 x 75 - 80	75 - 80	2 1/2	M 10	20 x 2.0	1300	119	39	10	50	38870
BSU-HDG M 10 x 82 - 86	82 - 86	2 3/4	M 10	20 x 2.0	1300	125	42	10	50	38871
BSU-HDG M 10 x 87 - 92	87 - 92	3	M 10	20 x 2.0	1300	132	45	10	50	38872
BSU-HDG M 10 x 95 - 102	95 - 102	3 1/2	M 10	20 x 2.0	1300	149	49	10	50	38873
BSU-HDG M 10 x 108 - 116	108 - 116	4	M 10	20 x 2.5	2150	161	56	10	25	38874
BSU-HDG M 10 x 121 - 127	121 - 127	-	M 10	20 x 2.5	2150	176	61	10	25	38875
BSU-HDG M 10 x 131 - 141	131 - 141	5	M 10	20 x 2.5	2150	186	68	10	25	38876
BSU-HDG M 10 x 159 - 163	159 - 163	-	M 10	20 x 2.5	2150	206	79	10	25	38877
BSU-HDG M 10 x 165 - 169	165 - 169	6	M 10	20 x 2.5	2150	217	53	10	10	38878
BSU-HDG M 10 x 192 - 202	192 - 202	-	M 10	20 x 2.5	2150	256	98	10	10	38879
BSU-HDG M 10 x 210 - 220	210 - 220	8	M 10	20 x 2.5	2150	265	108	10	10	38880


STRUT RAIL

STRUT Rail

For quickly and professionally installing outdoor wall mounts and roof constructions. The Flamco rail is available in hot-dip galvanized STRUT execution and combines perfectly with the mpad Rooftop support set.

- Hot-dip galvanized according to BS EN 1461:2009.
- Dimensions and tolerances in accordance with BS 6946:1988.
- With slotted holes 14 x 28 for adjustable mounting.
- Space between the holes: 50 mm.



Type	Stock Length [m]	Max. working load (point load) [N]	Mb [Ncm]	Ix [cm ⁴]	Wx [cm ³]		Order Code
R-STR 41 x 21 x 2.5	3	1180	15470	0.99	0.91	10	50948
R-STR 41 x 21 x 2.5	6	1180	15470	0.99	0.91	10	50965
R-STR 41 x 41 x 2.5	3	3770	49980	6.20	2.94	10	50931
R-STR 41 x 41 x 2.5	6	3770	49980	6.20	2.94	10	50874
R-STR-D 41 x 82 x 2.5	6	10720	153170	37.20	9.01	10	50864

Dimensions R-STR Rail


Type	Dimensions							
	B [mm]	C [mm]	D [mm]	E [mm]	H [mm]	K [mm]	S [mm]	T [mm]
R-STR 41 x 21 x 2.5	41	28	2.5	10	21	22	22	14
R-STR 41 x 41 x 2.5	41	28	2.5	20	41	22	22	14
R-STR-D 41 x 82 x 2.5	41	28	2.5	41	82	22	22	14

STRUT RAIL CONSOLES

STRUT Rail Consoles

- Hot-dip galvanized according to BS EN 1461:2009.



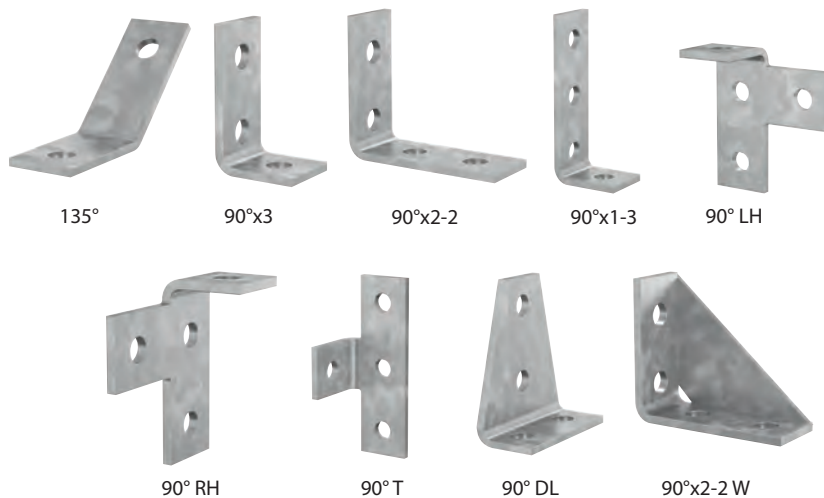
Type	Dimensions				Max. load at end point [N]		Order Code
	W. [mm]	H. [mm]	Th. [mm]	L. [mm]			
STRUT R41 x 300	41	41	2.5	300	1800	10	83030
STRUT R41 x 600	41	41	2.5	600	900	10	83060


STRUT RAIL CONNECTORS

STRUT HV Mounting Angles

To connect STRUT rails in every angle.

- Hot-dip galvanized according to BS EN 1461:2009.

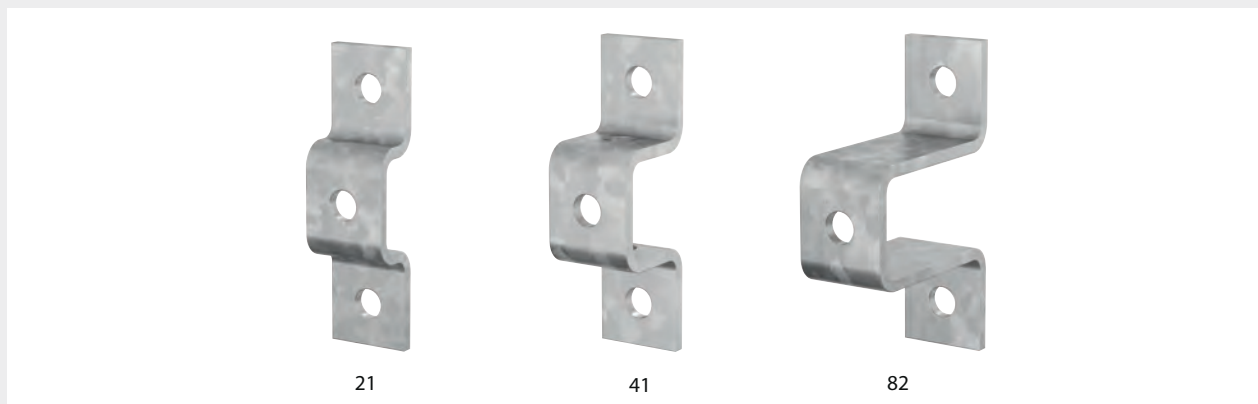



Type	Number of holes (Ø 14 mm)		Shape		Order Code
STRUT HV 135° x 1-1	2	1 - 1	135°	50	83615
STRUT HV 90° T x 3-1	4	3 - 1	T-shape / 90°	25	83609
STRUT HV 90° DL x 3-1	4	2 - 2	Delta / 90° / large	25	83610
STRUT HV 90° x 1-2	3	1 - 2	90°	50	83603
STRUT HV 90° x 2-2	4	2 - 2	90°	50	83605
STRUT HV 90° x 1-3	4	1 - 3	90°	50	83606
STRUT HV 90° LH x 2-1-1	4	2 - 1 - 1	T-shape / 90° / Left handed	25	83607
STRUT HV 90° RH x 2-1-1	4	2 - 1 - 1	T-shape / 90° / Right handed	25	83608
STRUT HV 90° W x 2-2	4	2 - 2	Welded reinforcement / 90°	25	83612

STRUT UK Mounting Crosses

To connect two crossing STRUT rails.

- Hot-dip galvanized according to BS EN 1461:2009.




Type	Rail type	Number of holes (Ø 14 mm)		Order Code
STRUT UK 21	21	3	25	83800
STRUT UK 41	41	5	25	83801
STRUT UK 82	82	3	10	83802

STRUT RV Flat Rail Connectors

- Hot-dip galvanized according to BS EN 1461:2009.



Type	Number of holes (Ø 14 mm)	Shape		Order Code
STRUT RV L3	3	L	50	83506
STRUT RV T4	4	T	50	83507

STRUT RL Rail Extensions

- Hot-dip galvanized according to BS EN 1461:2009.



Type	Rail type	Finish		Order Code
STRUT RL 21 - 41 EXT	21 - 41	external	20	83807


STRUT VL FLOOR CONSOLES

STRUT VL Floor Consoles

Fixing STRUT rail to floors, walls and ceiling.

- Hot-dip galvanized according to BS EN 1461:2009.




Type	Rail type	Number of holes (Ø 14 mm)	Finish		Order Code
STRUT VL E2	21 / 41	3	Single layer	25	83305
STRUT VL DE	41	6	Single delta	10	83307
STRUT VL DD	82	6	Double delta	10	83308

STRUT SP CLAMPING PLATES

STRUT SP Clamping Plates

- Hot-dip galvanized according to BS EN 1461:2009.




Type	Ø Hole	Bolt		Order Code
STRUT SP M 8	10	M 8	200	83002
STRUT SP M 10	12	M 10	200	83003

STRUT TAP BOLTS

STRUT Tap bolts



- In accordance with DIN 933.
- ISO fitted.
- Steel grade: 8.8.
- Hot-dip galvanized according to BS EN 1461:2009.

Type	Connection	Length [mm]		Order Code
STRUT Tap bolt M 8 x 20	M 8	20	100	83940
STRUT Tap bolt M 8 x 35	M 8	35	100	83942
STRUT Tap bolt M 8 x 55	M 8	55	100	83944
STRUT Tap bolt M 10 x 20	M 10	20	100	83941
STRUT Tap bolt M 10 x 35	M 10	35	100	83943
STRUT Tap bolt M 10 x 55	M 10	55	100	83945

STRUT NUTS

STRUT Nuts



For easy mounting of a suspension in a STRUT Rail.

- In accordance with DIN 934-8.
- ISO fitted.
- Hot-dip galvanized according to BS EN 1461:2009.

Type	Connection		Order Code
STRUT Nut M 8	M 8	200	83935
STRUT Nut M 10	M 10	200	83936


STRUT WASHERS

STRUT Washers



For easy mounting of a suspension in a STRUT Rail.

- Hot-dip galvanized according to BS EN 1461:2009.

Type	Connection	Dimensions				Order Code
		A [mm]	B [mm]	C [mm]		
STRUT Washer M 8	M 8	8,4	30	1,5	200	83930
STRUT Washer M 10	M 10	10,5	35	1,5	200	83931

STRUT THREADED RODS

STRUT Threaded rods



For all fixings and constructions requiring threaded rod.

- Produced according to current standards with 60 ° top angle for maximum load.
- In accordance with DIN 976.
- ISO fitted.
- Steel grade: 4.8.
- Hot-dip galvanized according to BS EN 1461:2009.

Type	Con- nection	Length [mm]		Order Code
STRUT Threaded rod M 8 x 1000	M 8	1000	25	83950
STRUT Threaded rod M 10 x 1000	M 10	1000	25	83951


STRUT HAMMER HEAD BOLT SET AND STRUT SLIDING NUTS

STRUT HBS Hammer head bolt set



For easy mounting of a suspension in a STRUT Rail.

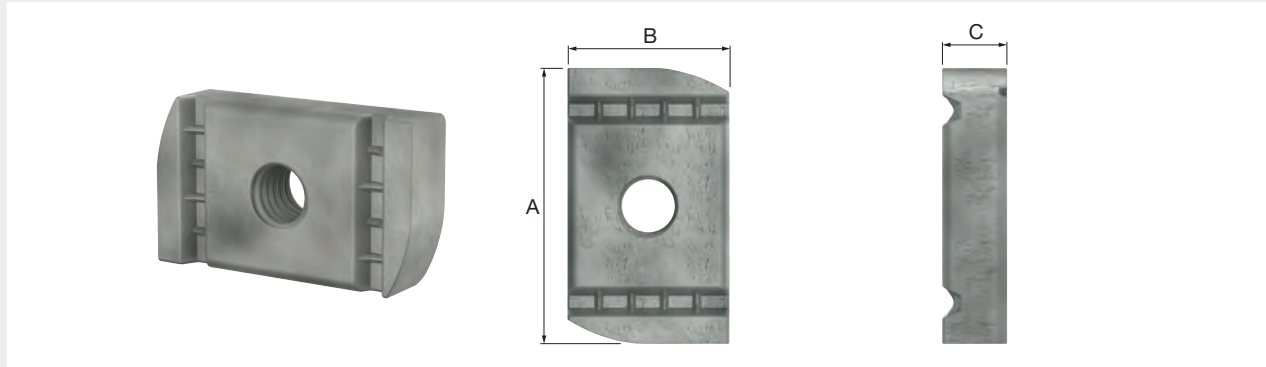
- Hot-dip galvanized according to BS EN 1461:2009.


Type	Connection		Order Code
STRUT HBS M 8 x 40	M 8 x 40	50	83925

STRUT Sliding Nuts

Extra strong version (STRUT) for the easy mounting of a suspension in STRUT rail.

- Hot-dip galvanized according to BS EN 1461:2009.



Type	Connection	Dimensions				Order Code
		A [mm]	B [mm]	C [mm]		
STRUT Sliding Nut M 8	M 8	34.5	20	8	100	83921
STRUT Sliding Nut M 10	M 10	34.5	20	9	100	83922

STRUT PROFILE FIXINGS

STRUT RP Profile Fixings

- Hot-dip galvanized according to BS EN 1461:2009.
- Beam clamps should be used in pairs to achieve maximum working load.



Type	Rail type	Finish	Max. working load (pair) [N]		Order Code
STRUT RP EXT	21-41	External, with clamping plate in rail slot	2700	100	83400
STRUT RP U110	21-41	U-shape (L=110), M 10	4500	25	83411
STRUT RP U150	82	U-shape (L=150), M 10	4500	25	83415

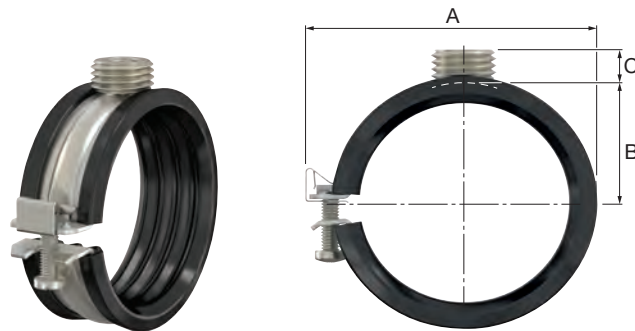
STAINLESS STEEL CLIPS


For use in situations where stainless steel mounting material is necessary, such as food processing, facilities, laboratories, the chemical industry, etc.

BSA Clips - Stainless Steel

Stainless steel universal clips with rubber strips for mounting pipes to the wall or ceiling.

- Stainless steel AISI 316L (1.4404 according to EN 10088).
- Noise-suppressing rubber strip: 19 dB(A) according to ISO 3822-1.
To achieve maximum sound suppression do not overload the fitting.
- Safety margin for minimal breaking load (V) = 3.
- Connection: G 1/2" M (BSP) / M 10.
- The EPDM rubber inlay is halogen-free.



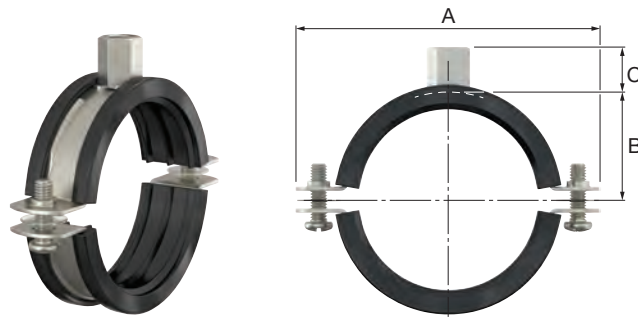
Type	Ø Pipe		Connection	Strip dimensions [mm]	Max. working load [N]	Dimensions				Order Code
	Nom. ["]	Ext. dia. [mm]				A [mm]	B [mm]	C [mm]		
BSA 14 - 16 SST	-	14 - 16	G 1/2" M / M 10	25 x 1.75	1000	47	15	10	50	51951
BSA 17 - 19 SST	3/8"	17 - 19	G 1/2" M / M 10	25 x 1.75	1000	50	17	10	50	51952
BSA 20 - 24 SST	1/2"	20 - 24	G 1/2" M / M 10	25 x 1.75	1000	54	19	10	50	51953
BSA 25 - 28 SST	3/4"	25 - 28	G 1/2" M / M 10	25 x 1.75	1000	59	21	10	50	51954
BSA 33 - 37 SST	1"	33 - 37	G 1/2" M / M 10	25 x 1.75	1000	70	27	10	50	51956
BSA 38 - 42 SST	1 1/4"	38 - 42	G 1/2" M / M 10	25 x 1.75	1000	78	31	10	50	51957
BSA 44.5 - 49 SST	1 1/2"	44.5 - 49	G 1/2" M / M 10	25 x 1.75	1000	83	34	10	50	51958
BSA 50 - 54 SST	-	50 - 54	G 1/2" M / M 10	25 x 1.75	1000	90	37	10	50	51959
BSA 56 - 60 SST	2"	56 - 60	G 1/2" M / M 10	25 x 1.75	1000	96	40	10	50	51960
BSA 62 - 64 SST *	-	62 - 64	G 1/2" M / M 10	25 x 2.75	1750	119	43	10	25	51970
BSA 75 - 80 SST *	2 1/2"	75 - 80	G 1/2" M / M 10	25 x 2.75	1750	133	50	10	25	51972
BSA 89 - 91 SST *	3"	89 - 91	G 1/2" M / M 10	25 x 2.75	1750	145	56	10	25	51974
BSA 108 - 116 SST *	4"	108 - 116	G 1/2" M / M 10	25 x 2.75	1750	168	67	10	25	51977
BSA 121 - 127 SST *	-	121 - 127	G 1/2" M / M 10	25 x 2.75	1750	184	71	10	25	51979
BSA 159 - 162 SST *	-	159 - 162	G 1/2" M / M 10	25 x 2.75	1750	220	93	10	25	51982


* Closing system provided with 2 closing screws.

BRS-A Clips - Stainless Steel

Stainless steel universal clips with rubber strips for mounting pipes to the wall or ceiling.

- Stainless steel AISI 316L (1.4404 according to EN 10088).
- Suitable for short-distance mounting.
- Noise-suppressing rubber strip: 17 dB(A) according to ISO 3822-1.
To achieve maximum sound suppression do not overload the fitting.
- Safety margin for minimal breaking load (V) = 3.
- Connection: M 8/10.
- Equipped with Philips / slotted head screws.
- With halogen-free inlay.

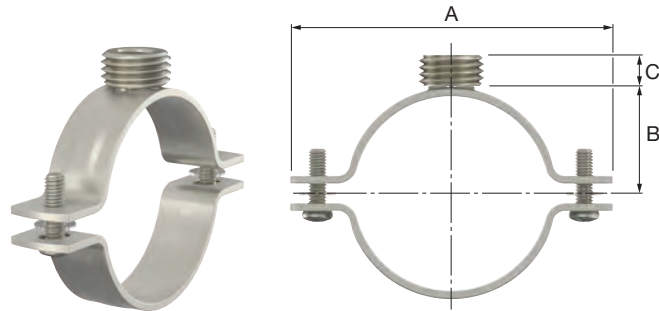



Type	Ø Pipe		Connec- tion	Strip dimen- sions [mm]	Max. working load [N]	Dimensions				Order Code
	Nom. ["]	Ext. dia. [mm]				A [mm]	B [mm]	C [mm]		
BRS-A 8 - 10 SST	1/8"	8 - 10	M 8/10	20 x 1.5	1000	53	13	16	50	38450
BRS-A 12 - 14 SST	1/4"	12 - 14	M 8/10	20 x 1.5	1000	58	15	16	50	38451
BRS-A 15 - 19 SST	3/8"	15 - 19	M 8/10	20 x 1.5	1000	62	18	16	50	38452
BRS-A 20 - 25 SST	1/2"	20 - 25	M 8/10	20 x 1.5	1000	69	21	16	50	38453
BRS-A 26 - 30 SST	3/4"	26 - 30	M 8/10	20 x 1.5	1000	74	23	16	50	38454
BRS-A 32 - 36 SST	1"	32 - 36	M 8/10	20 x 1.5	1000	81	26	16	50	38455
BRS-A 38 - 43 SST	1 1/4"	38 - 43	M 8/10	20 x 1.5	1000	87	30	16	50	38456
BRS-A 44 - 49 SST	1 1/2"	44 - 49	M 8/10	20 x 1.5	1000	94	33	16	50	38457
BRS-A 50 - 55 SST	1 3/4"	50 - 55	M 8/10	20 x 1.5	1000	103	36	16	50	38458
BRS-A 56 - 61 SST	2"	56 - 61	M 8/10	20 x 1.5	1000	106	39	16	50	38459
BRS-A 62 - 67 SST	-	62 - 67	M 8/10	20 x 2.0	1300	113	42	16	50	38460
BRS-A 68 - 73 SST	2 1/4"	67 - 73	M 8/10	20 x 2.0	1300	123	45	16	50	38461
BRS-A 75 - 80 SST	2 1/2"	75 - 80	M 8/10	20 x 2.0	1300	128	48	16	50	38462
BRS-A 82 - 86 SST	2 3/4"	82 - 86	M 8/10	20 x 2.0	1300	134	51	16	50	38463
BRS-A 87 - 92 SST	3"	87 - 92	M 8/10	20 x 2.0	1300	141	54	16	50	38464
BRS-A 95 - 102 SST	3 1/2"	95 - 102	M 8/10	20 x 2.5	2150	158	58	16	50	38465
BRS-A 108 - 116 SST	4"	108 - 116	M 8/10	20 x 2.5	2150	170	65	16	25	38466
BRS-A 121 - 127 SST	-	121 - 127	M 8/10	20 x 2.5	2150	185	70	16	25	38467
BRS-A 131 - 141 SST	5"	131 - 141	M 8/10	20 x 2.5	2150	195	77	16	25	38468
BRS-A 159 - 163 SST	-	159 - 163	M 8/10	20 x 2.5	2150	215	88	16	25	38469
BRS-A 165 - 169 SST	6"	165 - 169	M 8/10	20 x 2.5	2150	226	91	16	25	38470
BRS-A 192 - 202 SST	-	192 - 202	M 8/10	20 x 3.0	2150	265	107	16	25	38471
BRS-A 210 - 220 SST	8"	210 - 220	M 8/10	20 x 3.0	2150	274	117	16	25	38473

BSF Clips - Stainless Steel

Stainless steel universal clips for mounting stainless steel pipes to the wall or ceiling.

- Stainless steel AISI 316L (1.4404 according to EN 10088).
- Safety margin for minimal breaking load (V) = 3.
- Connection: G 1/2" M (BSP) / M 10.

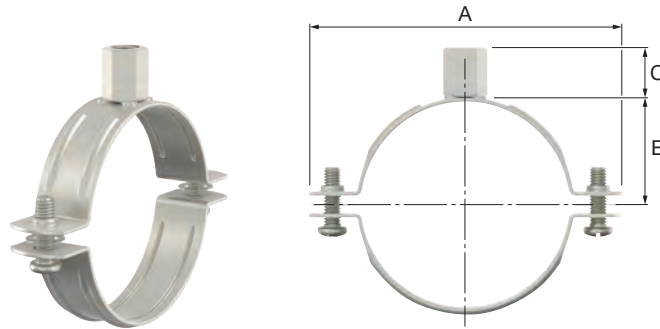



Type	Ø Pipe		Connection	Strip dimensions [mm]	Max. working load [N]	Dimensions				Order Code
	Nom. ["]	Ext. dia. [mm]				A [mm]	B [mm]	C [mm]		
BSF - SST 13 - 17.5	3/8"	13 - 17.5	G 1/2" M / M 10	20 x 2.5	1650	53	11	10	50	51851
BSF - SST 21 - 25.5	1/2"	21 - 25.5	G 1/2" M / M 10	20 x 2.5	1650	61	15	10	50	51852
BSF - SST 26.5 - 30.5	3/4"	26.5 - 30.5	G 1/2" M / M 10	20 x 2.5	1650	68	18	10	50	51853
BSF - SST 33.5 - 38.5	1"	33.5 - 38.5	G 1/2" M / M 10	20 x 2.5	1650	76	22	10	50	51854
BSF - SST 41.5 - 47	1 1/4"	41.5 - 47	G 1/2" M / M 10	20 x 2.5	1650	86	26	10	50	51855
BSF - SST 48 - 54	1 1/2"	48 - 54	G 1/2" M / M 10	20 x 2.5	1650	95	32	10	50	51856
BSF - SST 56 - 62.5	2"	56 - 62.5	G 1/2" M / M 10	20 x 2.5	1650	104	34	10	50	51857
BSF - SST 69.5 - 76.5	2 1/2"	69.5 - 76.5	G 1/2" M / M 10	20 x 2.5	1650	118	41	10	50	51859
BSF - SST 82 - 85	-	82 - 85	G 1/2" M / M 10	25 x 3.0	1650	114	45	10	25	51860
BSF - SST 89 - 90	3"	89 - 90	G 1/2" M / M 10	25 x 3.0	1650	119	49	10	25	51861
BSF - SST 99 - 104	-	99 - 104	G 1/2" M / M 10	25 x 3.0	3000	133	53	10	25	51862
BSF - SST 109 - 112	-	109 - 112	G 1/2" M / M 10	25 x 3.0	3000	150	58	10	25	51863
BSF - SST 113 - 116	4"	113 - 116	G 1/2" M / M 10	25 x 3.0	3000	154	61	10	25	51864
BSF - SST 117 - 121	-	117 - 121	G 1/2" M / M 10	25 x 3.0	3000	159	66	10	25	51865
BSF - SST 125 - 129	-	125 - 129	G 1/2" M / M 10	25 x 3.0	3000	167	69	10	25	51866
BSF - SST 133 - 135	-	133 - 135	G 1/2" M / M 10	30 x 3.0	4000	189	76	10	25	51867
BSF - SST 143.5 - 150.5	-	143.5 - 150.5	G 1/2" M / M 10	30 x 3.0	4000	205	78	10	25	51868
BSF - SST 151.5 - 159.5	-	151.5 - 159.5	G 1/2" M / M 10	30 x 3.0	4000	214	83	10	25	51869
BSF - SST 163.5 - 171.5	6"	163.5 - 171.5	G 1/2" M / M 10	30 x 3.0	4000	226	89	10	25	51870
BSF - SST 172.5 - 182	-	172.5 - 182	G 1/2" M / M 10	30 x 3.0	4000	236	94	10	25	51871
BSF - SST 192.5 - 198	-	192.5 - 198	G 1/2" M / M 10	30 x 3.0	4000	252	102	10	25	51872
BSF - SST 215 - 220	8"	215 - 220	G 1/2" M / M 10	30 x 3.0	4000	274	113	10	25	51873

BRS Clips - Stainless Steel

Stainless steel universal clips for mounting stainless steel pipes to the wall or ceiling.

- Stainless steel AISI 316L (1.4404 according to EN 10088).
- Suitable for short-distance mounting.
- Safety margin for minimal breaking load (V) = 3.
- Connection: M 8/10.
- Equipped with Philips / slotted head screws.



Type	Ø Pipe		Connection	Strip dimensions [mm]	Max. working load [N]	Dimensions				Order Code
	Nom. ["]	Ext. dia. [mm]				A [mm]	B [mm]	C [mm]		
BRS 8 - 10 SST	1/8"	8 - 10	M 8/10	20 x 1.5	1000	43	7	16	50	38475
BRS 12 - 14 SST	1/4"	12 - 14	M 8/10	20 x 1.5	1000	49	9	16	50	38476
BRS 15 - 19 SST	3/8"	15 - 19	M 8/10	20 x 1.5	1000	50	11	16	50	38477
BRS 20 - 25 SST	1/2"	20 - 25	M 8/10	20 x 1.5	1000	60	16	16	50	38478
BRS 26 - 30 SST	3/4"	26 - 30	M 8/10	20 x 1.5	1000	64	19	16	50	38479
BRS 32 - 36 SST	1"	32 - 36	M 8/10	20 x 1.5	1000	71	22	16	50	38480
BRS 38 - 43 SST	1 1/4"	38 - 43	M 8/10	20 x 1.5	1000	79	25	16	50	38481
BRS 44 - 49 SST	1 1/2"	44 - 49	M 8/10	20 x 1.5	1000	84	28	16	50	38482
BRS 50 - 55 SST	-	50 - 55	M 8/10	20 x 1.5	1000	91	29	16	50	38483
BRS 56 - 61 SST	2"	56 - 61	M 8/10	20 x 1.5	1000	93	34	16	50	38484
BRS 62 - 67 SST	-	62 - 67	M 8/10	20 x 2.0	1000	109	36	16	50	38485
BRS 68 - 73 SST	-	68 - 73	M 8/10	20 x 2.0	1300	115	39	16	50	38486
BRS 75 - 80 SST	2 1/2"	75 - 80	M 8/10	20 x 2.0	1300	118	44	16	50	38487
BRS 82 - 86 SST	-	82 - 86	M 8/10	20 x 2.0	1300	124	45	16	50	38488
BRS 87 - 92 SST	3"	87 - 92	M 8/10	20 x 2.0	1300	129	50	16	50	38489
BRS 95 - 102 SST	3 1/2"	95 - 102	M 8/10	20 x 2.5	2150	146	54	16	50	38490
BRS 108 - 116 SST	4"	108 - 116	M 8/10	20 x 2.5	2150	160	62	16	25	38491
BRS 121 - 127 SST	-	121 - 127	M 8/10	20 x 2.5	2150	176	66	16	25	38492
BRS 131 - 141 SST	5"	131 - 141	M 8/10	20 x 2.5	2150	188	75	16	25	38493
BRS 159 - 163 SST	-	159 - 163	M 8/10	20 x 2.5	2150	211	84	16	25	38494
BRS 165 - 169 SST	6"	165 - 169	M 8/10	20 x 2.5	2150	220	89	16	25	38495
BRS 192 - 202 SST	-	192 - 202	M 8/10	20 x 3.0	2150	252	104	16	25	38496
BRS 210 - 220 SST	8"	210 - 220	M 8/10	20 x 3.0	2150	270	113	16	25	38497

STAINLESS STEEL RAIL

R . Rail - Stainless Steel

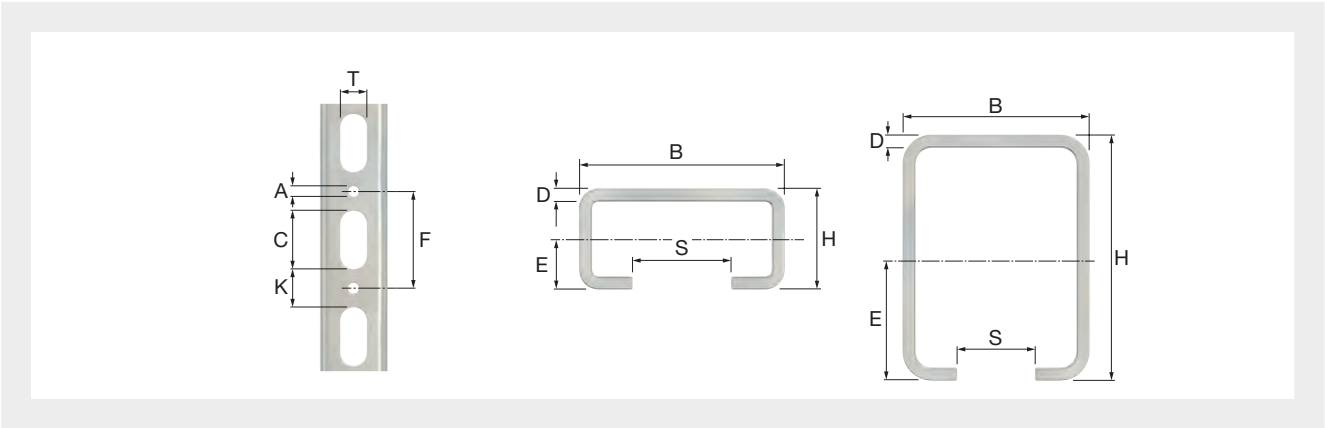


For fast and easy mounting of one or more suspensions or wall fixings.

- Stainless steel AISI 304.
- With slotted holes for adjustable mounting.

Type	Length [m]	Max. working load [N]		Order Code
R 1 SST	2	2000	10	50030
R 4 SST	2	2500	10	50034

Dimensions R . Rail - Stainless Steel



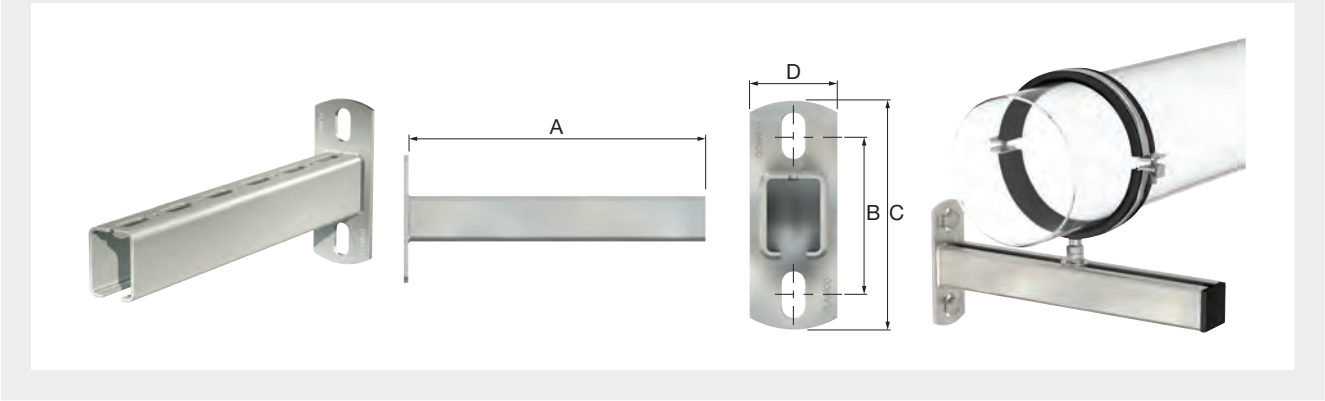
Type	Dimensions									
	H [mm]	B [mm]	A [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]	S [mm]	T [mm]
R 1	15	30.5	9	30	2.0	8.0	50	20	14.5	10.5
R 4	46	35.0	9	30	2.5	23.2	50	20	14.5	13.5


STAINLESS STEEL RAIL CONSOLES

R . x ... Rail Consoles - Stainless Steel

For suspension or support directly on the wall.

- Stainless steel AISI 304.



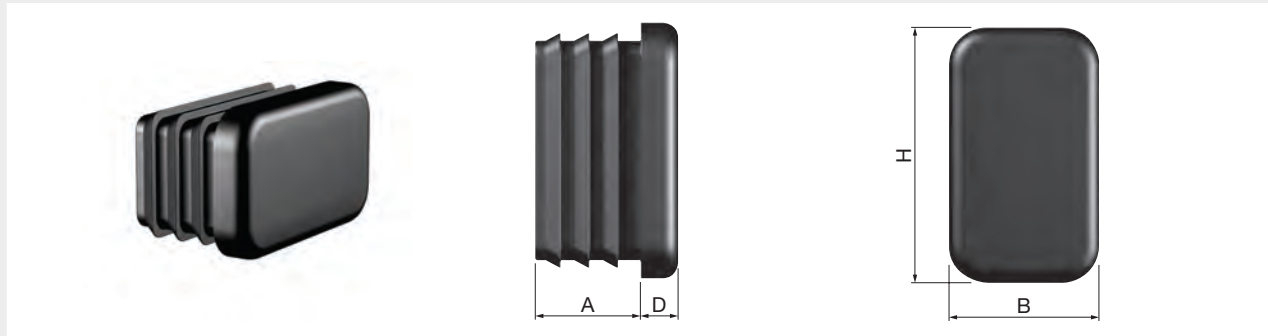
Type	Dimensions					Order Code
	A [mm]	B [mm]	C [mm]	D [mm]		
R 1 x 200 SST	200	80	115	40	10	71672
R 1 x 300 SST	300	80	115	40	10	71673
R 1 x 400 SST	400	80	115	40	10	71674
R 4 x 300 SST	300	90	130	50	10	71683
R 4 x 500 SST	500	90	130	50	10	71686


RAIL END CAPS

RD Rail End Cap

For a neat finish to Flamco rail R 1 - 8 and rail consoles. (For a neat finish to Flamco rail R 3, we advise two RD 2 rail end caps.)

- Black plastic.
- Easy to fit and self-securing.



Type	Suitable for rail	Dimensions					Order Code
		A [mm]	B [mm]	D [mm]	H [mm]		
RD 1	R 1	12	15	5	30	100	50501
RD 2	R 2 / R 3	12	20	5	35	100	50502
RD 4	R 4	14	35	5	46	100	50504
RD 6	R 6	14	41	5	60	100	50506
RD 7	R 7	14	40	5	40	100	50507
RD 8	R 8	14	30	5	40	100	50508


STAINLESS STEEL BACKPLATES

For mounting of a clip on a wall or ceiling, in conjunction with threaded rod or threaded pipe.

GP Backplates - Stainless Steel

- Available in stainless steel AISI 304 or 316, depending on product type.



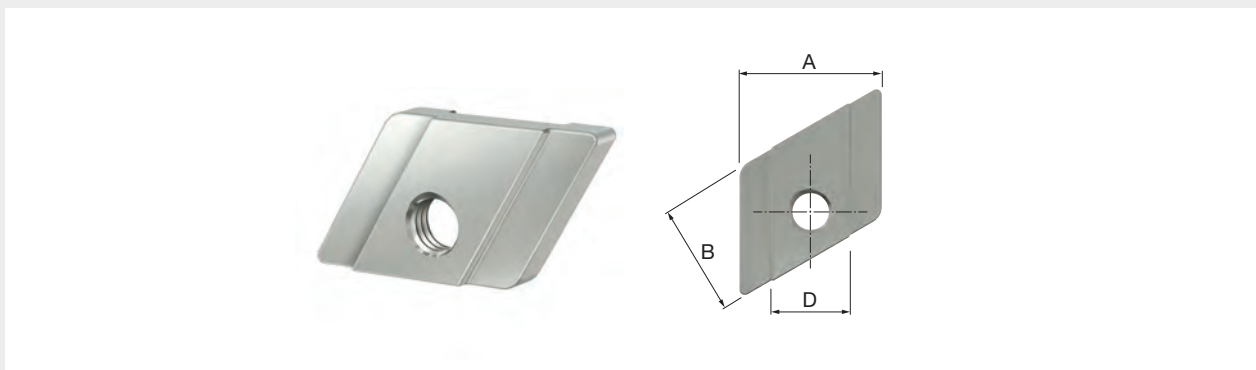
Type	Connection	Dimensions [mm]	Slotted hole [mm]		Order Code
GP 8 - 80 x 30 SST AISI 304	M 8	80 x 30	9 x 16	100	39445
GP 10 - 80 x 30 SST AISI 304	M 10	80 x 30	9 x 16	100	39446
GP 1/2 - 80 x 30 SST AISI 316	1/2" F	80 x 30	9 x 16	50	39447
GP 10 - 1/2 - 80 x 30 SST AISI 316	G 1/2" M / M 10	80 x 30	9 x 16	50	39448


STAINLESS STEEL RAIL SUPPORT NUTS

M ..s Rail Support Nuts - Stainless Steel

For easy mounting of a suspension in Flamco rail.

- Stainless steel AISI 304.

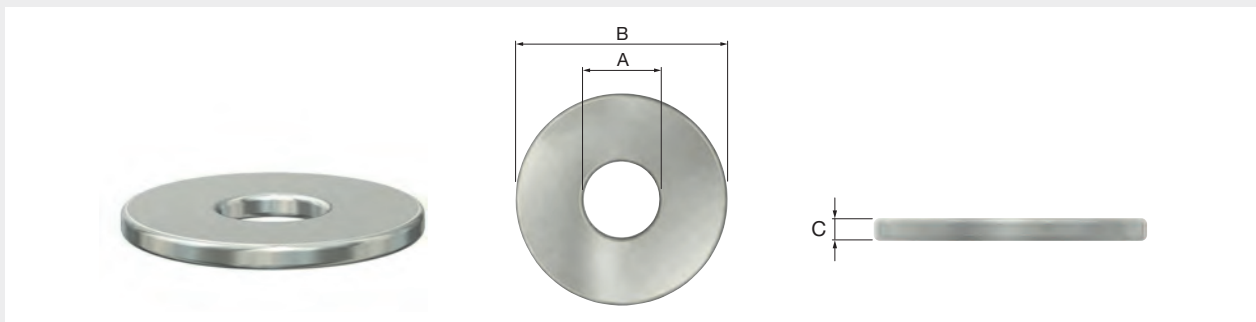



Type	Connection	Dimensions				Order Code
		A [mm]	B [mm]	D [mm]		
M 8s SST	M 8	25	20	13.5	100	80322
M 10s SST	M 10	25	20	13.5	100	80323

STAINLESS STEEL WASHERS

S Washers - Stainless Steel

- Stainless steel AISI 304.




Type	Connection (A)	Dimensions			Order Code
		B [mm]	C [mm]		
S 8 SST	M 8	23	1.5	100	70822
S 10 SST	M 10	29	2.0	100	70823

STAINLESS STEEL NUTS

M Nuts - Stainless Steel



- Stainless steel AISI 304.

Type	Connection		Order Code
M 8 SST	M 8	100	70222
M 10 SST	M 10	100	70223

STAINLESS STEEL THREADED TUBE

Threaded tube - Stainless steel



- Stainless steel AISI 316.


Type	Length [mm]	Connection		Order Code
Threaded pipe 1/2 V4A	1000	G 1/2" M	1	51760

STAINLESS STEEL THREADED PRODUCTS

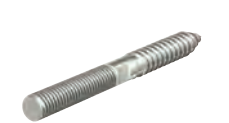
D Threaded Rods - Stainless Steel




- For all suspensions and assemblies with threaded rod.
- Stainless steel AISI 304.

Type	L. [mm]	Connection	Max. working load [N]		Order Code
D 8 SST	1000	M 8	4500	50	70052
D 10 SST	1000	M 10	7000	10	70053

HO Wood Screw Studs - Stainless Steel



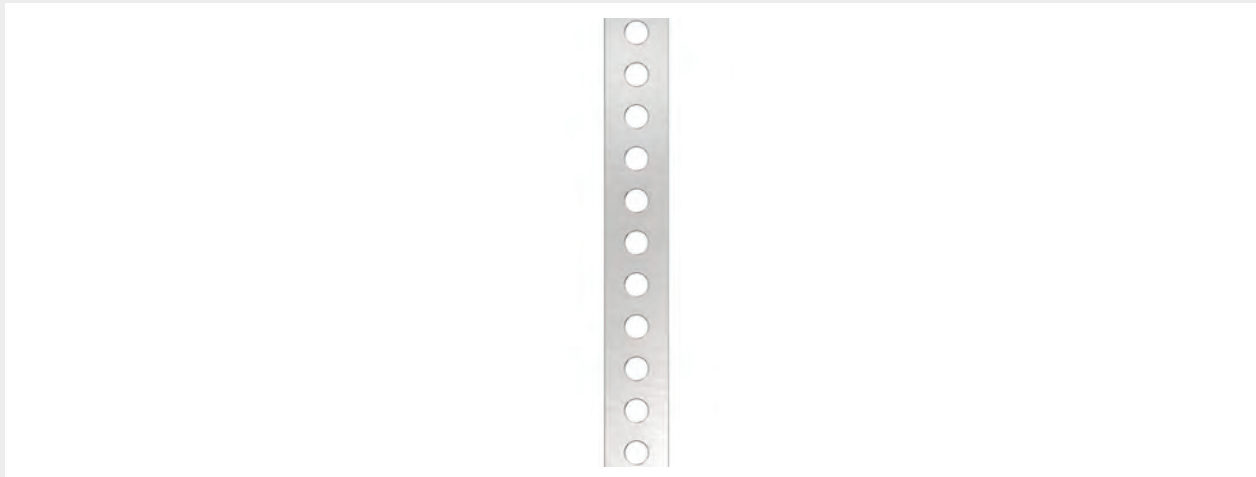
- Stainless steel AISI 304.
- Supplied with hexagonal midsection.


Type	L. [mm]	Connection		Order Code
HO 8 x 80 SST	80	M 8	100	70621
HO 8 x 100 SST	100	M 8	100	70624
HO 10 x 80 SST	80	M 10	100	70622
HO 10 x 100 SST	100	M 10	100	70625

STAINLESS STEEL MOUNTING STRIPS

Stainless steel LB Mounting Strip

- Stainless steel 316.




Type	Roll [m]	Dimensions		Max. working load [N]		Order Code
		Width [mm]	Perforations [mm]			
LB 26 SST	10	26	Ø 8.5	3000	1	71011

STAINLESS STEEL CONNECTORS

Sleeve - Stainless Steel



- Stainless steel AISI 304.

Type	Connection		Order Code
Sleeve 1/2 SST	1/2" F	100	52815

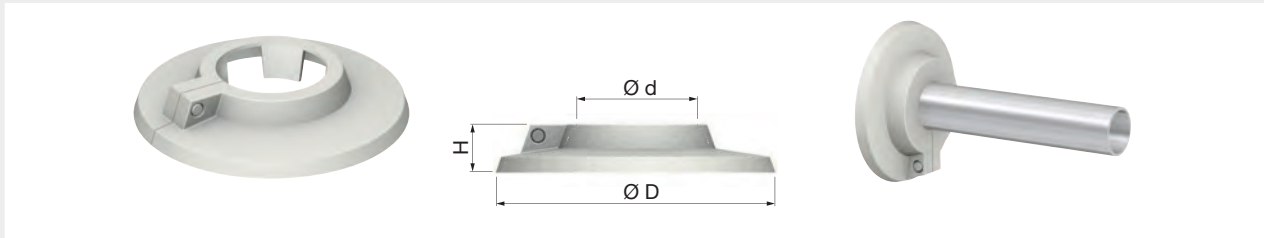
STANDARD PIPE ESCUTCHEONS


A neat and efficient method of concealing pipe holes in floors, walls and ceilings.

- Manufactured from polypropylene.
- Suitable for temperatures up to 120 °C.
- Has clamping lips, so that the escutcheons cannot slide.

RK Pipe Escutcheons

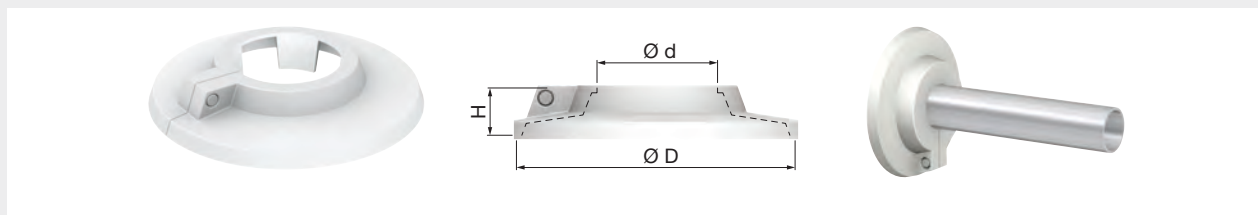
- Snap-on fitting bracket (pin-hole fastening).
- Colour: Gray.




Type	Ø Pipe		Dimensions				Order Code
	Nom. ["]	Ext. dia. [mm]	Ø d [mm]	H [mm]	Ø D [mm]		
RK 15	-	15	15	12	55	50	12315
RK 16	-	16	16	12	55	50	12316
RK 3/8	3/8"	18	18	12	55	50	12300
RK 1/2	1/2"	22	22	12	55	50	12301
RK 3/4	3/4"	28	28	12	60	50	12302
RK 1	1"	35	35	12	68	50	12303
RK 1 1/4	1 1/4"	42	42,9	12	75	50	12304

RKW Pipe Escutcheons

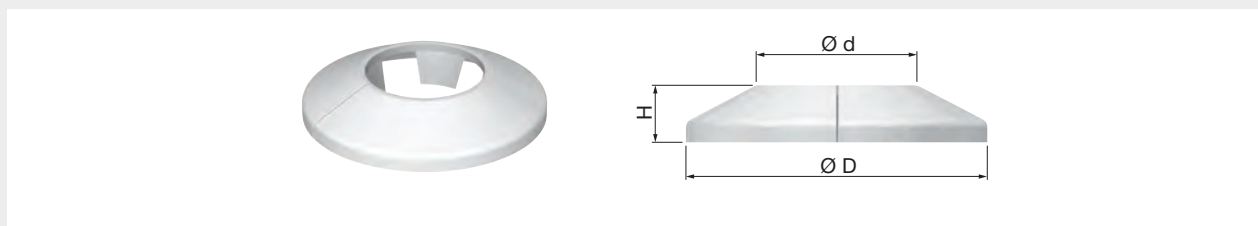
- Snap-on fitting bracket (pin-hole fastening).
- Colour: White.




Type	Ø Pipe		Dimensions				Order Code
	Nom. ["]	Ext. dia. [mm]	Ø d [mm]	H [mm]	Ø D [mm]		
RKW 8	-	8	8	12	40	50	12108
RKW 1 ¹ / ₈	1 ¹ / ₈ "	10	10	12	40	50	12110
RKW 12	-	12	12	12	40	50	12112
RKW 1 ¹ / ₄	1 ¹ / ₄ "	14	14	12	55	50	12114
RKW 15	-	15	15	12	55	50	12115
RKW 16	-	16	16	12	55	50	12116
RKW 3 ³ / ₈	3 ³ / ₈ "	18	18	12	55	50	12100
RKW 20	-	20	20	12	55	50	12120
RKW 1 ¹ / ₂ - 22	1 ¹ / ₂ "	22	22	12	60	50	12101
RKW 1 ¹ / ₂ - 22	1 ¹ / ₂ "	22	22	12	60	50	12201
RKW 25	-	25	25	12	60	50	12125
RKW 3 ³ / ₄	3 ³ / ₄ "	28	28	12	68	50	12102
RKW 1	1"	35	35	12	75	50	12103
RKW 1 ¹ / ₄	1 ¹ / ₄ "	42	42,9	12	88	50	12104
RKW 1 ¹ / ₂	1 ¹ / ₂ "	48	48,8	12	95	50	12105
RKW 57	-	57	57,6	12,5	109	50	12157
RKW 2	2"	60	60,8	12,5	109	50	12106

RV Pipe Escutcheons

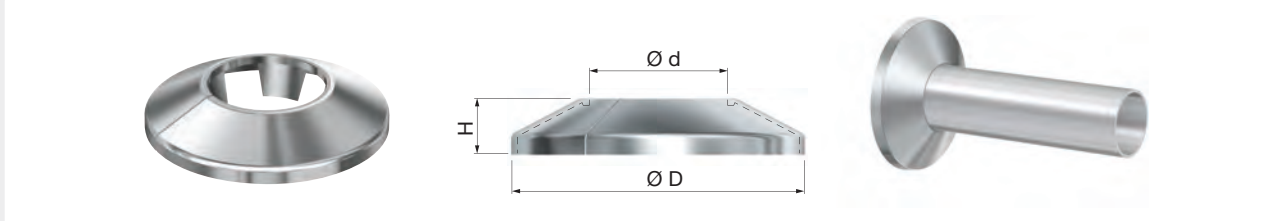
- Dovetail joint.
- Colour: White.




Type	Ø Pipe		Dimensions				Order Code
	Nom. ["]	Ext. dia. [mm]	Ø d [mm]	H. [mm]	Ø D [mm]		
RV 1 ¹ / ₈	1 ¹ / ₈ "	10	10	11.6	40	50	12410
RV 12	-	12	12	11.6	42	50	12412
RV 15	-	15	15	11.6	45	50	12415
RV 3 ³ / ₈	3 ³ / ₈ "	18	18	11.6	48	50	12400
RV 1 ¹ / ₂	1 ¹ / ₂ "	22	22	11.3	52	50	12401
RV 3 ³ / ₄	3 ³ / ₄ "	28	28	11.3	58	50	12404

RVC Pipe Escutcheons

- Dovetail joint.
- Chromium-plated.



Type	Ø Pipe		Dimensions				Order Code
	Nom. ["]	Ext. dia. [mm]	Ø d [mm]	H [mm]	Ø D [mm]		
RVC 1/8	1/8"	10	10	11.6	40	50	12460
RVC 12	-	12	12	11.6	42	50	12462
RVC 15	-	15	15	11.6	45	50	12465
RVC 3/8	3/8"	18	18	11.6	48	50	12450
RVC 1/2	1/2"	22	22	11.3	52	50	12451
RVC 3/4	3/4"	28	28	11.3	58	50	12454

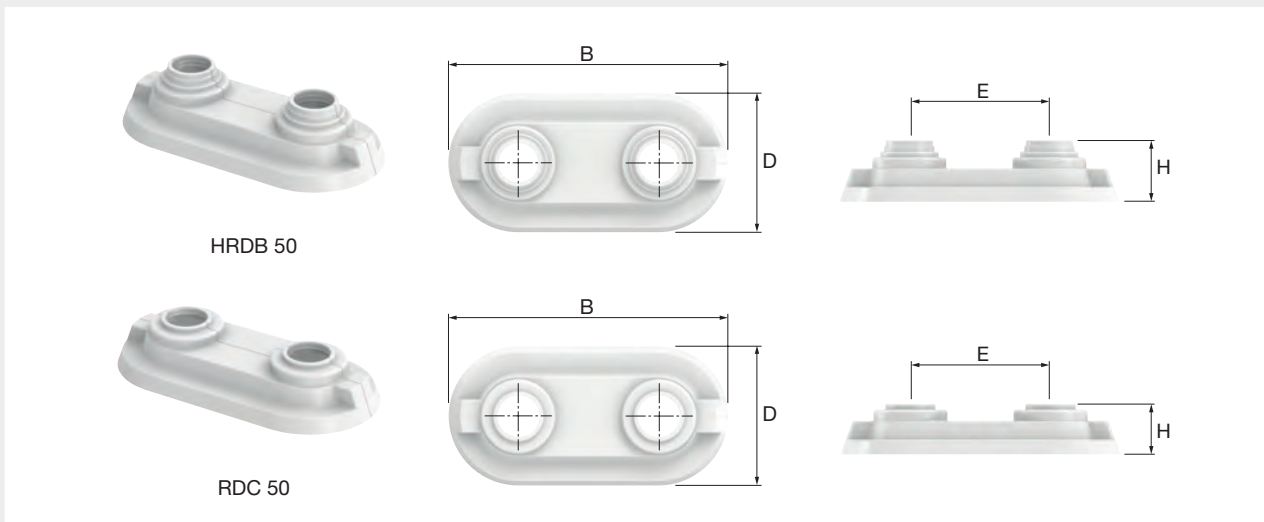
DOUBLE PIPE ESCUTCHEONS


A neat and efficient method of concealing pipe holes in floors, walls and ceilings.

- Manufactured from polypropylene.
- Suitable for temperatures up to 120 °C.

HRDB/RDC Double Pipe Escutcheons

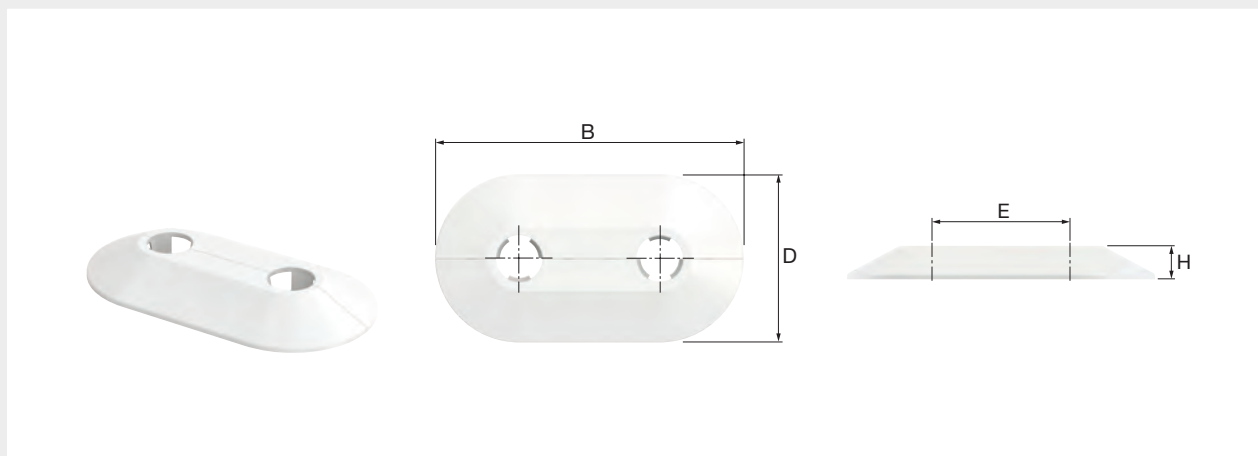
- Colour: White.




Type	Ø Pipe ext. dia. [mm]	Dimensions					Order Code
		B [mm]	D [mm]	H [mm]	E [mm]		
HRDB 50	14. 16. 17. 20	99	50	20	50	50	12550
RDC 50	15	99	50	18	50	50	12555

RVD Double Pipe Escutcheons

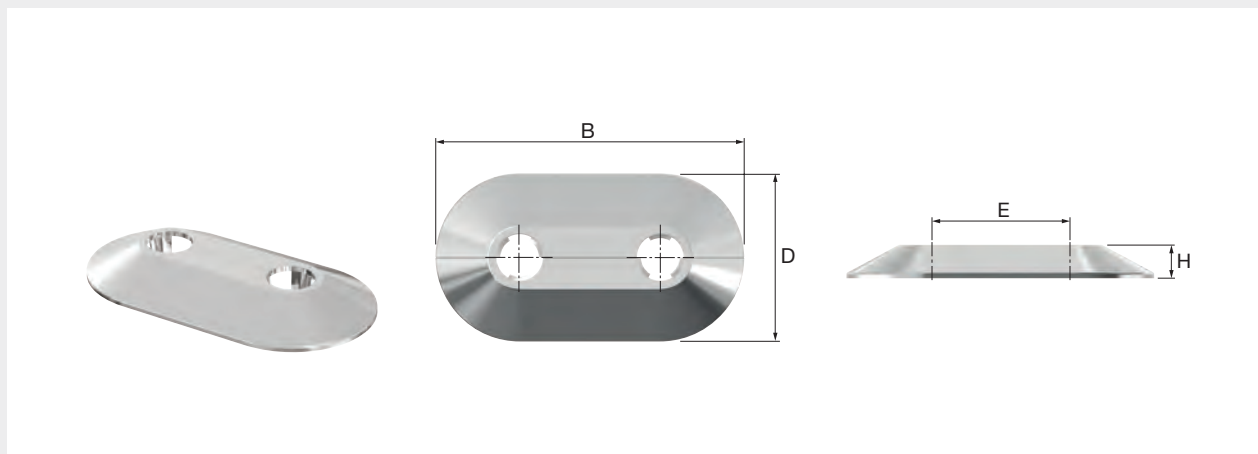
- Colour: White.




Type	Ø Pipe ext. dia. [mm]	Dimensions					Order Code
		B [mm]	D [mm]	H [mm]	E [mm]		
RVD 15/50	15	110	60	12	50	50	12569
RVD 16/50	16	110	60	12	50	50	12570

RVDC Double Pipe Escutcheons

- Chromium-plated.



Type	Ø Pipe ext. dia. [mm]	Dimensions					Order Code
		B [mm]	D [mm]	H [mm]	E [mm]		
RVDC 15/50	15	110	60	12	50	50	12529

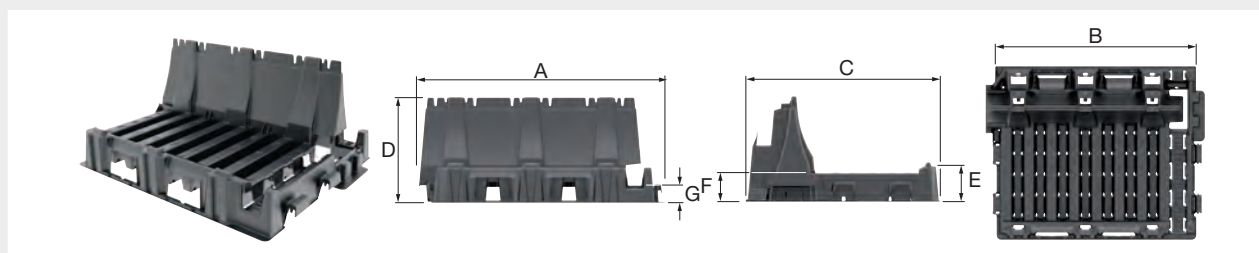
FLAMCOFIX FALX


Universal PV panel mounting system for flat surfaces.

- Consists of only three components: mounting block, rail and clip.
- Made of recyclable materials.

Falx mounting block

- Material: Polypropylene, UV-stabiliser, Additives.
- Color: Black (standard).

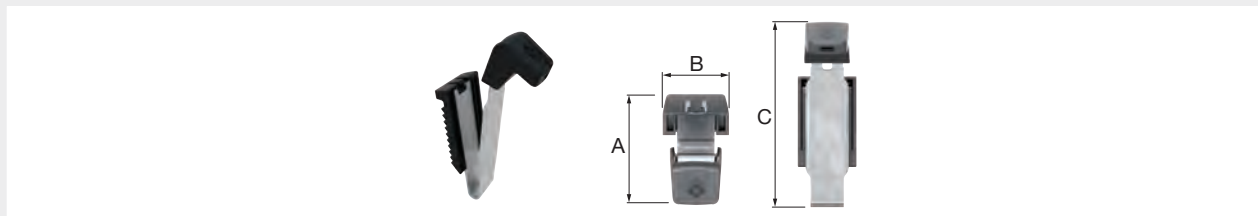



Type	Dimensions								Weight [kg]		Order Code
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]			
Falx mounting block	740	675	586	317	107	86	45	445	3.84	76	39980



Falx clip

- Material:
Clip: Polypropylene, UV-stabiliser, Additives.
Spring: SS301 Spring Steel.

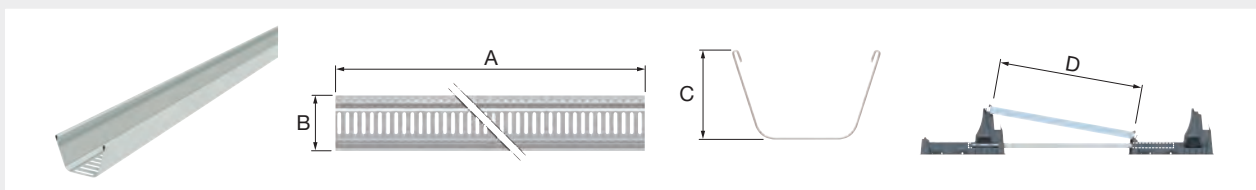



Type	Dimensions			Weight [kg]		Order Code
	A [mm]	B [mm]	C [mm]			
Falx Clip HD	50	30	95	0.03	40 / 200 / 11200	39982



Falx rail

- Material: Coated S250.



Type	Dimensions				Weight [kg]		Order Code
	A max. [mm]	B [mm]	C [mm]	D [mm]			
Falx rail F1411 (for landscape)	1411	55	34	981 - 1060	1.03	200 / 800	50095
Falx rail F2035 (for portrait)	2035	55	34	1601 - 1678	1.55	200 / 800	50096



Alternative Finishes

Flamco can offer alternative coatings for all products detailed in this chapter such as plastic, red and yellow oxide primer, epoxy, hot dip

Zinc Coating

- **Electroplated Zinc (ASTM B633)**

This type of coating is recommended for indoor use in relatively dry areas. This process deposits a coating of zinc on the steel or iron by electrolysis from a bath of zinc salts. This coating is pure zinc and adheres to the steel or iron with a molecular bond. A maximum of 12 µm of zinc can be applied using this method.

- **Pre-Galvanized Zinc (ASTM A653)**

This type of coating is suitable for extended exposure in dry or mildly corrosive atmospheres, but not generally recommended for outdoor use, or in industrial environments. This coating is also referred to as “mill galvanized” or “hot dip mill galvanized”. This process continuously rolls steel coils or sheets through molten zinc. The steel is then cut or slit to size. Coating thickness of .90 ounces per square foot of steel surface (referred to as G90) is used on Flamco’s Figures 310G and 310NFPA. Cut edges are not zinc coated, however, zinc near the uncoated steel becomes a sacrificial anode, which protects the bare areas after a short period of time.

- **Hot Dip Galvanized (ASTM 123)**

This type of coating provides extended corrosion protection for steel and iron products exposed to extreme humidity commonly evident in outdoor exposure or in uncontrolled atmospheric conditions. This coating provides superior corrosion resistance to that of electroplating. The process calls for the steel or iron product to be completely immersed into a bath of molten zinc, which creates a metallurgical bond. The minimum coating thickness is 1.5 ounces per square foot per side (3 ounces per square foot of steel or iron). Caution should be taken when specifying Hot Dip Galvanizing on certain products. Products with threaded components should either have the threads protected from the galvanizing process or chase the threads subsequent to hot dipping. Products with critical size tolerances should account for the thickness of the coating.

galvanized, electro zinc, copper, CUPPER-GARD, chrome and colour coordinated finishes. Specialized finishes may be available upon request.

Primer

Flamco offers Red Primer and Yellow Primer. Both offer a degree of protection from the elements. These coatings are also used in applications where painting of the metal is desired. EPA is restricting the use of certain primers. Consult Flamco for specific primer chemical components, as well as corrosive capabilities of specific primers.

Plastic Coating

Vinyl coating of the metal prevents galvanic reaction between dissimilar metals, provides corrosion resistance, reduces noise, and can be used where glass or plastic pipe contact with metal is not desired.

Epoxy Coating

Flamco offers various epoxy finishes in both commercial and military grades. These finishes offer a high degree of corrosion resistance.

Flamco provides CUPPER-GARD finish for copper tubing installations. The finish provides superior corrosion protection and insulates against dissimilar metal contact, thus preventing electrolysis. The process applies a baked-on epoxy paint to steel stampings and iron castings. In the three step process, the parts are zinc plated to .0002” thick, an epoxy copper colored powder is then applied by an electrostatic method, and finally, the coated parts are baked at 180 ° for 20 minutes.

Copper Plating

This coating is designed for copper tubing installations. The coating is intended to identify the product size only. This finish is not intended for corrosion resistance.

Chrome Plating

This coating is intended to support chrome plated pipe and provides corrosion resistance for commercial installations such as hospitals, schools and prisons.

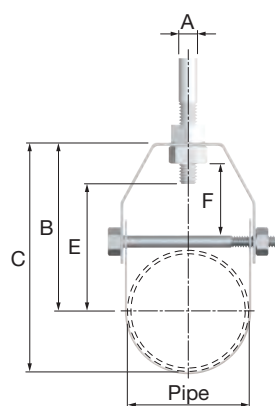
CLEVIS HANGERS


CH - G Clevis Hangers

Type 11

Standard, adjustable clevis hangers.

- Material: Carbon steel *.
- Finish: Electro-galvanized *.
- Service: Designed for the suspension of non-insulated, stationary pipe lines.
- Approvals: U.L. - U.L.C. listed (sizes 2½" - 8")
FM approved (¾" - 8").
- Complies with: Federal Specification WW-H-171-E (Type# 1), A-A-1192 A (Type# 1)
Manufacturers' Standardization Society MSS SP-58 and SP-69 (Type# 1).
- Notes: Upper locknut must be tightened securely to assure proper hanger performance. Stainless steel hangers are recommended for applications where protection from corrosive environments is needed.



Type	Ø Pipe		Material size		Bolt ["]	Dimensions					Max. rec. working load [lbs]	Weight [lbs]		Order Code
	Nom. ["]	OD ["]	Top ["]	Bottom ["]		A ["]	B ["]	C ["]	E ** ["]	F ["]				
CH-G 2	2	2.375	12ga x 7/8	12ga x 7/8	1/4	3/8	3 5/16	4 7/16	2 1/2	1 1/4	610	0.38	1	87005
CH-G 2 1/2	2 1/2	2.875	9ga x 1 3/16	10ga x 1 3/16	5/16	1/2	4 1/2	5 7/8	3 3/8	1 15/16	1130	0.86	1	87006
CH-G 3	3	3.500	9ga x 1 3/16	10ga x 1 3/16	5/16	1/2	4 3/4	6 1/2	3 11/16	1 3/4	1130	0.96	1	87007
CH-G 3 1/2	3 1/2	4.000	8ga x 1 3/16	10ga x 1 3/16	5/16	1/2	5 7/8	7 15/16	4 13/16	2 9/16	1130	1.14	1	87008
CH-G 4	4	4.500	8ga x 1 3/16	10ga x 1 3/16	3/8	5/8	5 15/16	8 3/16	4 9/16	2 1/8	1430	1.26	1	87009
CH-G 5	5	5.563	4ga x 1 1/4	8ga x 1 1/4	1/2	5/8	5 11/16	8 7/16	4 5/16	1 7/16	1430	2.04	1	87010
CH-G 6	6	6.625	3ga x 1 1/2	8ga x 1 1/2	1/2	3/4	6 13/16	10 1/8	5 3/16	1 3/4	1940	2.80	1	87011
CH-G 7	7	7.625	3ga x 1 1/2	8ga x 1 1/2	1/2	3/4	7 13/16	11 5/8	6 3/16	2	2000	3.24	1	87012
CH-G 8	8	8.625	3ga x 1 3/4	8ga x 1 3/4	5/8	3/4	8 1/16	12 7/16	6 1/4	1 7/8	2000	4.46	1	87013
CH-G 10	10	10.750	3/8 x 1 3/4	3ga x 1 3/4	3/4	7/8	10	15 7/16	8	2 1/4	3600	8.06	1	87014
CH-G 12	12	12.750	3/8 x 2	3ga x 2	3/4	7/8	11 9/16	18	9 9/16	2 13/16	3800	10.34	1	87015
CH-G 14	14	14.000	1/2 x 2 1/2	1/4 x 2	7/8	1	12 9/16	19 9/16	10 9/16	2 9/16	4200	14.80	1	87016
CH-G 16	16	16.000	1/2 x 2 1/2	1/4 x 2 1/2	1	1	13 15/16	21 15/16	11 15/16	2 13/16	4600	21.00	1	87017

* Material 304 and 316 stainless steel and finishes such as plain, painted or hot dip galvanized are available upon request.

** "E" dimension includes exposed rod threads beyond bottom of the hex nut. Exposed rod thread dimension is equal to the diameter of the rod used.



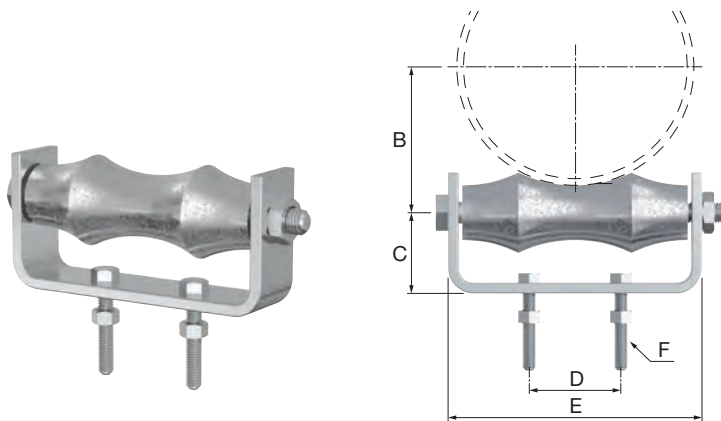
ROLLER CHAIR


RC Roller Chair

Type 275

Roller chair.

- Material: Carbon steel chair and axle with cast iron roller.
- Finish: Electro-galvanized.*
- Service: Designed for the support of pipe where longitudinal movement of pipe may occur due to the expansion and contraction, and where vertical adjustment is not necessary. May be bolted or welded to supporting member.



Type	Material size ["]	Axle size ["]	Dimensions					Max rec load [lbs]	Weight [lbs]		Order Code
			B ["]	C ["]	D ["]	E ["]	F ["]				
RC 2	4ga x 1.25	3/8	1 9/16	1 3/8	1 1/4	4 1/4	3/8	390	0.94	1	87500
RC 2 1/2	4ga X 1.25	1/2	1 7/8	1 5/8	1 1/4	4 7/8	3/4	390	1.18	1	87501
RC 3	4ga X 1.25	1/2	2 1/8	1 3/4	2	5 11/32	3/4	390	1.32	1	87502
RC 3 1/2	3/8 x 1.500	1/5	2 1/2	2	2 1/2	6 11/32	3/8	390	2.58	1	87503
RC 4	3/8 x 1.500	1/2	2 13/16	2 5/16	2	7 11/32	1/2	950	2.94	1	87504
RC 5	3/8 x 1.500	5/8	3 3/8	2 1/2	3	8 1/4	1/2	950	3.64	1	87505
RC 6	3/8 x 2.00	3/4	3 15/16	2 3/4	3 1/8	9 1/2	1/2	950	5.72	1	87506
RC 8	3/8 x 2.00	7/8	5 1/8	3	3 3/8	12 1/4	5/8	1350	8.16	1	87508
RC 10	1/2 x 2	7/8	6 3/8	3 5/8	5	14 1/2	5/8	1730	11.96	1	87509
RC 12	1/2 x2	7/8	7 1/2	4 1/8	6	16 1/4	5/8	2400	15.86	1	87510
RC 14	1/2 x 2.50	1 1/8	8 3/8	4 11/26	6 1/2	18	3/4	3130	21.58	1	87511
RC 16	1/2 x 3	1 1/4	9 3/8	5 3/8	8 1/4	21	3/4	3970	34.50	1	87512
RC 18	1/2 x 3	1 1/4	10 7/16	6	9 1/4	22 7/8	3/4	4200	36.50	1	87513

* Material 304 and 316 stainless steel an dfinish such as plain, painted or hot dip galvanized are available upon request.



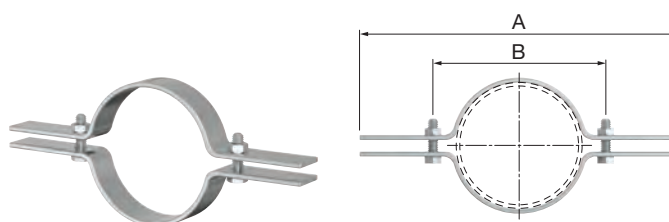
STANDARD RISER CLAMPS


SRC Riser Clamps

Type 50

Riser clamps, electro-galvanized

- Material: Carbon steel.*
- Finish: Electro-galvanized.*
- Service: Designed for supporting and stabilizing vertical pipe runs.
- Complies with: U.L. - U.L.C. listed (sizes 2" - 8").
Federal Specification WW-H-171-E (Type# 8), A-A-1192 A (Type# 8)
Manufactures' Standardization Society MSS SP-58 and SP-69 (Type# 8).
- Notes: Plastic coated riser clamps are completely plastic coated with zinc plated hardware. The plastic coating prevents pipe from coming in contact with the clamp and is designed to reduce noise, vibration and prevent electrolysis between pipe and clamp. Stainless steel riser clamps are recommended for applications where protection from corrosive environments is needed.



Type	Ø Pipe		Material size ["]	Dimensions		Max rec load [lbs]	Weight [lbs]		Order Code
	Nom. ["]	OD ["]		A ["]	B ["]				
SRC 1	1	1.315	8ga x 1.0	9 1/16	2 5/8	220	0.94	1	88203
SRC 1 1/4	1 1/4	1.660	8ga x 1.0	9 7/16	2 15/16	250	1.00	1	88204
SRC 1 1/2	1 1/2	1.900	8ga x 1.0	10	3 7/16	250	1.04	1	88205
SRC 2	2	2.375	8ga x 1.0	10 9/16	4	300	1.14	1	88206
SRC 2 1/2	2 1/2	2.875	3ga x 1.0	11 1/8	4 9/16	400	1.60	1	88207
SRC 3	3	3.500	3ga x 1.0	11 13/16	5 1/4	500	1.70	1	88208
SRC 3 1/2	3 1/2	4.000	3ga x 1.0	13	6	600	2.06	1	88209
SRC 4	4	4.500	3ga x 1.0	13 5/8	6 5/8	750	2.20	1	88210
SRC 5	5	5.563	3ga x 1.0	14 1/8	7 5/8	1500	3.40	1	88211
SRC 6	6	6.625	3ga x 1.0	15 3/8	8 7/8	1600	3.72	1	88212
SRC 8	8	8.625	3/8 x 1.5	18 5/8	12	2500	7.22	1	88213
SRC 10	10	10.750	3/8 x 2.0	21	14 1/2	2500	10.94	1	88214
SRC 12	12	12.750	1/2 x 2.0	22.75	16.75	2700	16.10	1	88215

* Material 304 and 316 stainless steel and finish such as plain, painted or hot dip galvanized are available upon request.



KFE & Ball Valves



P. 876

Expansion Compensator



P. 911

Pipe Crossing Fittings



P. 912

Backflow Preventers SB



P. 913

Connection Fittings



P. 914

Heating Accessories



P. 915

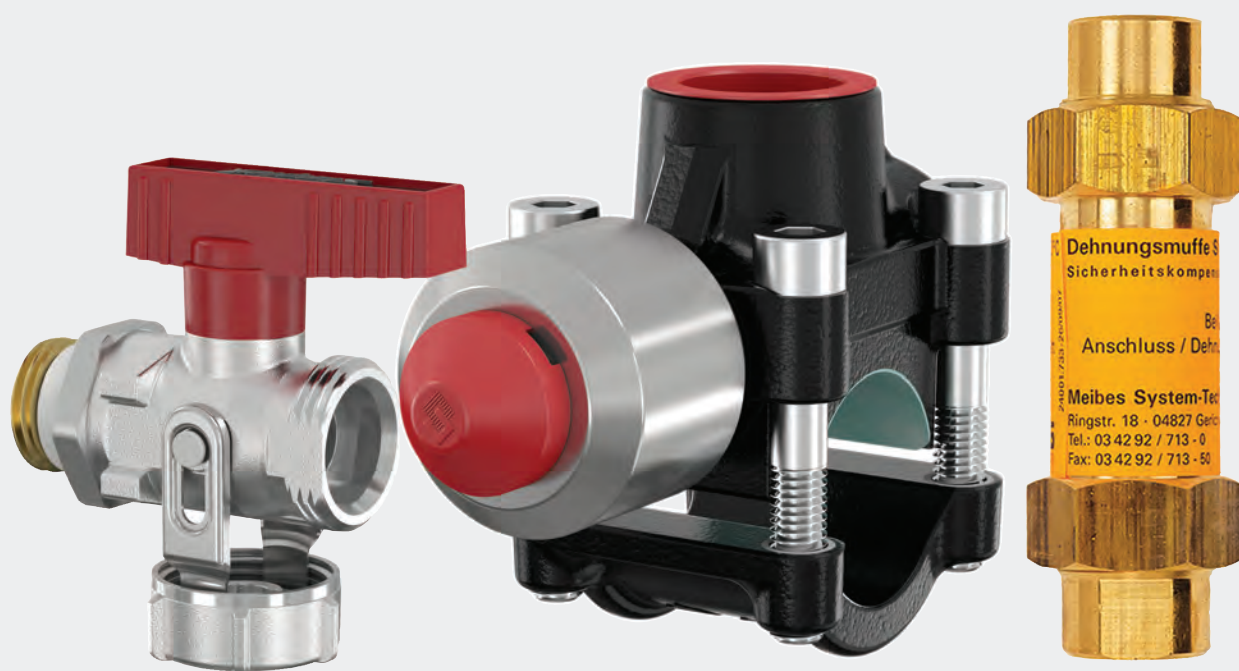
T-plus



P. 934

Essential Valves and Fittings

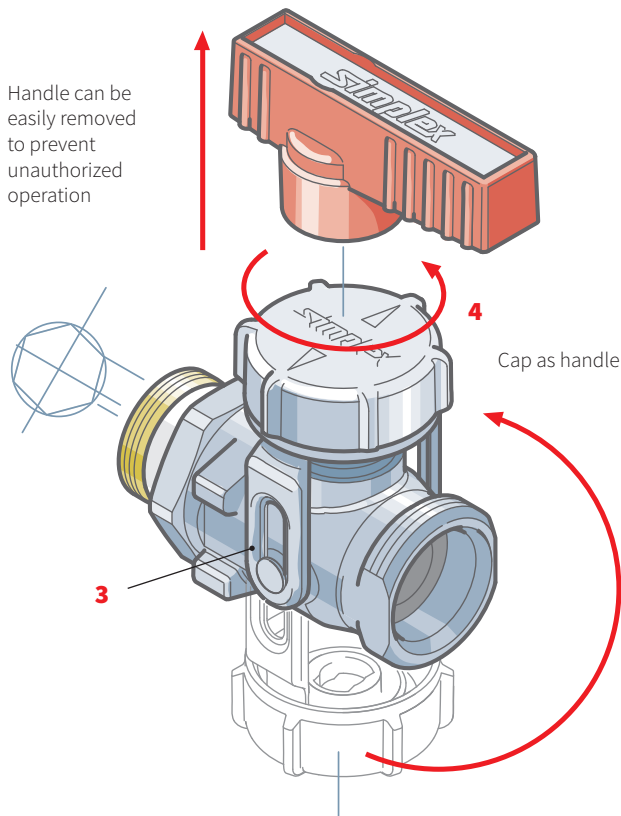
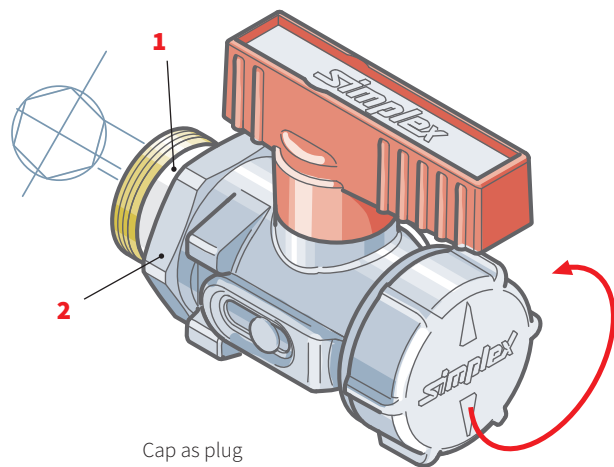
11



Flamco offers a wide range of components for quick installation and individual fittings for heating, air-conditioning and solar. Many of our particularly durable and low-maintenance fittings have proved their worth in long-term use and form an essential part of a wide range of installations. Worthy of special mention here are our pipe crossing fittings, gravity brakes (Backflow Limiters) and expansion compensators.

The T-plus branch creation clamp is particularly suitable for the extension, modification or renovation of an existing installation. So you no longer need to drain, depressurise or freeze the pipe when fitting a branch to it. The perfect way to avoid expensive down time.

KFE BALL VALVES



Advantages

- 1** Safe installation thanks to self-tightening thread seal
- 2** Exact axial positioning using lock nut
- 3** Exact positioning of blanking cap guide with stainless steel swivel bracket – no chain or loop to tear off
- 4** Hidden operating possibility using the blanking cap which serves as a hand wheel

The seal is what matters.

The advantages are convincing: Threaded connections are permanently sealed and additional adhesives or elastomers are not necessary. The secret of our success is five building blocks, which Simplex has optimally combined:

Raw Mixture

Resistance against heat and the effects of aging are extremely important issues for heating systems seals. Thus, Simplex seals are manufactured to a unique, specially developed formula.

Interconnection

Normally sulphur cured EPDM seals are used in heating systems. These shrink when exposed to heat and therefore cannot guarantee a permanent leak-tightness. In opposition Simplex seals are made of a non-aging, peroxide-crosslinked raw mixture.

Vulcanization

Temperature stressed seals must be fully vulcanized (crosslinked) during the manufacturing process. Simplex easily meets these requirements with modern machines at its factory.

Hardness Setting

Another special feature: The hardness of Simplex seals is set with a narrow tolerance range of 85 Shore. This makes them harder than commonly known seals made of elastic materials.

The Coating

The white coating makes Simplex seals mechanically tough, abrasion resistant and friction free.

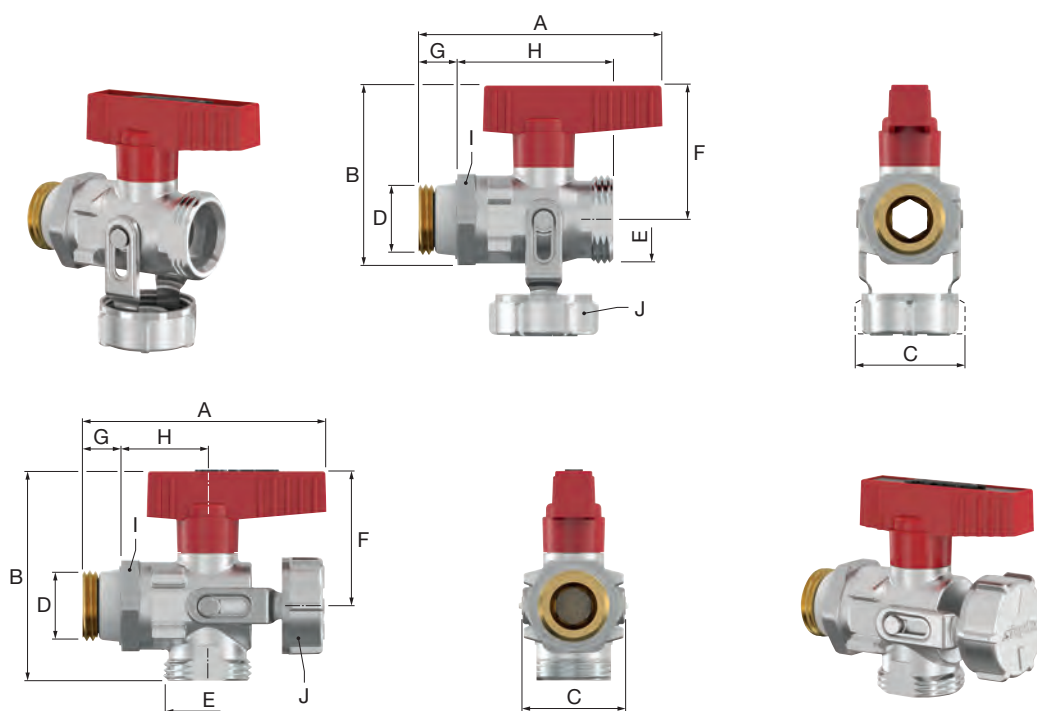
KFE BALL VALVES FOR HEATING


KFE ball valve for use in heating systems.

- Components made of nickel-plated brass
- Sealing materials: EPDM, PTFE
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

KFE Ball Valve with Male ThreadSimplex

With red lever handle, self-sealing with special thread seal, without hose connection.



Type	Version	Connection			Article no.
		D	E		
KFE-KH - D	straight	G 1/2" M	G 3/4" M	20	F10637
KFE-KH - E	angle	G 1/2" M	G 3/4" M	20	F10670

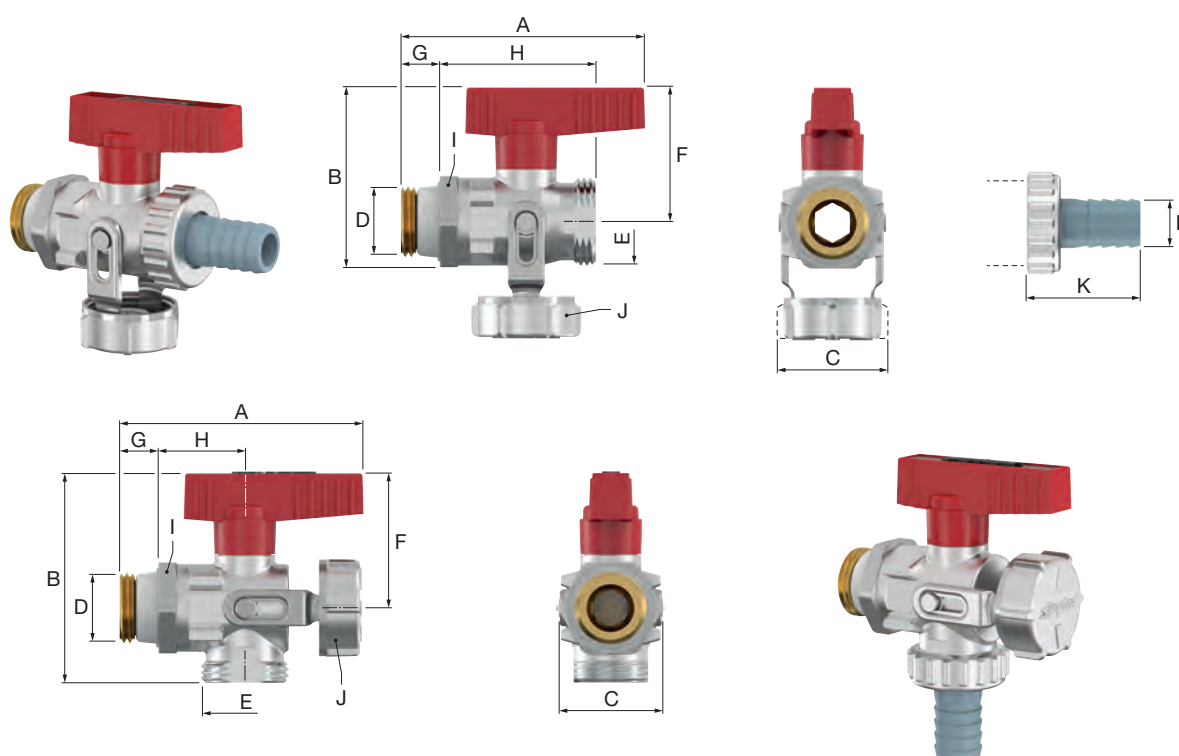


Dimensions

Type	Dimensions [mm]							
	A	B	C	F	G	H	I (WS)	J (WS)
KFE-KH - D	72	52.5	32.5	40	11	46.5	27	30
KFE-KH - E	72	62.0	31.0	40	11	26.0	27	30

KFE Ball Valve with Male Thread with Hose ConnectionSimplex

With red lever handle, self-sealing with special thread seal.



Type	Version	Connection			Article no.
		D	E		
KFE-KH - D SV	straight	G 1/2" M	G 3/4" M	20	F10638
KFE-KH - E SV	angle	G 1/2" M	G 3/4" M	20	F10671

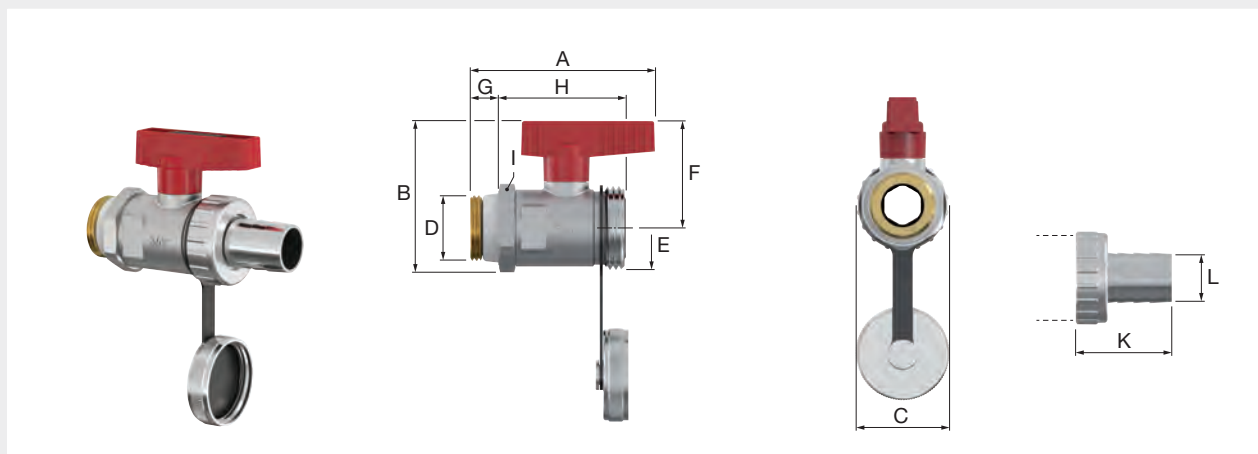


Dimensions

Type	Dimensions [mm]									
	A	B	C	F	G	H	I (WS)	J (WS)	K	L (Ø)
KFE-KH - D SV	72	52.5	32.5	40	11	46.5	27	30	33	14.5
KFE-KH - E SV	72	62.0	31.0	40	11	26.0	27	30	33	14.5

KFE Ball Valve with Male Thread DN 20 with Hose Connection

With red lever handle, self-sealing with special thread seal.



Type	Version	Connection			Article no.
		D	E		
KFE-KH DN20 - D SV	straight	G 3/4" M	G 1" M	10	F10680



Dimensions

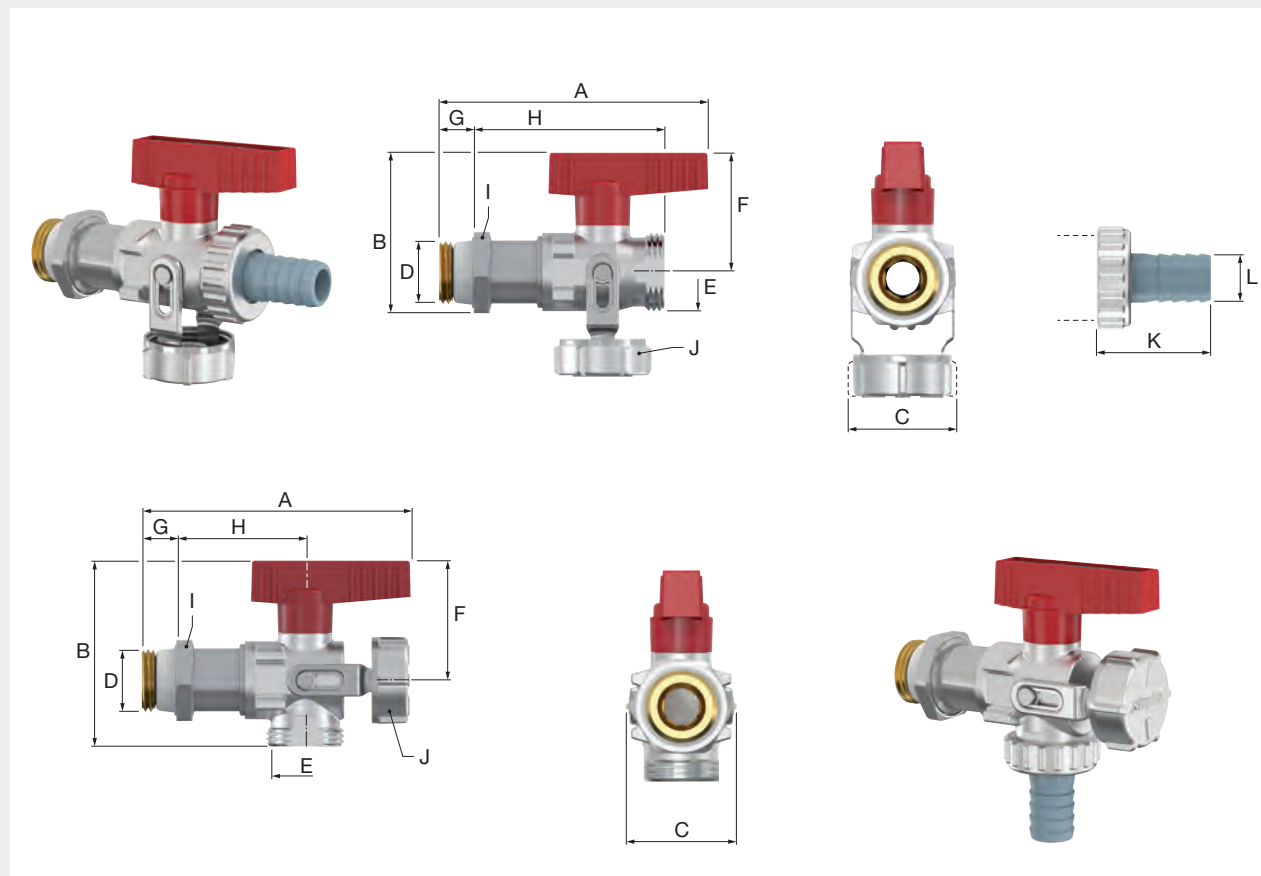
Type	Dimensions [mm]								
	A	B	C	F	G	H	I (WS)	K	L (Ø)
KFE-KH DN20 - D SV	73	60	37	42.5	11	50	32	35	20

Dimensions

Type	Dimensions [mm]							
	A	B	C	F	G	H	I (WS)	J (WS)
KFE-KH long - D	89	54.5	32.5	40	11	63.5	27	30
KFE-KH long - E	89	62.0	31.0	40	11	43.5	27	30

KFE Ball Valve with Male Thread, Long Version with Hose Connection

With red lever handle, self-sealing with special thread seal.



Type	Version	Connection			Article no.
		D	E		
KFE-KH long - D SV	straight	G 1/2" M	G 3/4" M	20	F10641
KFE-KH long - E SV	angle	G 1/2" M	G 3/4" M	20	F10674



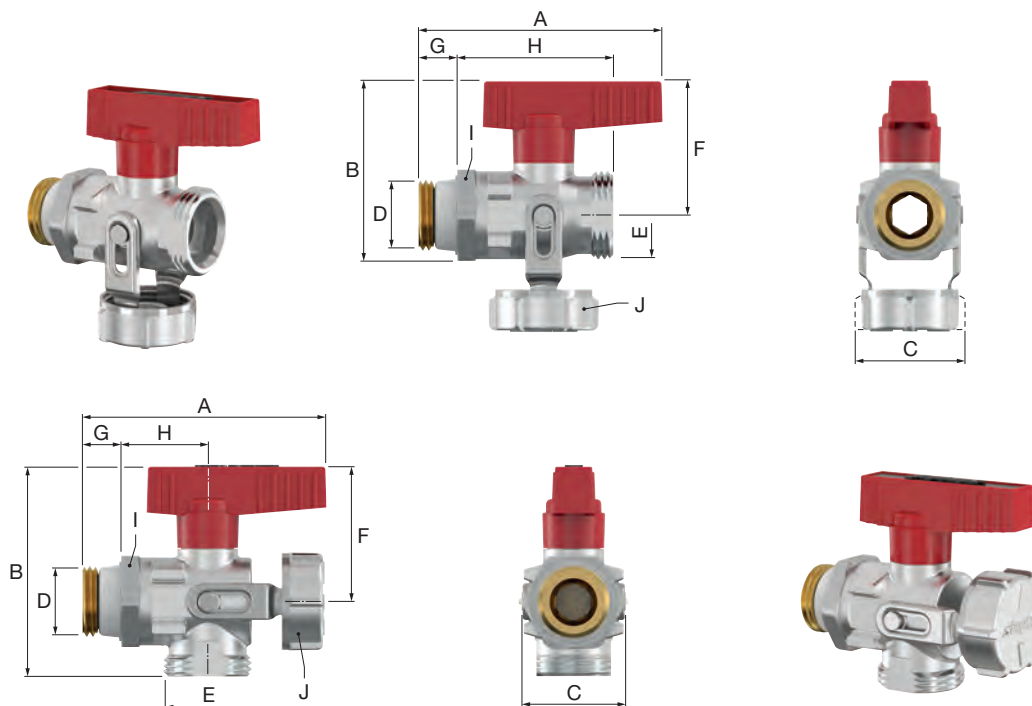
Dimensions

Type	Dimensions [mm]									
	A	B	C	F	G	H	I (WS)	J (WS)	K	L (Ø)
KFE-KH long - D SV	89	54.5	32.5	40	11	63.5	27	30	33	14.5
KFE-KH long - E SV	89	62.0	31.0	40	11	43.5	27	30	33	14.5

KFE Ball Valve with Male Thread, Silicone-free

With red lever handle, self-sealing with special thread seal, without hose connection.

- **Why silicone-free?** Free of lubricants and assembly aids that interfere with painting of completed installations.



Type	Version	Connection			Article no.
		D	E		
KFE-KH silicone-free - D	straight	G 1/2" M	G 3/4" M	20	F10657
KFE-KH silicone-free - E	angle	G 1/2" M	G 3/4" M	20	F10658



Dimensions

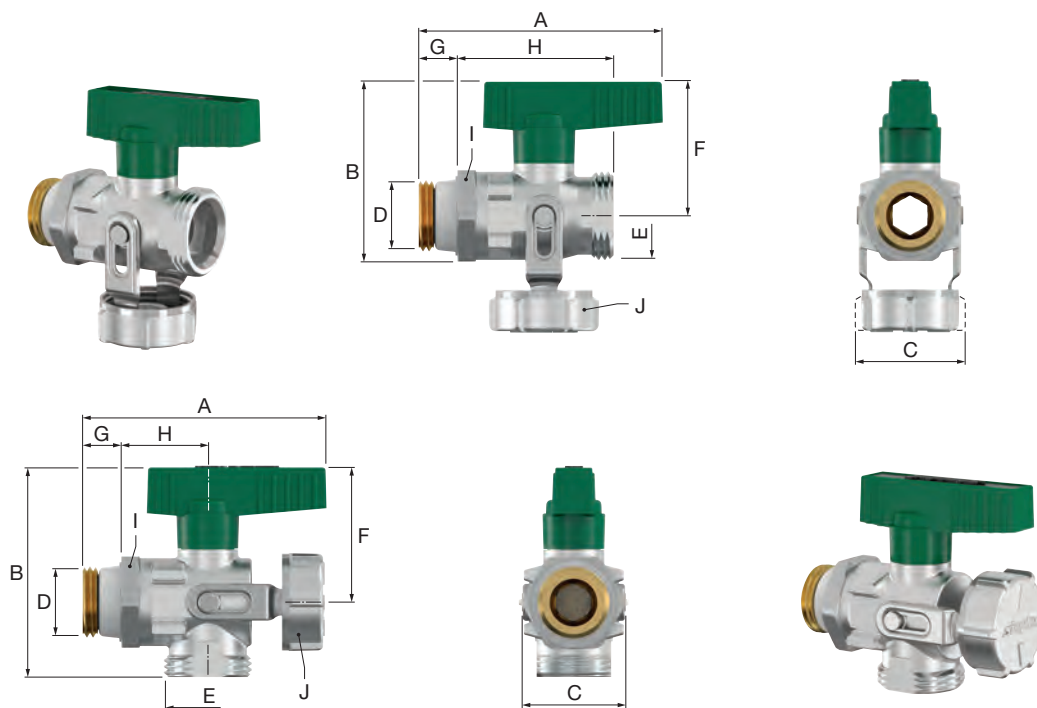
Type	Dimensions [mm]							
	A	B	C	F	G	H	I (WS)	J (WS)
KFE-KH silicone-free - D	72	52.5	32.5	40	11	46.5	27	30
KFE-KH silicone-free - E	72	62.0	31.0	40	11	26.0	27	30

KFE BALL VALVES FOR POTABLE WATER

KFE ball valve with DVGW approval for potable water systems (in accordance with the German TrinkwV) and heating systems, with green lever handle and male thread, self-sealing with special thread seal, without hose connection.

- Components made of nickel-plated brass, parts that come in contact with potable water are self finish brass
- Sealing materials: EPDM, PTFE
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

KFE Ball Valve for Potable Water



Type	Version	Connection			Article no.
		D	E		
KFE-KH DVGW - D	straight	G 1/2" M	G 3/4" M	20	F10639
KFE-KH DVGW - E	angle	G 1/2" M	G 3/4" M	20	F10669



Dimensions

Type	Dimensions [mm]							
	A	B	C	F	G	H	I (WS)	J (WS)
KFE-KH DVGW - D	72	52.5	32.5	40	11	46.5	27	30
KFE-KH DVGW - E	72	62.0	31.0	40	11	26.0	27	30

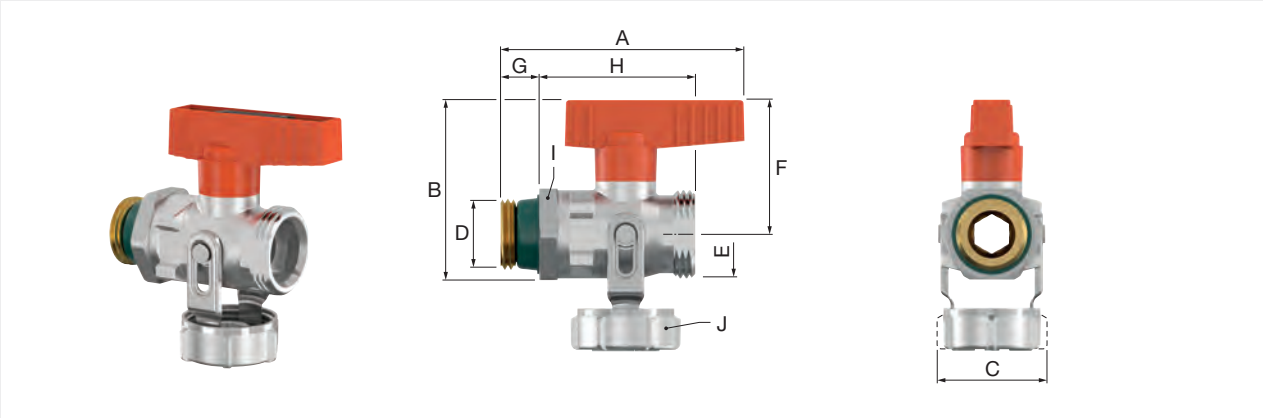
KFE BALL VALVES FOR SOLAR

KFE ball valve for use in solar systems, for water-glycol mixes up to 50% and increased temperature requirements, with orange lever handle and male thread, self-sealing with special thread seal.

- Components made of nickel-plated brass
- Sealing materials: AFLAS, FKM, PTFE
- Max. operating temperature: 180 °C permanent temperature, 200 °C short-term
- Max. operating pressure: 10 bar

KFE Ball Valve for Solar

Without hose connection.



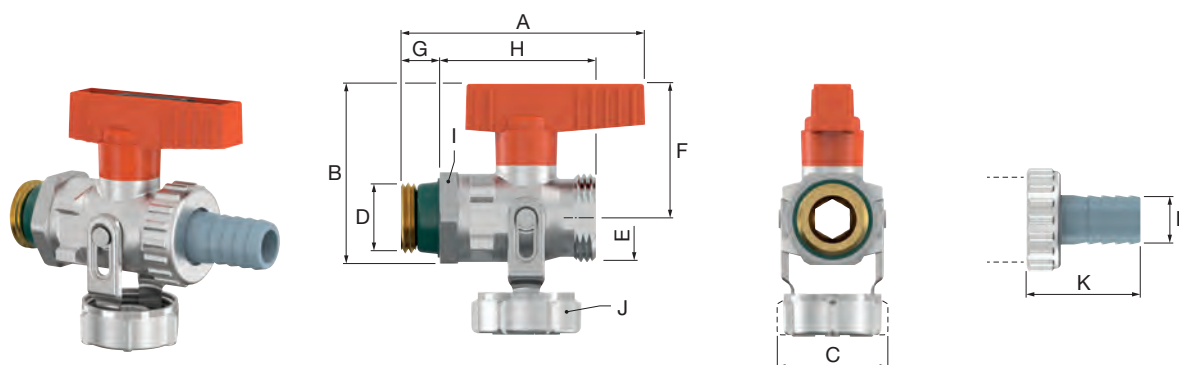
Type	Version	Connection			Article no.
		D	E		
KFE-KH Solar - D	straight	G 1/2" M	G 3/4" M	20	F10647




Dimensions

Type	Dimensions [mm]							
	A	B	C	F	G	H	I (WS)	J (WS)
KFE-KH Solar - D	72	52.5	32.5	40	11	46.5	27	30

KFE Ball Valve for Solar with Hose Connection



Type	Version	Connection			Article no.
		D	E		
KFE-KH Solar - D SV	straight	G 1/2" M	G 3/4" M	20	F10648



Dimensions

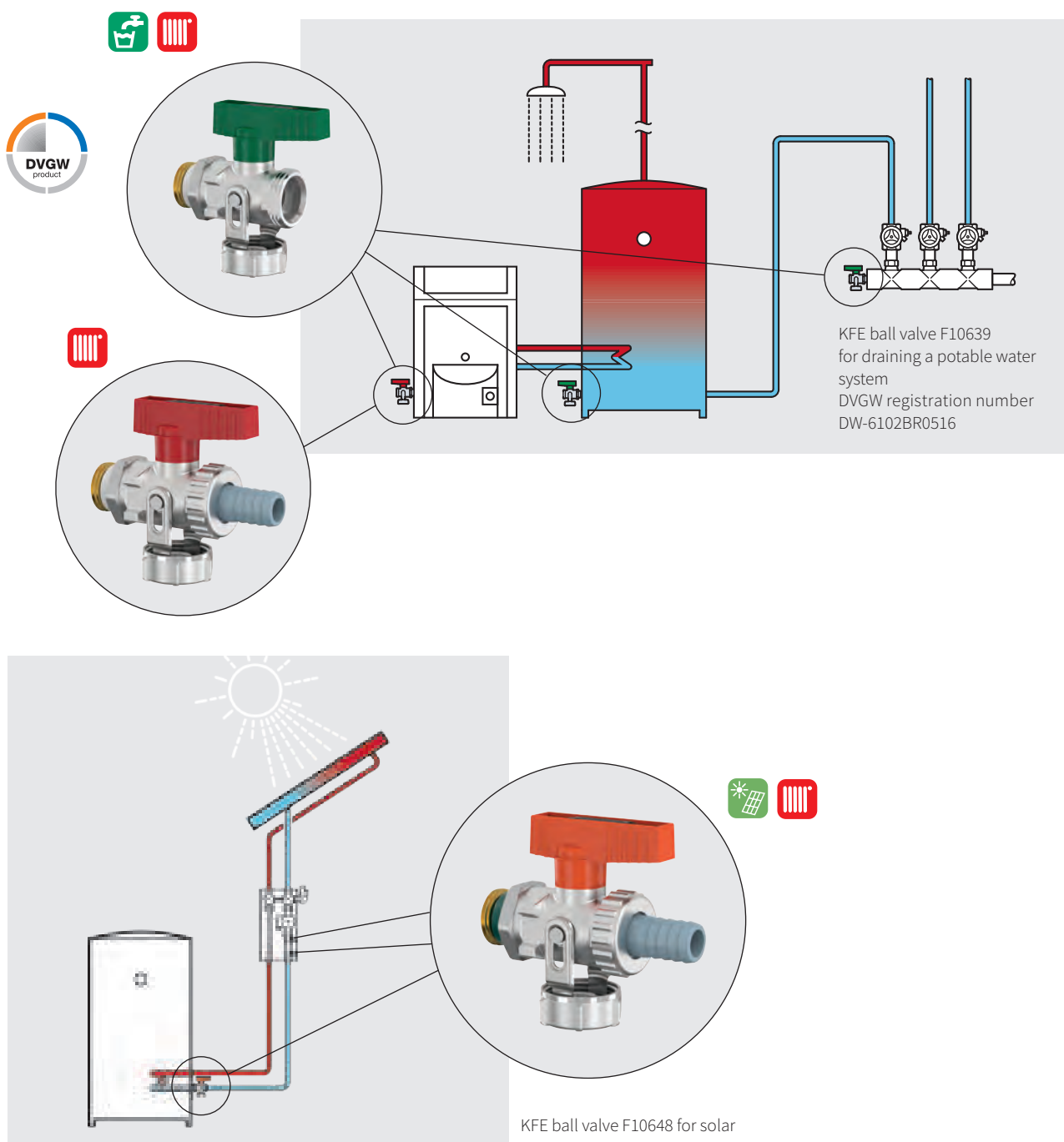
Type	Dimensions [mm]									
	A	B	C	F	G	H	I (WS)	J (WS)	K	L (Ø)
KFE-KH Solar - D SV	72	52.5	32.5	40	11	46.5	27	30	33	14.5

Material

For our valve components we use brass in accordance with European quality standards for turned and pressed parts EN 12164 and EN 12165; mainly types CW614N and CW617N.

For our potable water version we use brass alloy CW617N and the dezincing resistant alloy CW626N according to UBA-positive list (recommendation).

Installation example



SOCKET BALL VALVES

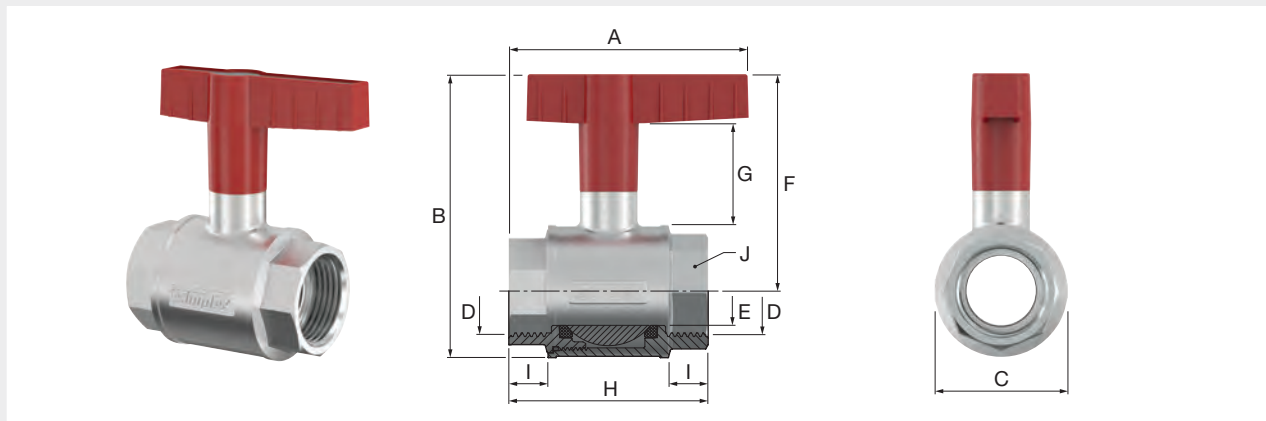
Shut-off ball valve for use in heating systems, full bore.


- Components made of nickel-plated brass, ball valves with press connection made of brass
- Sealing materials: EPDM, PTFE
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

→ Matching insulation shells available!

Socket Ball Valve with Lever Handle

With female thread on both sides, extended lever handle, metal, red coating.



Type	Nominal diameter	Connection (D)		Article no.
MKH FG - DN 15	DN 15	G 1/2" F	1 / 50	F10120
MKH FG - DN 20	DN 20	G 3/4" F	1 / 50	F10121
MKH FG - DN 25	DN 25	G 1" F	1 / 20	F10122
MKH FG - DN 32	DN 32	G 1 1/4" F	1 / 10	F10123
MKH FG - DN 40	DN 40	G 1 1/2" F	1	F10115
MKH FG - DN 50	DN 50	G 2" F	1	F10116

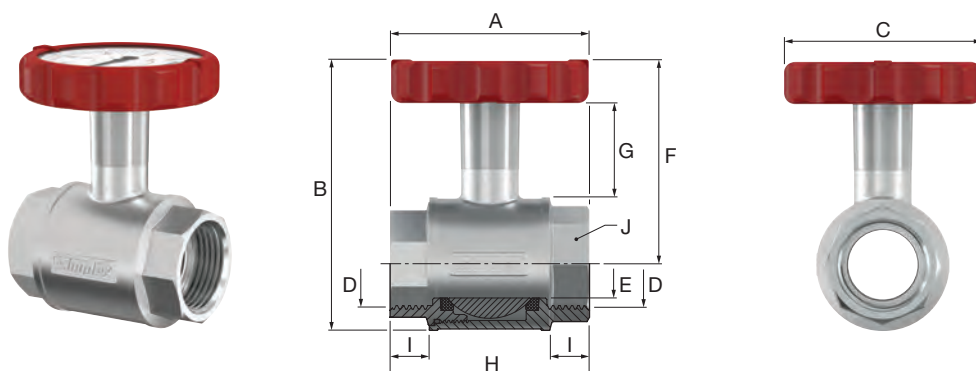



Dimensions

Type	Dimensions [mm]								
	A	B	C	E (Ø)	F	G	H	I	J (WS)
MKH FG - DN 15	62.0	71.0	31.5	15	56	24	52.5	11	27
MKH FG - DN 20	65.0	79.0	40.0	20	59	24	59.0	12	32
MKH FG - DN 25	87.0	103.0	48.5	25	79	37	72.5	14	39
MKH FG - DN 32	91.0	112.0	58.0	32	83	36	80.0	15	49
MKH FG - DN 40	97.5	124.0	71.0	40	89	35	92.5	16	55
MKH FG - DN 50	106.5	140.5	87.0	50	97	35	106.5	17	70

Socket Ball Valve with Red Thermometer Handle

With female thread on both sides, round thermometer handle in red, integrated Ø 63 mm thermometer.



Type	Nominal diameter	Connection (D)		Article no.
MKH TG-R - DN 20	DN 20	G 3/4" F	3	F10118
MKH TG-R - DN 25	DN 25	G 1" F	3	F10125
MKH TG-R - DN 32	DN 32	G 1 1/4" F	3	F10126
MKH TG-R - DN 40	DN 40	G 1 1/2" F	1	F99727
MKH TG-R - DN 50	DN 50	G 2" F	1	F99771

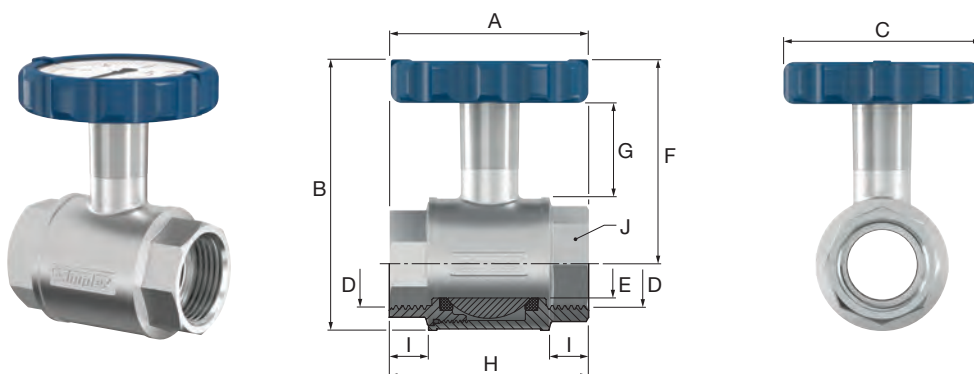



Dimensions

Type	Dimensions [mm]								
	A	B	C (Ø)	E (Ø)	F	G	H	I	J (WS)
MKH TG-R - DN 20	59	95.0	72	20	73.0	38.5	59	12	32
MKH TG-R - DN 25	73	100.0	72	25	75.5	36.0	73	14	39
MKH TG-R - DN 32	80	108.0	72	32	79.0	35.0	80	15	49
MKH TG-R - DN 40	93	120.0	72	40	86.0	35.0	93	15	55
MKH TG-R - DN 50	107	136.5	72	50	93.0	35.0	107	17	70

Socket Ball Valve with Blue Thermometer Handle

With female thread on both sides, round thermometer handle in blue, integrated Ø 63 mm thermometer.



Type	Nominal diameter	Connection (D)		Article no.
MKH TG-B - DN 20	DN 20	G 3/4" F	3	F10119
MKH TG-B - DN 25	DN 25	G 1" F	3	F10150
MKH TG-B - DN 32	DN 32	G 1 1/4" F	3	F10151
MKH TG-B - DN 40	DN 40	G 1 1/2" F	1	F99728
MKH TG-B - DN 50	DN 50	G 2" F	1	F99772

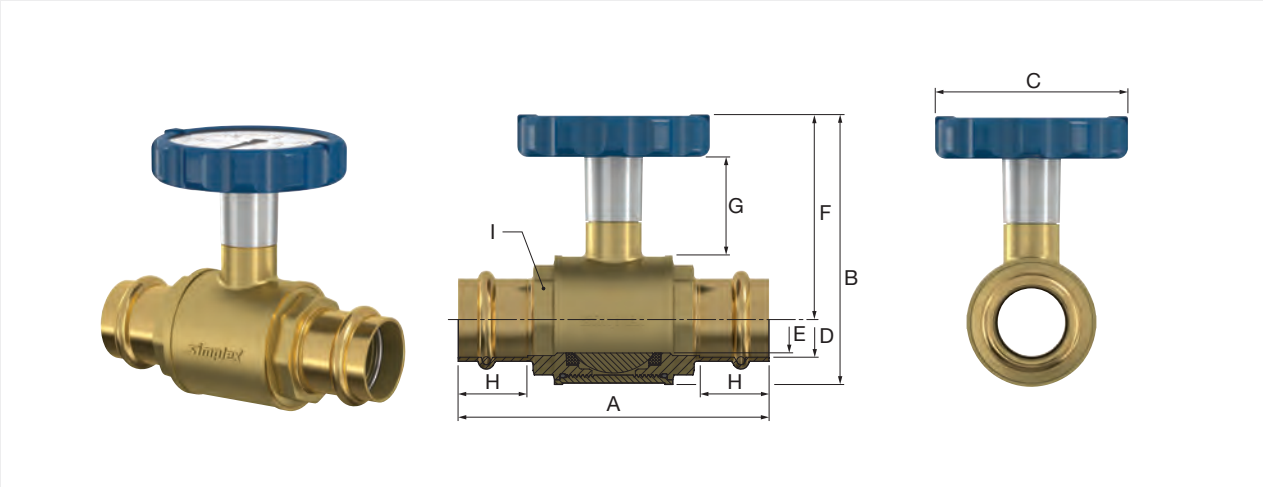



Dimensions

Type	Dimensions [mm]								
	A	B	C (Ø)	E (Ø)	F	G	H	I	J (WS)
MKH TG-B - DN 20	59	95.0	72	20	73.0	38.5	59	12	32
MKH TG-B - DN 25	73	100.0	72	25	75.5	36.0	73	14	39
MKH TG-B - DN 32	80	108.0	72	32	79.0	35.0	80	15	49
MKH TG-B - DN 40	93	120.0	72	40	86.0	35.0	93	15	55
MKH TG-B - DN 50	107	136.5	72	50	93.0	35.0	107	17	70

Socket Ball Valve with Press Connection and Blue Thermometer Handle

With press connection for M and V profile on both sides, for copper, carbon steel and stainless steel pipes, round thermometer handle in blue, integrated Ø 63 mm thermometer.



Type	Nominal diameter	Connection (D Ø) [mm]		Article no.
MKH PRESS TG-B - DN 25	DN 25	28	1	F10523
MKH PRESS TG-B - DN 32	DN 32	35	1	F10524

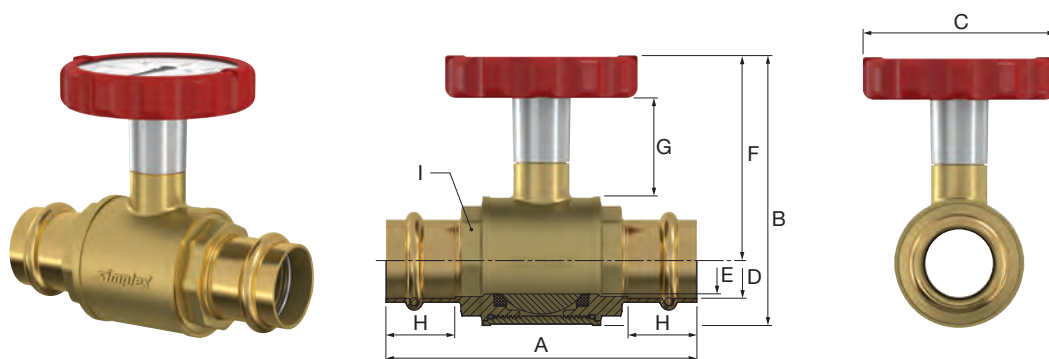


Dimensions

Type	Dimensions [mm]							
	A	B	C Ø	E (Ø)	F	G	H	I (WS)
MKH PRESS TG-B - DN 25	116.5	101	72	25	77	37	26	39
MKH PRESS TG-B - DN 32	127.0	104	72	32	79	34	28	45

Socket Ball Valve with Press Connection and Red Thermometer Handle

With press connection for M and V profile on both sides, for copper, carbon steel and stainless steel pipes, round thermometer handle in red, integrated Ø 63 mm thermometer.



Type	Nominal diameter	Connection (D Ø) [mm]		Article no.
MKH PRESS TG-R - DN 25	DN 25	28	1	F10536



Dimensions

Type	Dimensions [mm]							
	A	B	C (Ø)	E (Ø)	F	G	H	I (WS)
MKH PRESS TG-R - DN 25	116.5	101	72	25	77	37	26	39

PUMP BALL VALVES

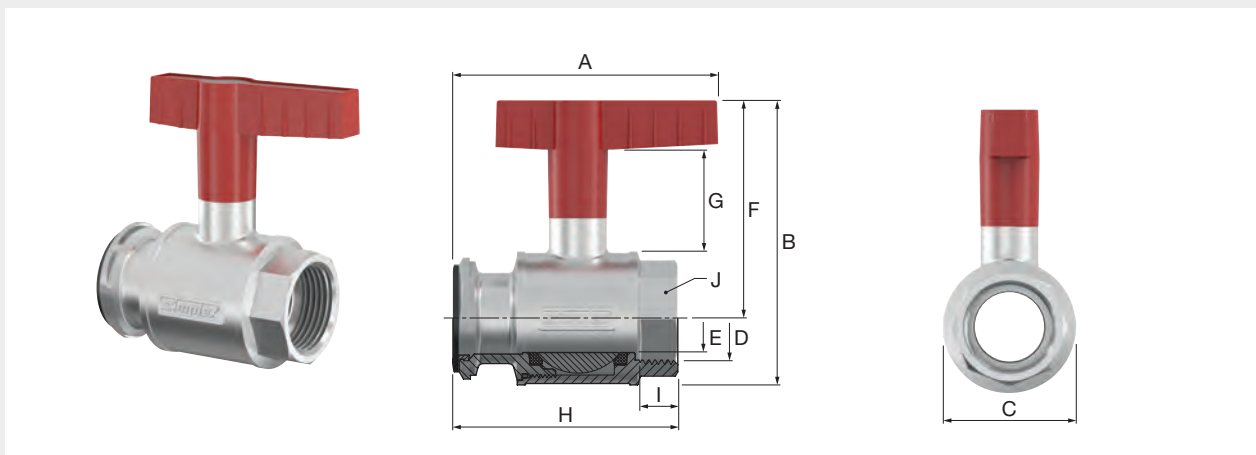
Shut-off ball valve for use in heating systems, for installation on the suction side of circulation pumps, pump connection with flange for pump screw connection and integrated flat seal (union nut not included), full bore.


- Components made of nickel-plated brass, ball valves with press connection made of brass
- Sealing materials: EPDM, PTFE
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

→ Matching union nuts and insulation shells available!

Pump Ball Valve with Lever Handle

Pipe connection with female thread, extended lever handle, metal, red coating.



Type	Nominal diameter	Connection (D)		Article no.
PKH FG - DN 25	DN 25	G 1" F	1 / 20	F10127
PKH FG - DN 32	DN 32	G 1 1/4" F	1 / 20	F10128

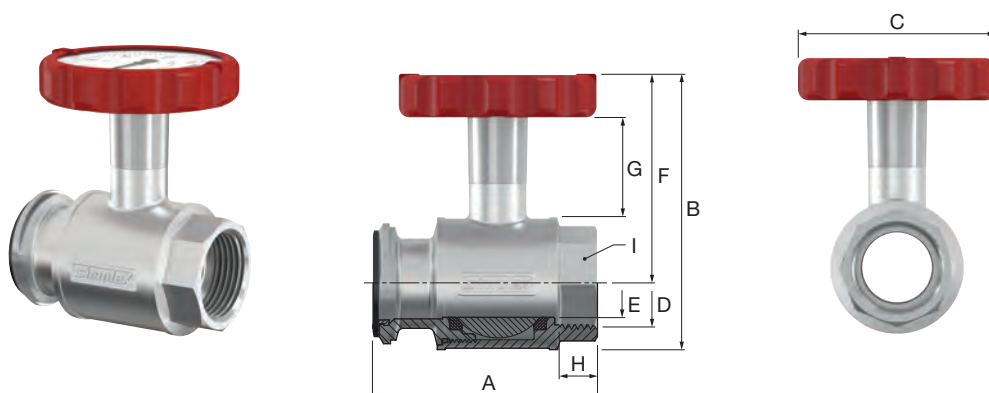



Dimensions

Type	Dimensions [mm]								
	A	B	C	E (Ø)	F	G	H	I	J (WS)
PKH FG - DN 25	87.5	104	48.5	25	79	37.0	82.0	14	39
PKH FG - DN 32	105.5	112	58.0	32	83	35.5	94.5	14	49

Pump Ball Valve with Red Thermometer Handle

Pipe connection with female thread, round thermometer handle in red, integrated Ø 63 mm thermometer.



Type	Nominal diameter	Connection (D)		Article no.
PKH TG-R - DN 25	DN 25	G 1" F	3	F10129
PKH RG-R - DN 32	DN 32	G 1 1/4" F	3	F10130

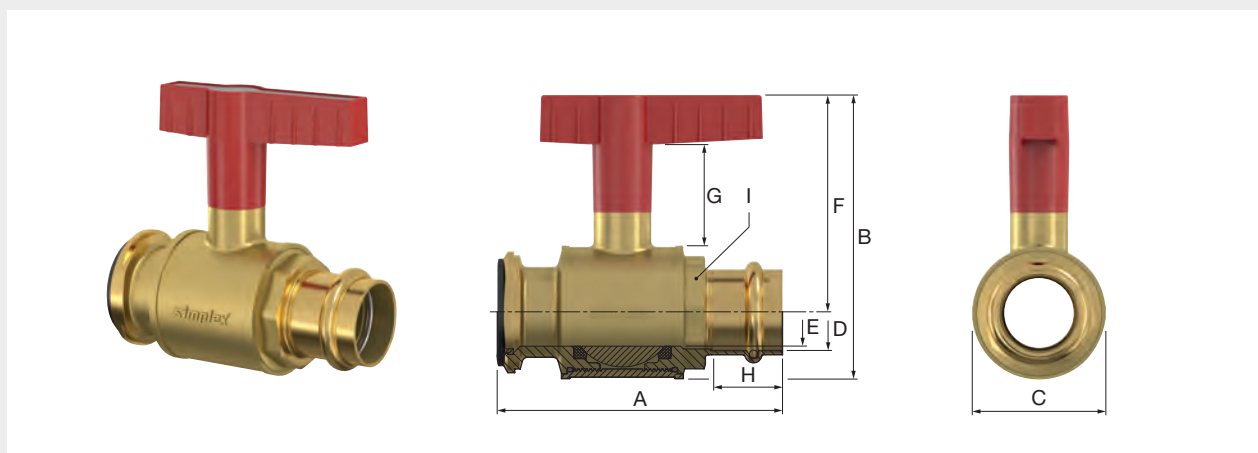



Dimensions

Type	Dimensions [mm]							
	A	B	C (Ø)	E (Ø)	F	G	H	I (WS)
PKH TG-R - DN 25	82.0	104	72	25	75	34	14	39
PKH TG-R - DN 32	94.5	108	72	32	79	34	14	49

Pump Ball Valve with Press Connection and Lever Handle

With press connection for M and V profile on the pipe side, for copper, carbon steel and stainless steel pipes. Extended lever handle, metal, red coating.



Type	Nominal diameter	Connection (D Ø) [mm]		Article no.
PKH PRESS FG - DN 25	DN 25	28	1	F10521
PKH PRESS FG - DN 32	DN 32	35	1	F10522



Dimensions

Type	Dimensions [mm]							
	A	B	C (Ø)	E (Ø)	F	G	H	I (WS)
PKH PRESS FG - DN 25	103.5	103	48.5	25	79	36.5	26	39
PKH PRESS FG - DN 32	118.0	112	58.0	32	83	35.5	28	45

PUMP BALL VALVES WITH INTEGRAL BACKFLOW LIMITER

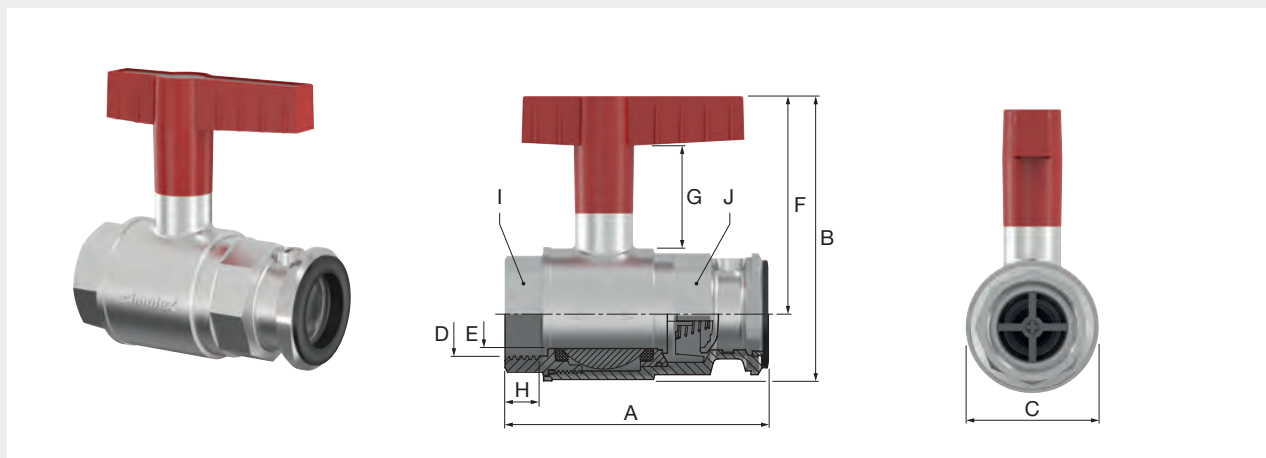
Shut-off ball valve for use in heating systems, for fitting to circulation pumps on the discharge side, with integral backflow limiter and opening device (does not act as a check valve), pump connection with flange for pump screw connection and integrated flat seal (union nut not included), full bore.


- Components made of nickel-plated brass, ball valves with press connection made of brass
- Sealing materials: EPDM, PTFE
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

→ Matching union nuts and insulation shells available!

Pump Ball Valve with Integral Backflow Limiter and Lever Handle

Pipe connection with female thread, extended lever handle, metal, red coating.



Type	Nominal diameter	Connection (D)		Article no.
PKH SKB FG - DN 25	DN 25	G 1" F	1 / 20	F10131
PKH SKB FG - DN 32	DN 32	G 1 1/4" F	1 / 10	F10132

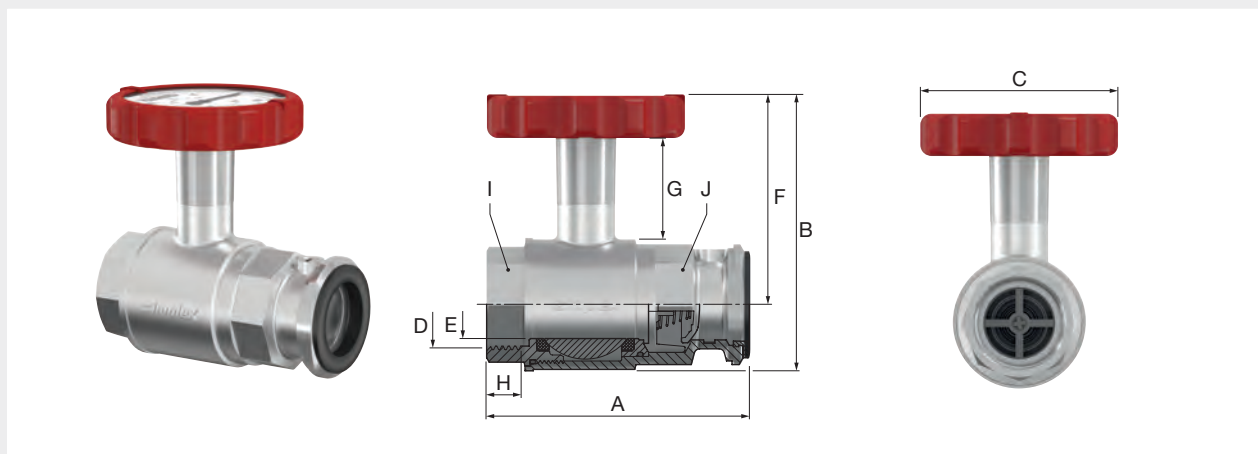


Dimensions

Type	Dimensions [mm]								
	A	B	C	E (Ø)	F	G	H	I (WS)	J (WS)
PKH SKB FG - DN 25	96	103.5	48.5	25	79	37	14	39	41
PKH SKB FG - DN 32	110	111.0	58.0	32	83	36	14	49	50

Pump Ball Valve with Integral Backflow Limiter and Red Thermometer Handle

Pipe connection with female thread, round thermometer handle in red, integrated Ø 63 mm thermometer.



Type	Nominal diameter	Connection (D)		Article no.
PKH SKB TG-R - DN 25	DN 25	G 1" F	3	F10135
PKH SKB TG-R - DN 32	DN 32	G 1 1/4" F	3	F10136

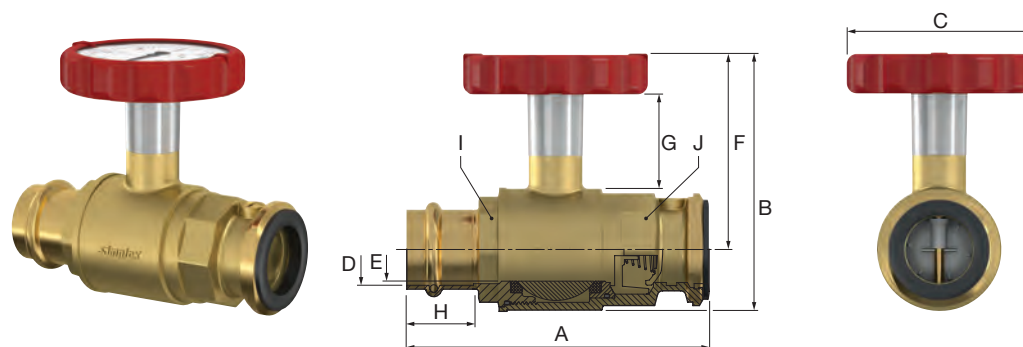



Dimensions

Type	Dimensions [mm]								
	A	B	C (Ø)	E (Ø)	F	G	H	I (WS)	J (WS)
PKH SKB TG-R - DN 25	96	99	72	25	75.0	35	14	39	41
PKH SKB TG-R - DN 32	110	108	72	32	78.5	36	14	49	50

Pump Ball Valve with Integral Backflow Limiter, Press Connection and Red Thermometer Handle

With press connection for M and V profile on the pipe side, for copper, carbon steel and stainless steel pipes, round thermometer handle in red, integrated Ø 63 mm thermometer.



Type	Nominal diameter	Connection (D Ø) [mm]		Article no.
PKH SKB PRESS TG-R - DN 25	DN 25	28	1	F10525
PKH SKB PRESS TG-R - DN 32	DN 32	35	1	F10526



Dimensions

Type	Dimensions [mm]								
	A	B	C (Ø)	E (Ø)	F	G	H	I (WS)	J (WS)
PKH SKB PRESS TG-R - DN 25	118	99.5	72	25	75	35.0	26	39	41
PKH SKB PRESS TG-R - DN 32	134	107.5	72	32	79	34.5	28	45	50

SOCKET BALL VALVE WITH MOTORIZED ACTUATOR

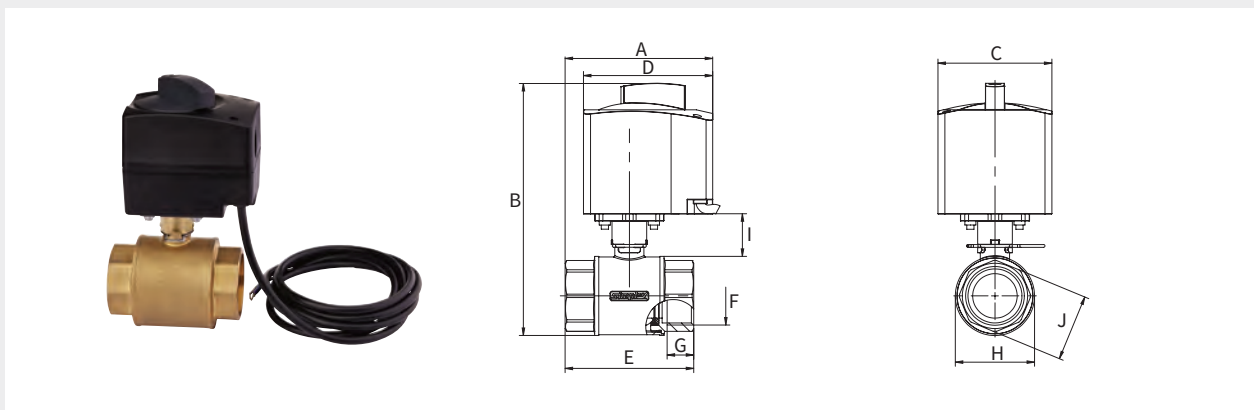
Shut-off ball valve for use in heating systems, with female thread on both sides, full bore.


Motor:

- Activation: 3-point
 - Maximum load: 10 Nm (DN 50: 15 Nm)
 - Runtime: 135 sec. (DN 50: 120 sec.)
 - Angle of rotation: 90°
 - Nominal voltage: 230 V, ~50 Hz
 - Nominal capacity: 3,5 VA - 4 VA (DN 50: 2,5 VA - 4 VA)
 - Fuse type: IP42
 - Protection classe: II
-
- Components made of brass
 - Sealing materials: EPDM, PTFE
 - Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
 - Max. operating pressure: 10 bar

→ *Matching insulation shells available!* (leave the insulation shells blank around the brackets)

Socket Ball Valve with Motorized Actuator



Type	Nominal diameter	Connection (F)		Article no.
MKH STA - DN 20	DN 20	G 3/4" F	1	F10586
MKH STA - DN 25	DN 25	G 1" F	1	F10588
MKH STA - DN 32	DN 32	G 1 1/4" F	1	F10590
MKH STA - DN 40	DN 40	G 1 1/2" F	1	F10592



Dimensions

Type	Dimensions [mm]								
	A	B	C	D	E	G	H	I	J (WS)
MKH STA - DN 20	94	167	82	93	67.0	14.5	39	34	32
MKH STA - DN 25	100	173	82	93	81.0	17.0	47	32	37
MKH STA - DN 32	107	181	82	93	93.0	19.0	57	31	48
MKH STA - DN 40	109	195	82	93	97.0	19.0	70	31	54
MKH STA - DN 50	124	215	86	100	119.5	23.5	86	30	68

HANDLES FOR BALL VALVES

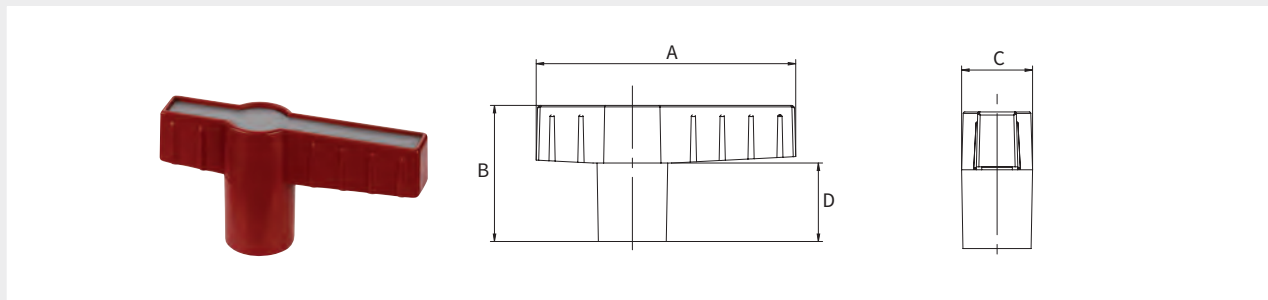
All ball valves in versions DN 20 to DN 50 (except article no. F10121) are equipped with a special hollow spindle, which allows the mounting of various handle options depending on the application. All handle types are interchangeable. The handles can be removed from and mounted on the valves without the use of tools.


→ *Thermometer handle with company logo on request!*

Lever Handle

Lever handle for Simplex socket and pump ball valves, extended version.

- Components made of coated metal



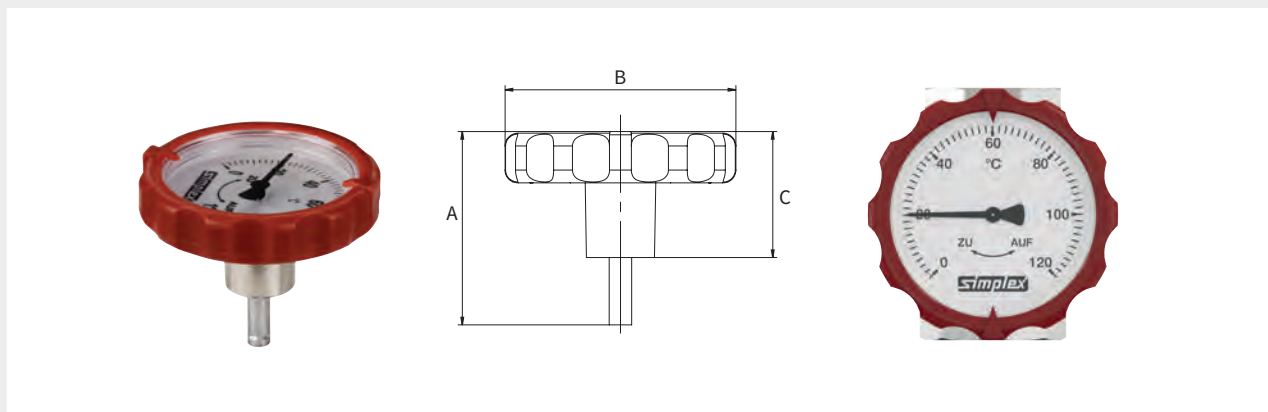
Type	Nominal diameter	Colour	Dimensions [mm]					Article no.
			A	B	C	D		
FG PKH	DN 20 - DN 50	red	81	43	22	24,5	1	F10104




Thermometer Handle

Thermometer handle for Simplex socket and pump ball valves, integrated Ø 63 mm thermometer.
Company logo on request.

- Metal body with plastic handle



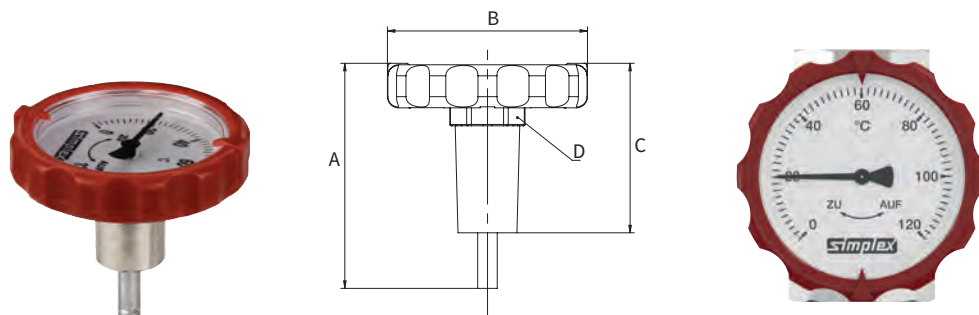
Type	Nominal diameter	Colour	Dimensions [mm]				Article no.
			A	B (Ø)	C		
TG-R PKH	DN 20 - DN 50	red	59,5	72	38,5	1	F10198
TG-B PKH	DN 20 - DN 50	blue	59,5	72	38,5	1	F10199




Thermometer Handle, Long Version

Thermometer handle for Simplex socket and pump ball valves, integrated Ø 63 mm thermometer.
Company logo on request.

- Metal body with plastic handle



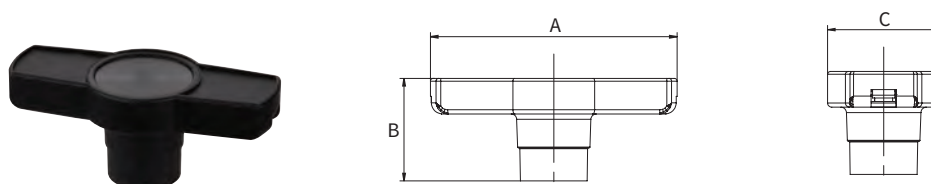
Type	Nominal diameter	Colour	Dimensions [mm]					Article no.
			A	B (Ø)	C	D (WS)		
TG-R long PKH	DN 20 - DN 50	red and blue	80.5	72	60.5	24	1	F10304




T-Handle without Thermometer

T-Handle for Simplex socket and pump ball valves.

- Components made of plastic



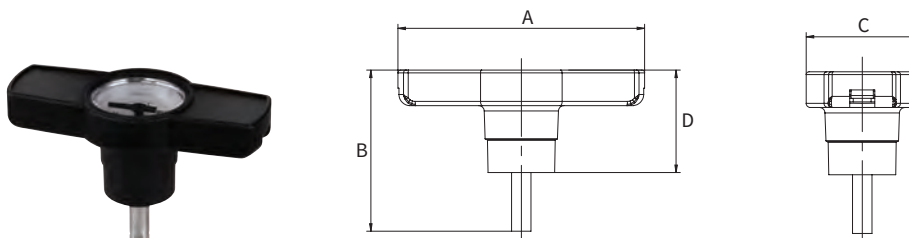
Type	Nominal diameter	Colour	Dimensions [mm]				Article no.
			A	B	C		
KG PKH	DN 20 - DN 50	black	89	37	40.5	1	F10202




T-Handle with Integrated Thermometer

T-Handle for Simplex socket and pump ball valves, integrated Ø 32 mm thermometer.

- Components made of plastic and metal



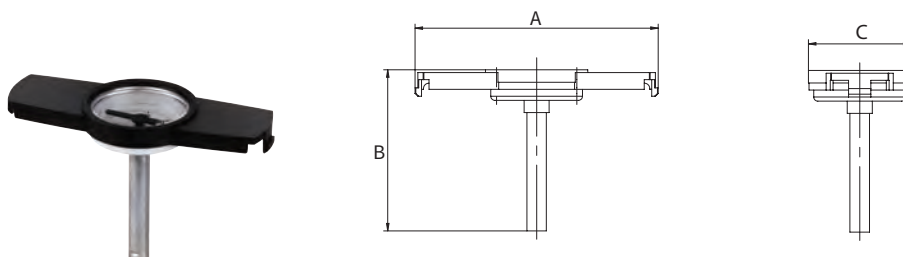
Type	Nominal diameter	Colour	Dimensions [mm]					Article no.
			A	B	C	D		
KG + TG PKH	DN 20 - DN 50	black	89	58	40.5	37	1	F10197



Thermometer T-Handle Retrofit Kit

Retrofit kit for Simplex thermometer T-handle F10202, consisting of thermometer and protective cap.

- Components made of plastic



Type	Colour	Dimensions [mm]				Article no.
		A	B	C		
TG Retrofit Kit	black	87.5	58	37	1	F10108



PUMP SUPPLY SET

Pump supply set for use in heating systems, consisting of:

- 1 pc. pump ball valve with integral backflow limiter and red thermometer handle
- 1 pc. pump ball valve with red lever handle
- Including 2 union nuts

(Pump is not included)


Technical information and dimensional drawings see at the respective ball valves.

- Components made of nickel-plated brass
- Sealing materials: EPDM, PTFE
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

→ Matching insulation shells available!

Pump Supply Set



Type	Nominal diameter	Connection		Article no.
VL-Set - DN 25	DN 25	G 1" F	1	F10255
VL-Set - DN 32	DN 32	G 1 1/4" F	1	F10256

PUMP RETURN SET

Pump return set for use in heating systems, consisting of:

- 1 pc. pump ball valve with blue thermometer handle
- Including union nut and screw connector


Technical information and dimensional drawings see pump ball valve with blue thermometer handle.

- Components made of nickel-plated brass
- Sealing materials: EPDM, PTFE
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

→ Matching insulation shells available!

Pump Return Set



Type	Nominal diameter	Connection		Article no.
RL-Set - DN 25	DN 25	G 1" F	1	F10258
RL-Set - DN 32	DN 32	G 1 1/4" F	1	F10259

PUMP VALVE SETS

Pump valve set for use in heating systems, consisting of:

- 1 pc. pump ball valve with integral backflow limiter and red thermometer handle
- 1 pc. socket ball valve with blue thermometer handle
- 1 pc. pump ball valve with red lever handle

(Pump and pipe not included)


Technical information and dimensional drawings see at the respective ball valves.

- Components made of nickel-plated brass
- Sealing materials: EPDM, PTFE
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

→ Matching insulation shells available!

Pump Valve Set without Union Nut




Type	Nominal diameter	Connection		Article no.
PAG - DN 25	DN 25	G 1" F	1	F10190
PAG - DN 32	DN 32	G 1 1/4" F	1	F10191



Pump Valve Set with Two Union Nuts




Type	Nominal diameter	Connection		Article no.
PAG ÜM - DN 25	DN 25	G 1" F	1	F10192
PAG ÜM - DN 32	DN 32	G 1 1/4" F	1	F10193



Pump Valve Set with Screw Connector and Union Nuts

Including all connections and union nuts.



Type	Nominal diameter	Connection		Article no.
PAG RV ÜM - DN 25	DN 25	G 1" F	1	F10194
PAG RV ÜM - DN 32	DN 32	G 1 1/4" F	1	F10195

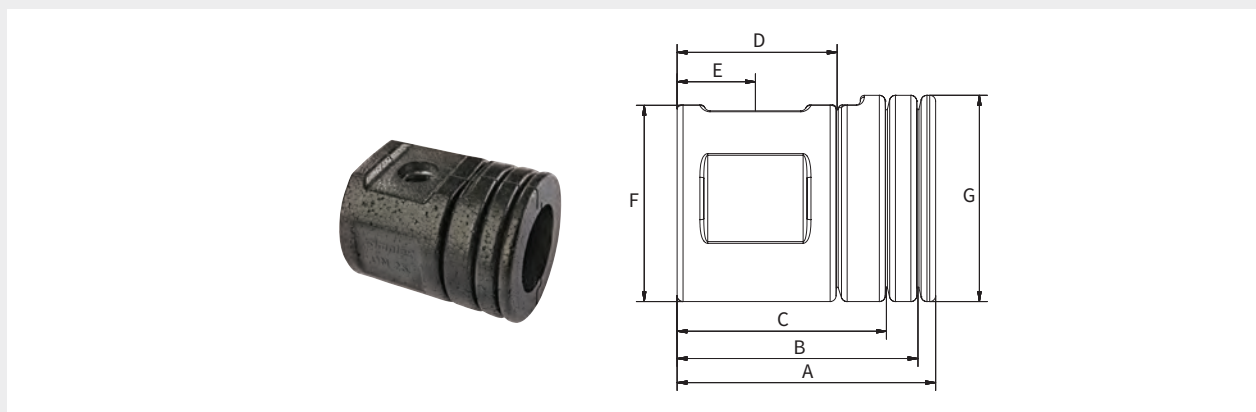



ACCESSORIES FOR PUMP BALL VALVES

Insulation Shells

2-piece, insulates in accordance with EnEV, adapts to Simplex pump ball valves and socket ball valves with screw-in or press connection, fits in conjunction with Simplex union nuts F10212-F10214.

- Components made of EPP



Type	Nominal diameter	Suitable for	Dimensions [mm]								Article no.
			A	B	C	D	E	F (Ø)	G (Ø)		
Insulation Shell - DN 25	DN 25	BV* DN 25	118	108	94	73	36	93	98	1	F10555
Insulation Shell - DN 32	DN 32	BV* DN 32	131	122	106	81	40	100	105	1	F10556

* ball valve




Insulation Shell Set



Insulation shell set for Simplex pump valve sets, consisting of 3 pcs. insulation shells (2-piece), insulates in accordance with EnEV, adapts to Simplex pump ball valves and socket ball valves with screw-in or press connection, fits in conjunction with Simplex union nuts F10212-F10214. Dimension drawings see insulation shells, article no. F10555 and F10556.

- Components made of EPP

Type	Nominal diameter	Suitable for		Article no.
			[Set]	
Insulation Shell Set - DN 25	DN 25	BV* DN 25	1	F10555SET
Insulation Shell Set - DN 32	DN 32	BV* DN 32	1	F10556SET

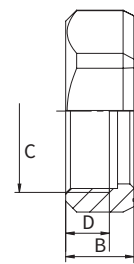
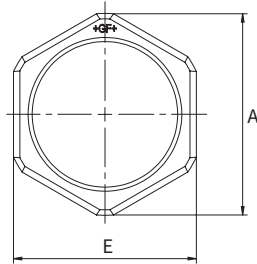
* ball valve




Union Nut

Union nut for Simplex pump ball valves.

- Components made of brass or malleable cast
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



Type	Version	Nom. diameter	Conn- ection (C)	Dimensions [mm]				Suitable for		Article no.
				A	B	D	E (WS)			
Union Nut - DN 25 bl.	brass, blank	DN 25	G 1 1/2" F	57	16	12	51	PBV* DN 25	1	F10212
Union Nut - DN 25 Ni	brass, nickel-pl.	DN 25	G 1 1/2" F	57	16	12	51	PBV* DN 25	1	F10213
Union Nut - DN 32 Zn	cast-iron, zinc-pl.	DN 32	G 2" F	74	25	16	67	PBV* DN 32	1	F10214

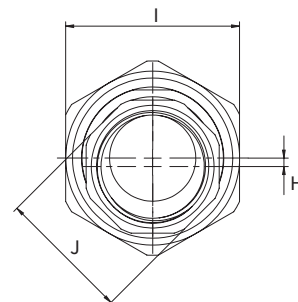
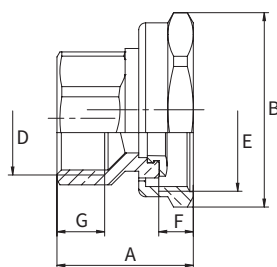
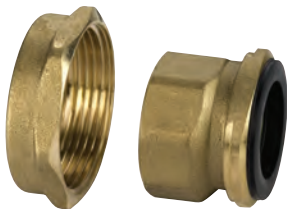
* pump ball valve




Eccentric Threaded Connection DN 25

As compensation fitting for DN 25 manifold with 120 mm axial distance, 2.5 mm offset per piece.

- Components made of brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



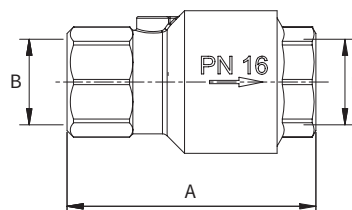
Type	Connection		Dimensions [mm]								Article no.
	D	E	A	B	F	G	H	I (WS)	J (WS)		
Eccentric Connection	G 1 1/2" F	G 1" F	40	57	12	14	2.5	51	39	1	F10297




Backflow Limiter Valve

Backflow limiter with opening device for use in heating systems.

- Components made of nickel-plated brass
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



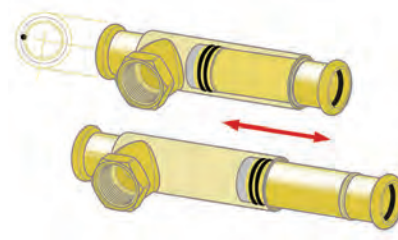
Type	Nominal diameter	Connection (B)	Dimension A [mm]		Article no.
SKB - DN 20	DN 20	Rp 3/4"	77	5	F10163
SKB - DN 25	DN 25	Rp 1"	92	5	F10164
SKB - DN 32	DN 32	Rp 1 1/4"	95	5	F10167



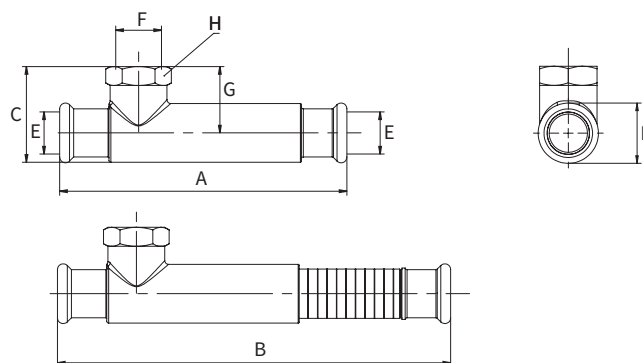
TELESCOPIC T-PIECE


Telescopic T-piece for use in heating systems, with press connection for M and V profile, for copper, carbon steel and stainless steel pipes.

- Components made of brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar



Telescopic T-Piece with Press Connection



Type	Connection		Dimensions [mm]							Article no.
	E (Ø) [mm]	F	A	B	C	D (Ø)	G	H (WS)		
TELE-T PRESS - 15	15	G 1½" F	124.0	174.0	42.0	31.5	30	24	1	F13193
TELE-T PRESS - 22	22	G ¾" F	151.5	207.5	50.5	31.5	35	30	1	F13194
TELE-T PRESS - 28	28	G 1" F	165.5	222.0	66.5	37.0	48	41	1	F13195



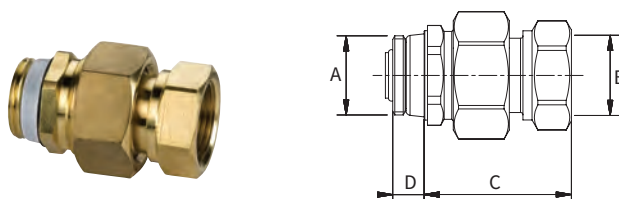
EX-COUPPLINGS


The ex-coupling is installed into the expansion pipe in front of the expansion vessel in heating systems. It is used for shut off, draining, maintenance and exchange of expansion vessels without draining the heating systems.

- Components made of brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

Ex-Coupling Type A

With male thread, self-sealing with special thread seal and female thread.

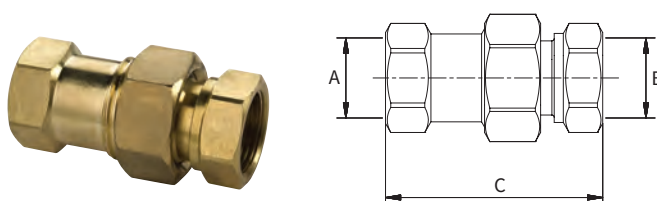



Type	Nominal diameter	Connection		Dimensions [mm]			Article no.
		A	B	C	D		
Ex-Coupling A	DN 20	G 3/4" M	G 3/4" F	49	11	10/50	F10385



Ex-Coupling Type B

Female thread on both sides.

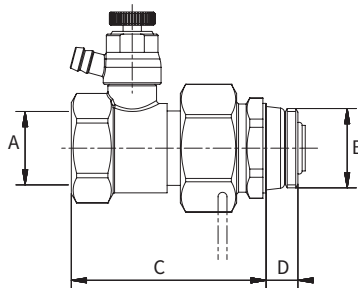



Type	Nominal diameter	Connection		Dimension (C) [mm]		Article no.
		A	B			
Ex-Coupling B	DN 20	G 3/4" F	G 3/4" F	72	10/50	F10386



Ex-Coupling with Drain Type A

With male thread, self-sealing with special thread seal and female thread.

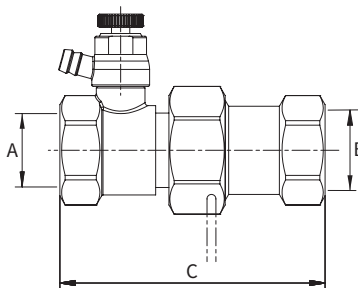



Type	Nominal diameter	Connection		Dimensions [mm]			Article no.
		A	B	C	D		
Ex-Coupling with Drain A	DN 20	G 3/4" F	G 3/4" M	64	11	5/25	F10305



Ex-Coupling with Drain Type B

Female thread on both sides.



Type	Nominal diameter	Connection		Dimension (C) [mm]		Article no.
		A	B			
Ex-Coupling with Drain B	DN 20	G 3/4" F	G 3/4" F	87	5/25	F10306




VALVES

Pump gate valves



Coupler on one side with Meibes-specific flange on the other.

- Material: Brass
- Steam: 6.5 bar up to 160 °C
- Water, oil, air: 9 bar up to 110 °C

Type	Model	Con- nection FL/F	Suitable for union nut		Order Code
Pump gate valve	-	1"	1 1/2"	1	M61340
Pump gate valve backflow limiter	With backflow limiter	1"	1 1/2"	1	M68202


FL = Flange, F = Female thread, UM = Union nut

Ball valve female thread / female thread



Standard model with red wing style handle.

- Material: Brass
- Max. operating pressure: 10 bar
- Max. Operating temperature: 130 °C

Type	Connection			Order Code
	F	F		
Ball valve female thread/female thread 3/8"	3/8"	3/8"	1	M61920.1
Ball valve female thread/female thread 1/2"	1/2"	1/2"	1	M61930.1
Ball valve female thread/female thread 3/4"	3/4"	3/4"	1	M61940.1
Ball valve female thread/female thread 1"	1"	1"	1	M61950.1


F = Female thread

Ball valve female thread / male thread



With red wing style handle.

- Material: Brass
- Max. operating pressure: 10 bar
- Max. Operating temperature: 130 °C

Type	Connection			Order Code
	F	M		
Ball valve female thread/male thread 1/2"	1/2"	1/2"	1	M61972.3
Ball valve female thread/male thread 3/4"	3/4"	3/4"	1	M61971.3
Ball valve female thread/male thread 1"	1"	1"	1	M61970.3


F = Female thread, M = Male thread

Ball valve with Meibes flange



For pumps and pipework, with red toggle.

- Material: Brass
- Max. operating pressure: 10 bar
- Max. Operating temperature: 110 °C

Type	Connection		Suitable for union nut		Order Code
	FL	F			
KH FL 1"	1"	1"	1 1/2"	1	M61810
KH FL 1 1/4"	1 1/4"	1 1/4"	2"	1	M61840


FL = Flange, F = Female thread, UM = Union nut

Ball valve with Meibes flange and backflow preventer



With integrated backflow preventer, with red toggle, for pumps and pipework.

- Material: Brass
- Max. operating pressure: 10 bar
- Max. Operating temperature: 110 °C

Type	Connection		Suitable for union nut		Order Code
	FL	F			
KH FL+RFV 1"	1"	1"	1 1/2"	50	M61850


FL = Flange, F = Female thread, ÜM = Union nut

Ball valve with Meibes flange, backflow preventer and air lock



With integrated backflow preventer and air lock, with red toggle, for pumps and pipework.

- Material: Brass
- Max. operating pressure: 10 bar
- Max. Operating temperature: 110 °C

Type	Connection		Suitable for union nut		Order Code
	FL	F			
KH FL+RFV+LS 1"	1"	1"	1 1/2"	50	M61851
KH FL+RFV+LS 1 1/4"	1 1/4"	1 1/4"	2"	1	M61861


FL = Flange, F = Female thread, ÜM = Union nut

Basic ball valve



With short flange, shut-off option with hexagon socket and screwdriver slot.

- Material: Brass
- Max. operating pressure: 10 bar
- Max. Operating temperature: 110 °C

Type	Connection		Suitable for union nut		Order Code
	FL	F			
Ball valve light 1"	1"	1"	1 1/2"	1	M61804

FL = Flange, F = Female thread, ÜM = Union nut

Union nut and seal



Type	Dimension	Suitable for flange		Order Code
Union nut+seal 1 1/2"	1 1/2"	1"	1	M43.550D
Union nut+seal 2"	2"	1 1/4"	1	M42602.01D

EXPANSION COMPENSATOR


Expansion compensator SI 10



Soldered or screw fitting length expansion compensator with protective and guide housing, available with soldered ends or screw fittings with female threads.

Please observe the installation instructions in the current technical information brochure!

- Material: Stainless steel extension bellows, brass housing and connections
- Max. operating pressure: 10 bar
- Max. Operating temperature: 130 °C

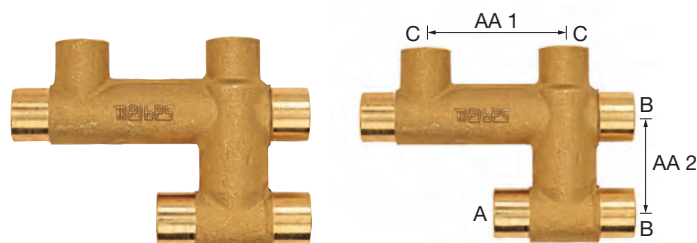
Type	Nominal width	Expansion compensation [mm]	Conn. connection-type	Conn-connection		Order Code
Expansion limiter SI10 DN15 (F)*	DN 15	Up to 5	F	1/2"	10	M62416
Expansion limiter SI10 DN22 (F)*	DN 22	Up to 5.5	F	3/4"	10	M62423
Expansion limiter SI10 DN28 (F)*	DN 28	Up to 6	F	1"	4	M62429
Expansion limiter SI10 DN35 (F)*	DN 35	Up to 6	F	1 1/4"	1	M62440
Expansion limiter SI10 DN42 (F)*	DN 42	Up to 11	F	1 1/2"	1	M62444
Expansion limiter SI10 DN15 solder*	DN 15	Up to 5	Soldering	-	10	M62415
Expansion limiter SI10 DN18 solder*	DN 18	Up to 5	Soldering	-	10	M62418
Expansion limiter SI10 DN22 solder*	DN 22	Up to 5.5	Soldering	-	10	M62422
Expansion limiter SI10 DN28 solder*	DN 28	Up to 6	Soldering	-	4	M62428
Expansion limiter SI10 DN35 solder*	DN 35	Up to 6	Soldering	-	4	M62435
Expansion limiter SI10 DN42 solder	DN 42	Up to 11	Soldering	-	1	M62442


* Up to DN 35 with restricted lift and draw, F = Female thread

PIPE CROSSING FITTINGS

Meipass double cross pieces

Compatible with compact radiators, types RA 4 HZ and RA 5 HZ, as well as with commercially-available pipe-clips.



Type	Unobstructed throughput [mm]	Connection [mm]			Axial distance [mm]			Order Code
		A	B	C	AA 1	AA 2		
Cross piece RA 4 HZ	15	15	15	15	50	35	1	M70633
Cross piece RA 5 HZ	18	18	18	15	50	35	1	M70641
Cross piece RA 5	18	18	18	15	50	30	1	M70611

meipass connection element



Between cross bar fittings and radiator valve - particularly suitable for connection to valve radiator. 90° elbow made from copper piping for soldered or plug-connectors.

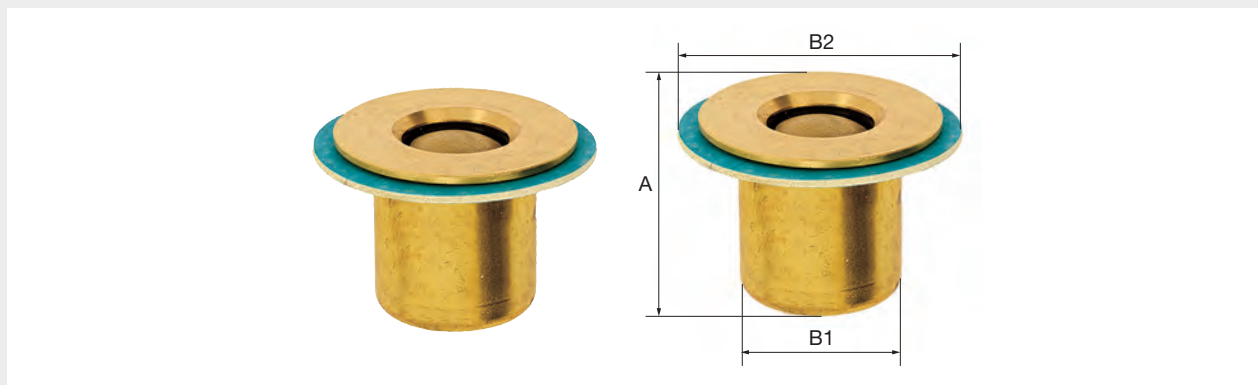
Type	Dimensions [mm]	Bracket length [mm]		Order Code
Solder elbows 15mm	15 x 1	65 x 100	1	M10540.02


BACKFLOW PREVENTERS SB

Backflow preventer, type SB IR (in the RV pipe)

Backflow preventer with seal, no extra space required for installation in screw fittings and fittings. Models with and without air lock.

- Material: Brass



Type	Model	Flange	Dimension [mm]				Order Code
			A	B1	B2		
SB IR 3/4"		3/4"	23.5	20.0	30.5	20	M58120
SB IR 1"		1"	30.0	25.0	38.5	20	M58100
SB IR 1 1/4"		1 1/4"	30.0	31.5	50.0	15	M58110
SB IR+LS 3/4"	With LS	3/4"	23.5	20.0	30.5	20	M58121
SB IR+LS 1"	With LS	1"	30.0	25.0	38.5	20	M58101
SB IR+LS 1 1/4"	With LS	1 1/4"	30.0	31.5	50.0	15	M58111


LS = Air lock

Backflow preventer, type SB TS (Thermulock)



Backflow preventer for direct screwing onto the pump head, manually adjustable. Models with and without air lock.

- Material: Brass

Type	Model	Connection			Order Code
		F	M		
SB Thermulock 1 1/2"		1 1/2"	1 1/2"	12	M58130
SB Thermulock 2"		2"	2"	10	M58140
SB TS+LS 1 1/2"	With LS	1 1/2"	1 1/2"	12	M58131
SB TS+LS 2"	With LS	2"	2"	10	M58141


LS = Air lock, F = Female thread, M = Male thread

Backflow preventer, type SB (F)



Backflow preventer with female thread and flange, manually adjustable. Models with and without air lock.

- Material: Brass


Type	Model	Connection FL/F	Suitable for union nut		Order Code
SB F 1"		1"	1 1/2"	15	M58051
SB F 1 1/4"		1 1/4"	2"	8	M58058
SB F+LS 1"	With LS	1"	1 1/2"	12	M58052
SB F+LS 1 1/4"	With LS	1 1/4"	2"	8	M58059

LS = Air lock, FL = Flange, F = Female thread, ÜM = Union nut

Backflow preventer, type SB (M)



Backflow preventer with male thread and flange, manually adjustable. Models with and without air lock.


Type	Model	Connection FL/M	Suitable for union nut		Order Code
SB M 1"	-	1"	1 1/2"	12	M58080
SB M 1 1/4"	-	1 1/4"	2"	10	M58081
SB M+LS 1"	With LS	1"	1 1/2"	12	M58079
SB M+LS 1 1/4"	With LS	1 1/4"	2"	12	M58078

LS = Air lock, FL = Flange, M = Male thread, UM = Union nut

Backflow preventer, type SB (M) with union nut and seal



Backflow preventer with male thread and flange, manually adjustable. Models with and without air lock.

Type	Model	Connection			Order Code
		FL	M		
SB M + union nut 1"	-	1"	1 1/2"	12	M58041
SB M + union nut 1 1/4"	-	1 1/4"	2"	10	M58046
SB M + union nut + LS 1"	With LS	1"	1 1/2"	12	M58043
SB M + union nut + LS 1 1/4"	With LS	1 1/4"	2"	10	M58054


LS = Air lock, FL = Flange, M = Male thread, UM = Union nut

Backflow preventer, type SB RV (Euro RV)



Backflow preventer with coupler on both ends.

- Material: Brass

Type	Connection			Order Code
	F	F		
SB RV 1/2"	1/2"	1/2"	1	M58210
SB RV 3/4"	3/4"	3/4"	1	M58220
SB RV 1"	1"	1"	1	M58230
SB RV 1 1/4"	1 1/4"	1 1/4"	1	M58240


F = Female thread

CONNECTION FITTINGS

Connection fitting 1" female thread/male thread



With female thread on the side 1/2" for the connection of immersion thermometers, meter sensor, manometer or fill and drain ball valve.

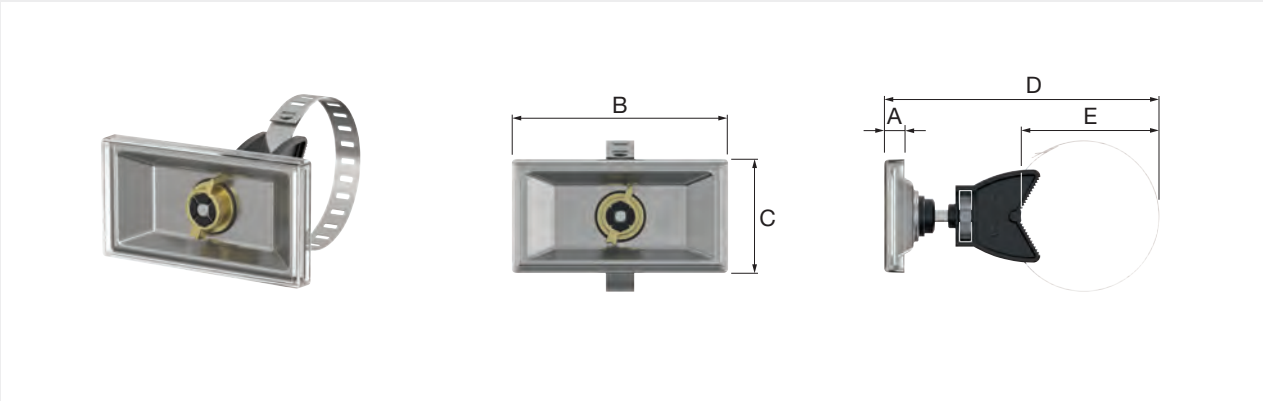
Type	Connection				Order Code
	F	F	M		
Connection fitting	1"	1/2"	1"	1	M90256.10


UNIVERSAL HOLDER WITH FIXING STRAP

Universal Holder with Fixing Strap

Sign holder made of stainless steel 1.4016 and heat-resistant plastic, with fixing strap up to 2" and transparent cover, for signs 100 x 50 mm, removable sign plate for pipe insulation.

- Components made of stainless steel and plastic
- Tool-free installation
- Vertical and horizontal attachment possible




Type	Dimensions [mm]						Article no.
	A	B	C	D*	E*		
Universal Holder Fixing Strap	10	105	55	95	35	10	F55002

* delivery state

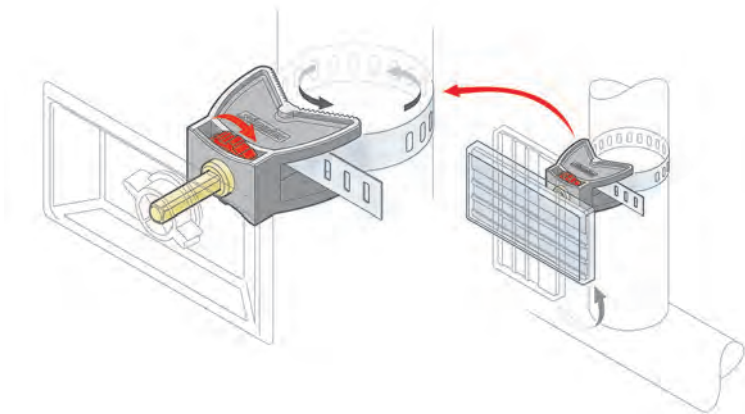
Extension Strap for Universal Holder



- Material: Stainless steel

Type	Dimension [mm]		Article no.
Extension Strap - 240	240	1	F55011
Extension Strap - 5000	5000	1	F55013

Tighten fixing straps easily without tools.



UNIVERSAL HOLDER WITH QUICK RELEASE ROD


Universal Holder with Quick Release Rod

Sign holder made of stainless steel 1.4016 and heat-resistant plastic, rectangular threaded rod M 8 made of galvanised steel for fast installation with quick release anchor, with transparent cover, for signs 100 x 50 mm, sign plate can be removed using quick release locking mechanism for easier pipe insulation.

Quick release anchor F55016 not included, please order separately.

- Components made of stainless steel, galvanised steel and plastic
- Quick release anchor allows for lightning-fast installation - just one quarter of a turn and the rod locks in place
- Large number of installation option possible, e.g. wall installation, directly on the pipe using standard pipe clamps, all installation systems include M8 fastener, etc.
- Vertical and horizontal attachment possible




Type	Suitable for		Article no.
Universal Holder Release Rod	signs 100 x 50 mm	10	F55014

Anchor for Universal Holder with Quick Release Rod

Special anchor for quick release rod, variable socket depth, locks in place using just one quarter of a turn.

- Material: Plastic



Type	Suitable for		Article no.
Anchor Holder Release Rod	Universal holder with quick release rod	50	F55016


WELDING HOLDER

Sign holder made of stainless steel 1.4016 with steel welding pin 110 mm long and transparent cover, for signs 100 x 50 mm, removable sign plate for pipe insulation.

- Components made of stainless steel, steel and plastic
- Vertical and horizontal attachment possible

Welding Holder



Type	Suitable for		Article no.
Welding Holder	signs 100 x 50 mm	25	F55004

SCREW HOLDER

Sign holder made of stainless steel 1.4016 with transparent cover, for signs 100 x 50 mm.

- Components made of stainless steel and plastic
- Vertical and horizontal attachment possible

Screw Holder



Type	Suitable for		Article no.
Screw Holder	signs 100 x 50 mm	25	F55006


SPECIAL LABELS FOR UNIVERSAL, WELDING AND SCREW HOLDER

Heat resistant labels, printable with laser printer, 10 x A4 sheets with 10 labels each, print template to download.

- Special weather-resistant film
- Labelling by hand or with laser printer
- Use your own design
- Can be used as an ad space

Special Labels for Universal, Welding and Screw Holder



Type	Dimensions [mm]			Article no.
	A	B		
Special Labels for Universal Holder	100	50	100	F55015


BLANK SIGNS, 100 X 50 MM

Signs for Simplex sign holders.

- Material: Plastic


Blank Signs without Blank Strip



Type	Colour	Dimensions [mm]				Article no.
		A	B	C		
Signs - white	white	100	50	3	25	F55101.01
Signs - grey	grey	100	50	3	25	F55101.03
Signs - green	green	100	50	3	25	F55101.04
Signs - blue	blue	100	50	3	25	F55101.05
Signs - red	red	100	50	3	25	F55101.06
Signs - yellow	yellow	100	50	3	25	F55101.07
Signs - orange	orange	100	50	3	25	F55101.11

Blank Signs with 3 Blank Strips



Type	Colour	Dimensions [mm]				Article no.
		A	B	C		
Signs 3 Strips - white	white	100	50	3	25	F55104.01
Signs 3 Strips - grey	grey	100	50	3	25	F55104.03
Signs 3 Strips - green	green	100	50	3	25	F55104.04
Signs 3 Strips - blue	blue	100	50	3	25	F55104.05
Signs 3 Strips - red	red	100	50	3	25	F55104.06
Signs 3 Strips - yellow	yellow	100	50	3	25	F55104.07
Signs 3 Strips - orange	orange	100	50	3	25	F55104.11

BLANK SIGNS WITH COMPANY IMPRINT, 100 X 50 MM


Signs for Simplex sign holders, company imprint on the head runner, hot stamped, size of imprint (W x H): max. 96 x 10 mm (2 lines of text), logo imprint possible.

(Please send logo in printable resolution).

- Material: Plastic

Blank Signs with Company Imprint and 3 Blank Strips



Type	Colour	Dimensions [mm]				Article no.
		A	B	C		
Signs Imprint - white	white	100	50	3	25	F55104.51
Signs Imprint - green	green	100	50	3	25	F55104.54
Signs Imprint - blue	blue	100	50	3	25	F55104.55
Signs Imprint - red	red	100	50	3	25	F55104.56
Signs Imprint - yellow	yellow	100	50	3	25	F55104.57
Set-up cost per print colour	-	-	-	-	1	F55000
Single plate share per print colour	-	-	-	-	1	F55100


BLANK STRIP

Blank strips for Simplex signs.

- Material: Plastic

Blank Strip



Type	Colour	Dimensions [mm]			Article no.
		A	B		
Blank Strip	white	100	9	100	F55111


QUICK SIGN HOLDER WITH QUICK FASTENER STRAP

QUICK Sign Holder with Quick Fastener Strap

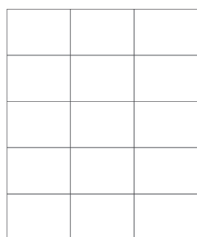
Sign holder made of plastic, with quick fastening strap made of heat-resistant polyamide, up to 200 mm pipe outside diameter, for self-printable labels 70 x 50.8 mm.

- Components made of plastic
- Max. operating temperature (for installation on pipes): 90 °C, max. ambient temperature: 40 °C
- Tool-free and fast installation via quick strap attachment
- Labelling by hand or with laser printer
- Can also be mounted on insulation
- Vertical and horizontal attachment possible



Type	Suitable for		Article no.
Sign Holder QUICK	labels 70 x 50,8 mm	10	F55022

Special Labels for QUICK Sign Holder



Weather-resistant labels, printable with laser printer, 10 x A4 sheets with 15 labels each, print template to download.

- Special weather-resistant film
- For higher humidity levels and for direct sunlight
- Labelling by hand or with laser printer
- Use your own design
- Can be used as an ad space

Type	Dimensions			Article no.
	A [mm]	B [mm]		
Special Labels for QUICK	70	50,8	150	F55023

Quick Fastener Strap for QUICK Sign Holder



Quick fastener strap made of grey, heat-resistant plastic.

- Material: Plastic

Type	Dimensions			Article no.
	A [mm]	B [mm]		
Fastener Strap for QUICK	775	9	100	F55024

PRESSURE TEST BRIDGES FOR H-MODULE CONNECTION

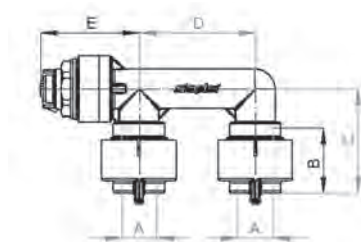
Pressure test bridge for pressure testing, venting and draining, axial distance 50 mm, with air plug, connection of fill and drain plugs possible.


Please note: Use for pressure test, maximum test pressure of 15 bar. Not suitable for continuous heating mode.

- Components made of plastic and brass
- Sealing materials: EPDM
- Fixed axial distance of 50 mm
- Reduced installation time
- Reusable

Pressure Test Bridge with Quick Fastener

For copper, carbon steel and stainless steel pipes, tool-free installation.

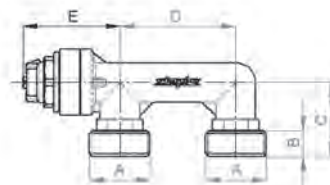



Type	Connection A Ø [mm]	Dimensions [mm]					Article no.
		B	C	D	E		
Pressure Test Bridge Fast	15	28	45	50	43	1 / 5	F10088



Pressure Test Bridge with Euro Taper

Suitable with Simplex compression adapters, for all types of pipes.



Type	Connection A (ET)	Dimensions [mm]					Article no.
		B	C	D	E		
Pressure Test Bridge ET	G 3/4" M	11	32	50	42	1 / 5	F10098

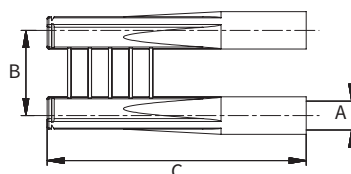



PROTECTIVE CAP FOR H-MODULE CONNECTION

Protective cap for protecting and fixing the radiator connection pipes, 50 mm spacer.

- Components made of plastic
- Dirt protection, damage protection
- Reusable

Protective Cap for H-Module Connection



Type	Connection A Ø [mm]	Dimensions [mm]			Article no.
		B	C		
Protective Cap	12 - 16	50	152	5 / 25	F10041

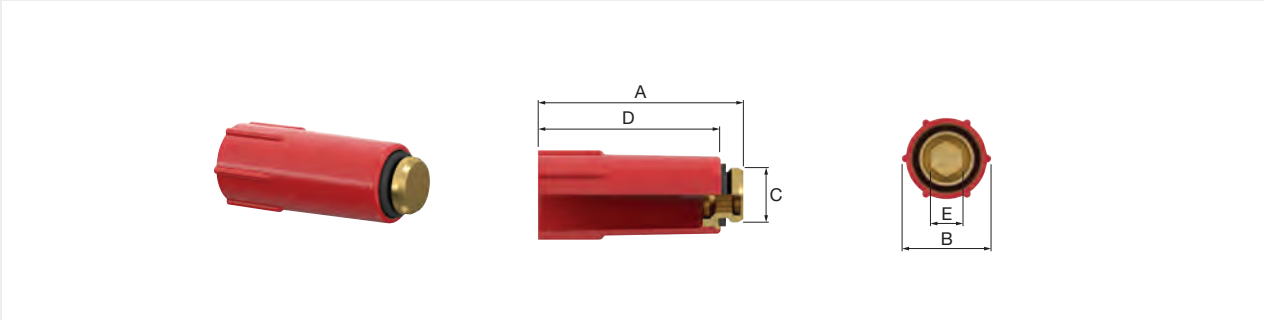



CONSTRUCTION PLUGS

Construction plug for sealing threaded connections during construction and pressure testing in heating systems.

- Components made of plastic and brass
- Sealing materials: EPDM
- Max. operating temperature: 110 °C permanent temperature, 130 °C short-term
- Max. operating pressure: 10 bar

Construction Plug with Brass Thread, Self-sealing



Type	Connection (C)	Dimensions [mm]					Article no.
		A	B	D	E (WS)		
Constr. Plug - white	G 1/2" M	77	30.5	68.5	12	10/100	F22307
Constr. Plug - red	G 1/2" M	77	30.5	68.5	12	10/100	F22308
Constr. Plug - blue	G 1/2" M	77	30.5	68.5	12	10/100	F22309



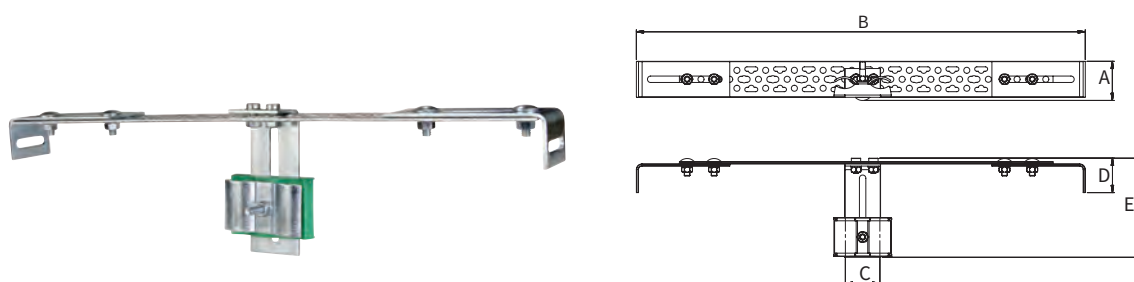
FIX KIT RADIATOR CONNECTION SYSTEM


Installation system for radiators with integrated valve for concealed wall connection, axial distance 50 mm.

- **Basic element:** Radiator Connection Module with hanger bolt
 - **For dry construction:** Up to 280 mm long, laterally adjustable profile rail
 - **For masonry installation:** Radiator connection set for wall slots with 100 mm minimum width and 95 mm depth
 - **Supplement:** Insulated 15 mm copper pipe elbow (nickel-plated); is fixed using the connection module, cut to length and connected to a two-pipe radiator H-module
- Components made of galvanised steel and plastic

FIX KIT Radiator Connection Set, Panel Wall

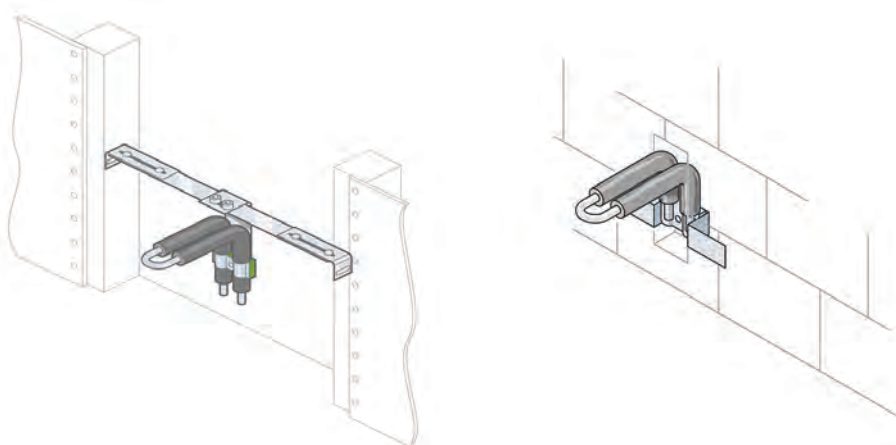
For profile centre distance 625 mm, laterally adjustable 280 mm, without pipe elbow.



Type	Dimensions [mm]						Article no.
	A	B	C	D	E		
FIX KIT TB	55	625	50	48	138	1	F13565

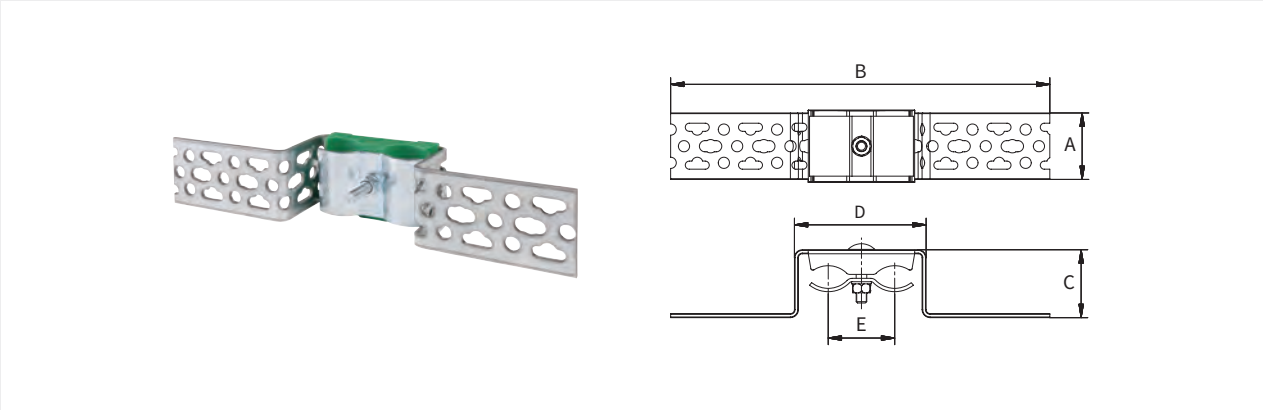



FIX KIT Radiator Connection Set for dry construction, installed in panel wall and for masonry, installed in stone wall



FIX KIT Radiator Connection Set, Masonry

Simple version, without pipe elbow.




Type	Dimensions [mm]						Article no.
	A	B	C	D	E		
FIX KIT MW	50	285	71	99	50	1	F13566



FIX KIT Radiator Connection Module

Mounted on hanger bolt.

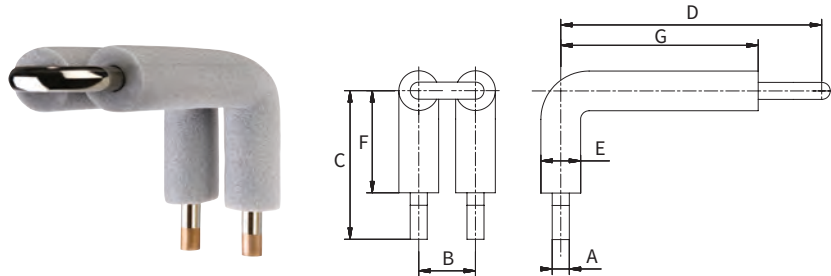



Type	Axial Distance [mm]		Article no.
FIX KIT Connection Module	50	1 / 5	F13568



FIX KIT Copper Pipe Elbow with Insulation

Pipe elbow (nickel-plated) for radiator connection sets (F13565 and F13566) and connection module (F13568).



Type	Connection A Ø [mm]	Dimensions [mm]							Article no.
		B	C	D	E	F	G		
FIX KIT Pipe Elbow	15	50	131	230	35	90	174	1	F13567




TOOLS

H-Module Spanner Wrench Size 30

For tightening and loosening H-modules and Simplex compression adapters A series.

- Material: Stainless steel




Type	Dimension (WS) [mm]		Article no.
Spanner HB	30	1	F10100

Assembly Template for Connection Lines of Valve Radiators

Assembly template with metric scale for pre-installing the connection lines, axial distance 50 mm.

- Material: Galvanised sheet metal




Type	Adjustable range [mm]		Article no.
Assembly Template	33-115	1	F10039

Installation Spanner for Air and Blind Plugs 1 1/4"

Hexagonal spanner.

- Material: Plastic




Type	Dimension (WS) [mm]		Article no.
Spanner Plug	22 / 32 / 40	1 / 5	F11205

Adjustment Key for Regulator Valve



Adjustment key for infinitely variable pre-setting.

- Material: Plastic


Type	Suitable for		Article no.
Adjustment Key VA	VARIOCON and VARIODESIGN	10	F11895

Calibration Arbor



For calibrating plastic and multilayer composite pipes.
The pipes must be calibrated before installation of compression adapters.

- Material: Plastic


Type	Suitable for		Article no.
Calibration Arbor	plastic and multilayer composite pipe	1 / 5	F11211

Demounting Clip for TECTITE Push-fit Connections



For easy demounting of TECTITE push-fit connections.

- Material: Plastic

Type	Dimension [mm]		Article no.
TECTITE Clip - 15	15	5	F60041
TECTITE Clip - 18	18	5	F60042


* discontinued article

Demounting Pliers for TECTITE Push-fit Connections



For easy demounting of TECTITE push-fit connections.

- Material: Steel


Type	Dimension [mm]		Article no.
TECTITE Pliers - 15	15	1	F10508
TECTITE Pliers - 18	18	1	F10509

TECTITE Universal Tool/Push-in Depth Template



Tool for marking the insertion depth, for deburring and for applying a notch on chrome-plated copper pipes.

- Material: Plastic

Type	Dimension [mm]		Article no.
TECTITE Universal Tool	10 - 28	1	F60065


SPARE PARTS

Lever Handle for KFE-Ball Valve



Colour coated.

- Material: Zinc die-cast


Type	Version		Article no.
Handle KFE - H	heating - red	5 / 10	F10102
Handle KFE - S	solar - orange	5 / 10	F10101
Handle KFE - T	potable water - green	5 / 10	F10174

Cap for KFE Ball Valve

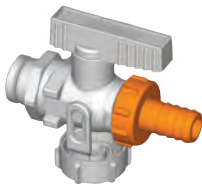


With bracket.

- Material: Nickle-plated brass


Type	Dimension		Article no.
Cap KFE - 3/4	G 3/4" F	10/50	F10643
Cap KFE - 1	G 1" F	10/50	F10504

Hose Connection for KFE Ball Valve



Union nut made of brass, sleeve with O-ring.


- Material: Nickle-plated brass / plastic and zinc die-cast

Type	Version	Suitable for		Article no.
SV KFE - 3/4	plastic / zinc die-cast	KFE ball valve G 1/2"	50	F10372
SV KFE - 1	nickel-plated brass	KFE ball valve G 3/4"	10/50	F10345

Supply Flow Insert for H-Module (One-pipe and Two-pipe Systems) and Single Valves




- Material: Plastic
- Seal: EPDM

Type			Article no.
VL Insert		10/1000	F10630

Return Flow Insert for H-Module for One-pipe Systems



- Material: Plastic
- Seal: EPDM

Type	Suitable for		Article no.
RL Insert	F10001, F10003, F10005, F10007	25/100	F10631

Cone Insert



Suitable for Simplex radiator connection valves.

- Material: Plastic
- Seal: EPDM


Type	Nominal diameter		Article no.
Cone Insert	DN 20	10/50	F10090

Connection Nipple



Suitable for Simplex radiator connection valves, flat seal, self-sealing.


- Material: Brass
- Seal: EPDM

Type	Connection			Article no.
	radiator side	valve side (ET)		
Connection Nipple - 1/2 x 3/4	G 1/2" M	G 3/4" M	10/50	F10384
Connection Nipple - 3/8 x 3/4	G 3/8" M	G 3/4" M	10/50	F10503

Cap for H-Module for One-pipe Systems



- Material: Nickle-plated brass
- Seal: Centellen

Type	Suitable for		Article no.
Cap HB 1-P	F10001, F10003, F10005, F10007	10/50	F10034

Seal for H-Module for One-pipe Systems




- Material: Centellen

Type	Dimension [mm]	Suitable for		Article no.
Seal HB 1-P	17 x 1	F10001, F10003, F10005, F10007	25/100	F10037

Cap for MULTIGRIP H-Module



- Material: Plastic


Type	Colour	Suitable for		Article no.
Cap MULTIGRIP	nickle coloured	F13444, F13424	10/50	F13465

Cap for VARIOCON Connection Valve



For article no. F10026, F10027, F12003, F12004.

- Material: Nickle-plated brass
- Seal: EPDM

Type	Version		Article no.
Cap VARIOCON - DS	with sealing washer	10/50	F10431
Cap VARIOCON - DR	with sealing ring	10/50	F11035

Cap for Lockshield Valve Type L and Type N




- Material: Nickle-plated brass

Type	Version		Article no.
Cap RV L+N		10/50	F99577

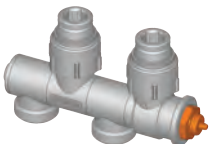
Cap for Lockshield Valve Type M



- Material: Nickle-plated brass
- Seal: EPDM


Type	Version		Article no.
Cap RV M	with sealing ring	10/50	F11035

Valve Insert for VARIOCON and VARIODESIGN Regulator Valves



Adjustable valve insert, thermostatic head connection thread M 30 x 1.5.

- Material: Brass
- Seal: EPDM

Type	Suitable for		Article no.
Valve Insert V	VARIOCON and VARIODESIGN	1 / 5	F12039

Cap for Fill and Drain Plug V




- Material: Nickle-plated brass

Type	Dimension	Suitable for		Article no.
Cap FES-V	G 3/4" F	F10605, F10607, F10608, F10613	10/50	F10615

Cap for Fill and Drain Plug



- Material: Nickle-plated brass
- Seal: EPDM


Type	Dimension	Suitable for		Article no.
Cap FES	G 3/4" F	F10628, F10629	10/50	F10642

Seals for Plugs for Steel and Cast Iron Radiators



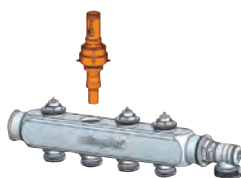
Flat seal.

- Material: EPDM, HD-300

Type	Version	Nominal diameter	Dimension [mm]		Article no.
Seals Plugs - EP 4.2	EPDM	DN 32	4.2	25/100	F10933
Seals Plugs - EP 2.5	EPDM	DN 32	2.5	25/100	F10934
Seals Plugs - HD 1.5	HD-300*	DN 32	1.5	25/100	F10928
Seals Plugs - HD 2.5	HD-300*	DN 32	2.5	25/100	F10929

* non-stick coating

Flowmeter for Manifolds



For Simplex heating manifolds for surface heating. For setting the flow volume, with locking ring and set-point display.

- Material: Nickle-plated brass, plastic

Type	Version [l/min]		Article no.
Flowmeter Manifold	0 - 5	1 / 10	F18477

Thermostat Valve Insert for Manifolds



For Simplex heating manifolds for surface heating.


- Material: Brass
- Seal: EPDM

Type	Version		Article no.
Valve Insert Manifold	M 30 x 1.5	1 / 10	F18478

Valve Insert for Regulation Box and RTL Valve



- Material: Brass
- Seal: EPDM


Type	Suitable for		Article no.
VE - RTL EXCLUSIV	F11829, F11832	1 / 5	F11865
VE - RTL STANDARD / DUO / Valve	F11828, F11831, F11879, F11882, F11883, F11888, F11889	1 / 5	F11866
VE - TH / RTL-TH / DUO	F11836, F11838, F11848, F11849, F11879	1 / 5	F99076

RTL/TH Head for Regulation Box and RTL Valve



White, similar to RAL 9016.

- Material: Plastic, brass

Type	Suitable for		Article no.
Head - RTL-A	F11828, F11829	1 / 5	F35242
Head - TH / DUO	F11848, F11849, F11879	1 / 5	F35243
Head- RTL-I STANDARD / DUO / Valve	F11831, F11879, F11882, F11883	1 / 5	F35351
Head - RTL-I EXCLUSIV*	F11832	1 / 5	F35355


* with pre-setting 4

Cover for Regulation Box



White, similar to RAL 9016.


- Material: Plastic

Type	Suitable for		Article no.
Cover - RTL-I / RTL-TH*	F11831, F11832, F11836, F11838	1	F11834
Cover - RTL-A / TH / DUO	F11848, F11849, F11828, F11829, F11879	1	F11860

* RTL-TH BASIC and DIGITAL

Room Temperature Controller for DIGITAL Regulation Box



Type	Suitable for		Article no.
Room Temperature Controller	F11838	1	F11843

Protective Cap for VK 31 Connection Kit

- Material: Plastic



Type	Colour		Article no.
Protective Cap VK31 - N	nickle coloured	2 / 10	F13414
Protective Cap VK31 - W	white*	2 / 10	F13415


* similar to RAL 9016

Covering Rosette for Baseboard Cut-out

Covering rosette for Simplex baseboards.

- Material: Plastic




Type	Colour	Dimensions [mm]		Article no.
Rosette SL - W	oak dark	12	10	F13449
Rosette SL - W	white*	12	10	F13455
Rosette SL - G	grey	12	10	F13456
Rosette SL - W	beech	12	10	F13457
Rosette SL - OL	oak light	12	10	F13458

* similar to RAL 9016

Plug-in Connector for Moulded Corners

- Material: Plastic




Type	Suitable for		Article no.
Plug-in Connector	plug-in connector for moulded corners	1	F70039

Flat Seal for VK 31 Connection Kit

- Material: EPDM



Type	Dimension [mm]		Article no.
Seal VK31	24 x 2	10	F10624

Transparent Cover for Signs 100 x 50 mm

- Material: Plastic



Type	Suitable for		Article no.
Transparent Cover	signs 100 x 50 mm	10	F55010

T-PLUS

The T-plus is specially designed to create perfect branches quickly and easily, whilst the system remains in operation.

The design of the T-plus is unique and responds precisely to the requirements of installers and their customers. The combination of a plunger, striking pin and a trigger sets the new standard in the creation of branches for systems in operation.

The new branching mechanism (the trigger) means perfect installation everywhere, everytime. Once the pin is removed, the charge ignites and the striking pin shoots straight forward. This makes a clean cut in the pipe creating the branch. This makes it possible to make branches even where there is little available space. There is no need to use a hammer any more.

Main advantages

- Saves installation time and costs.
- Create branches while the system is still in operation.
- Draining is not necessary, so no air and dirt can get into the system.
- A perfect branch every time due to the trigger.
- Easy to create a branch, even where space is restricted.
- Optimum pipe seal.
- Anti-corrosion coating.
- Single use (one shot) trigger mechanism. The trigger is included with the T-plus.

Areas of application

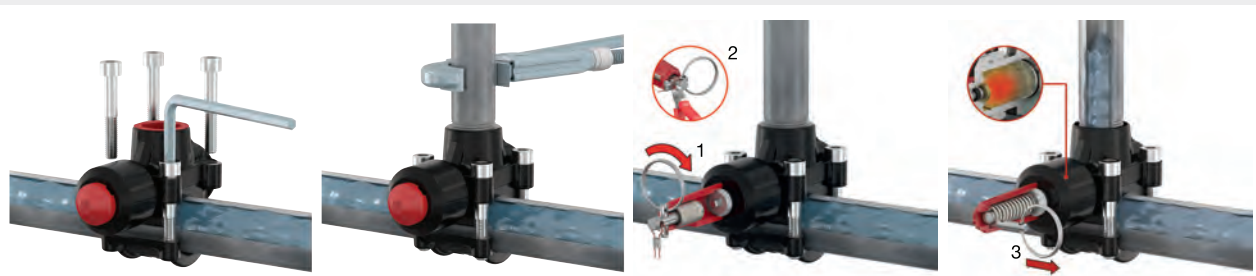
- Central heating and cooling installations.
- Potable installations.
- Solar installations.
- Fire protection systems.
- Industrial applications such as compressed air systems.

There are two types of T-plus available: a cast-iron version for thick-walled steel pipes and a brass version for copper pipes, thin-walled steel tubes and stainless-steel pipes.

Installing the T-plus

The T-plus makes things easy for installers. We developed a new mechanism for making the perfect branch in just four steps. No matter how small the available space is, installers can always deliver optimum quality with the T-plus. Creating a branch has never been easier.

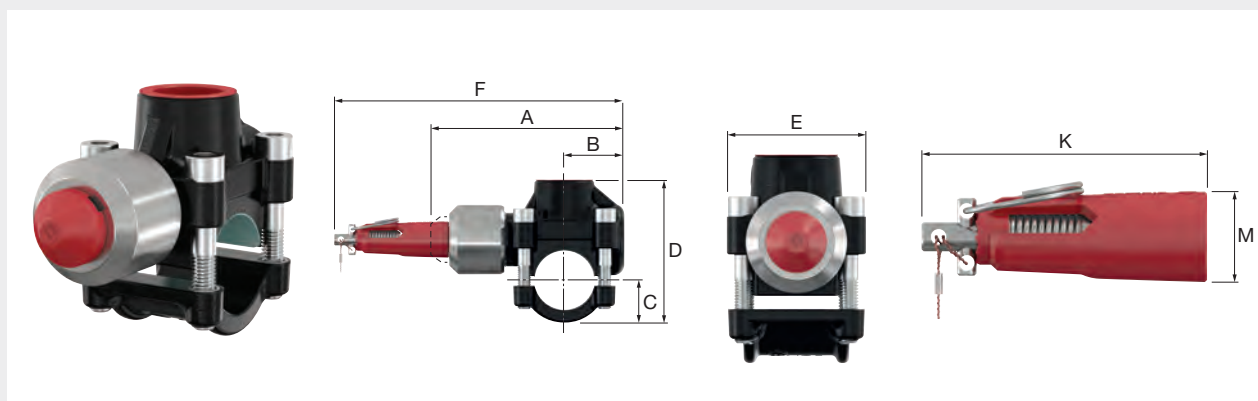
- (1) Position the ring in the most comfortable direction for you to pull.
- (2) Cut through the seal.
- (3) Pull the pin.




T-plus Cast Iron

For steel pipes (St33, St34, St35, St37) from 1/2" to 3":

- Threaded pipes: NEN 3257 C Heavy, DIN 2441, BS 1387 Heavy (or lighter)/ISO 9329-1.
- Seamless steel pipes: DIN 2448/1629 Bl.3, St 35 / ISO 9330-1.
- Welded steel pipes: DIN 2458/1626 Bl.2, St 35.
- Material numbers:
1.0035 (St33)
1.0034, 10305 (St34)
1.0308, 10345 (St35)
1.0036, 1.0037, 1.0038, 1.0039, 1.0255, 1.0254 (St37).
- Maximum working pressure: 25 bar.
- Maximum permissible temperature: 130 °C.
- Simple preparatory installation with click-in nuts (on models from 1 1/2").
- Not suitable for drinkwater.



Type	Ø Pipe		Branch connection	Permissible wall thickness		Torque [Nm]		Order Code
	Nom.	Ext. [mm]		Min. [mm]	Max. [mm]			
T-plus DN 15 x Rp 1/2	1/2"	21.3	Rp 1/2"	2.0	3.25	16	1	90615
T-plus DN 20 x Rp 1/2	3/4"	26.9	Rp 1/2"	2.0	3.25	16	1	90620
T-plus DN 25 x Rp 3/4	1"	33.7	Rp 3/4"	2.0	4.05	16	1	90626
T-plus DN 32 x Rp 1	1 1/4"	42.4	Rp 1"	2.0	4.05	16	1	90632
T-plus DN 40 x Rp 1 1/4	1 1/2"	48.3	Rp 1 1/4"	2.3	4.05	30	1	90640
T-plus DN 50 x Rp 1 1/4	2"	60.3	Rp 1 1/4"	2.3	4.50	30	1	90650
T-plus DN 65 x Rp 1 1/4	2 1/2"	76.1	Rp 1 1/4"	2.6	4.50	30	1	90665
T-plus DN 80 x Rp 1 1/4	3"	88.9	Rp 1 1/4"	2.9	5.00	30	1	90680



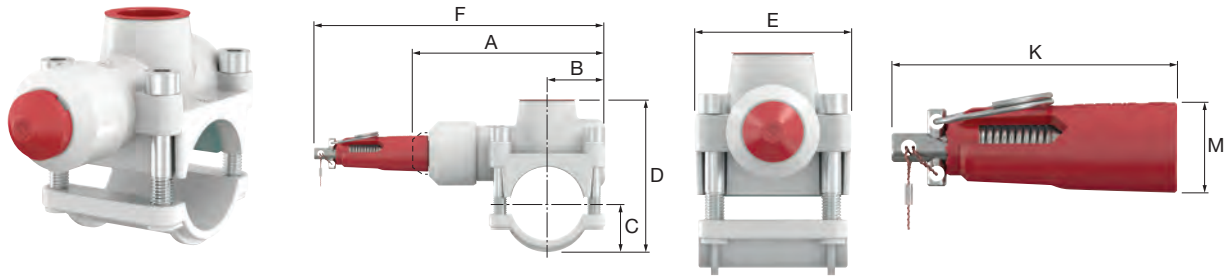
T-Plus Cast Iron - Dimensions


Type	Dimensions							
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F + 13 [mm]	K [mm]	M [mm]
T-plus DN 15 x Rp 1/2	100	28	19	67	47	166	66	21
T-plus DN 20 x Rp 1/2	113	34	21	77	50	179	66	21
T-plus DN 25 x Rp 3/4	115	35	25	83	56	181	66	21
T-plus DN 32 x Rp 1	130	38	29	102	69	196	66	21
T-plus DN 40 x Rp 1 1/4	165	55	35	123	83	231	66	21
T-plus DN 50 x Rp 1 1/4	167	55	43	136	83	233	66	21
T-plus DN 65 x Rp 1 1/4	190	66	52	153	83	256	66	21
T-plus DN 80 x Rp 1 1/4	190	66	58	168	83	256	66	21

T-plus Brass

For thin-walled steel pipes (St33, St34, St35, St37), copper pipes (R290, R250) and SST pipes (1.4401, 1.4521):

- Thin-walled steel pipes according to NEN 1982, EN 10305 and DIN 2391.
Material numbers: 1.0033 (St33), 1.0031, 1.0034 (St34), 1.0214, 1.0308 (St35), 1.0220, 1.0225, 1.0237 and 1.0261.
- Hard (R290) / semi-hard (R250) copper pipes according to EN 1057.
- Stainless steel pipes according to NEN 1982, EN 10312 and DIN 2391 made of AISI 316 (1.4401) and AISI 444 (1.4521).
- Maximum working pressure: 16 bar.
- Maximum permissible temperature: 130 °C.



Type	Ø Pipe ext. dia. [mm]	Branch con- nection	Suitable for			Max. permissible wall thickness			Torque [Nm]		Order Code
			Thin- walled steel	Copper	SST	Thin- walled steel [mm]	Copper [mm]	SST [mm]			
T-plus 15 x G 1/2 M	15	G 1/2" M	✓	✓	✓	1.25	1.25	1.00	6	1	90515
T-plus 18 x G 1/2 M	18	G 1/2" M	✓	✓	✓	1.25	1.25	1.00	6	1	90518
T-plus 22 x G 1/2 M *	22	G 1/2" M	✓	✓	✓	1.50	1.25	1.25	6	1	90522
T-plus 28 x Rp 3/4	28	Rp 3/4"	✓	✓	✓	1.50	1.50	1.25	10	1	90528
T-plus 35 x Rp 3/4	35	Rp 3/4"	✓	✓	✓	1.50	1.50	1.50	10	1	90535
T-plus 42 x Rp 3/4	42	Rp 3/4"	✓	✓	-	1.50	1.50	-	10	1	90542

* Complete with coupling 15 mm compr. fittings.



T-plus Brass - Dimensions

Type	Dimensions							
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F + 13 [mm]	K [mm]	M [mm]
T-plus 14 x G 1/2 M	75	17	13	48	35	141	66	21
T-plus 15 x G 1/2 M	75	17	13	51	35	141	66	21
T-plus 16 x G 1/2 M	75	17	12	46	35	141	66	21
T-plus 18 x G 1/2 M	88	24	14	51	40	154	66	21
T-plus 22 x G 1/2 M	88	24	15	58	40	154	66	21
T-plus 28 x Rp 3/4	105	29	22	76	57	171	66	21
T-plus 35 x Rp 3/4	108	30	25	82	56	174	66	21
T-plus 42 x Rp 3/4	115	35	29	89	63	181	66	21

Expansion Vessels for Potable Water



P. 940

Water Heaters



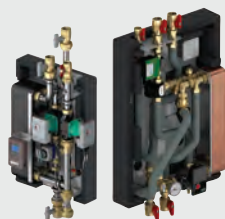
P. 954

Storage Vessels - Potable Water Systems



P. 988

Fresh Water Stations



P. 992

Backflow Preventers



P. 1003

Reinforces Hoses



P. 1004

Safety Valves



P. 1009

Domestic Water Fittings



P. 1014

Flexofit Water Shock Arrestor



P. 1028

Mixing Valves



P. 1029

Prescor PRV



P. 1033

Products for Potable Water

12



Flamco offers a wide range of safety and hygienic solution products with a long service life for potable water installations. Ranging from fittings to pressure safety and expansion vessels to tap water stations. With our innovative solutions, we ensure lower energy and water consumption thanks to design focus and system performance.

AIRFIX A/D

For use in potable water or fresh water installations.

The Airfix A and D expansion vessels operate in such a way that the water flows right through and they are continuously flushed with fresh water from the mains. This prevents tepid, stagnant water from collecting in the vessel in which bacterial growth could occur. Therefore, users can be assured of high quality potable water.

Applying an Airfix A / D expansion vessel to a water heater prevents the opening of the safety group or safety valve each time the potable water is heated. As a result, not only the life of the safety group or safety valve is significantly prolonged (damage or calcification of seat is avoided) but also the risk of permanent leakage (with high water loss as a consequence). An Airfix vessel is also a perfect solution in basement applications where the drain is higher than the safety valve.

Benefits of using Airfix expansion vessels

- No waste of valuable potable water.
- With special flow through construction.
- Continuous flow through prevents bacterial growth.
- Special butyl rubber diaphragm does not add any colour, odour or taste to the water.
- Corrosion-resistant coating inside, not only on the water side but also on the nitrogen side.
- Internationally approved and certified.
- The clench ring construction allows coating before assembly.
- Nitrogen gas filling for longer retention of pre-charge.
- Colour: White RAL9010.
- Maximum working pressure: 8/10 bar.
- Suitable for systems with a maximum flow temperature of 120 °C.
- Maximum temperature diaphragm: 70 °C.
- Vessels in accordance with EN13831.
- Approvals: **DVGW-W270**
WRAS
ACS
PZH
KIWA approved execution available on request.
Approved for potable water applications according to CE 2002/16/EC.
- In accordance with Pressure Equipment Directive 2014/68/EU.
- Airfix A/D 35 - 80: With suspension eye. Connection to the underside of the vessel.

Airfix Selection Table

Selection table for pressure expansion vessels for boiler applications.

- Cold water temperature: 10 °C.
- Hot water temperature: 60 °C.

Boiler Capacity [l]	Initial pressure [bar]	Set pressure safety valve			
		6 bar	7 bar	8 bar	10 bar
100	3	Airfix 8/3	Airfix 8/3	Airfix 8/3	Airfix 8/3
100	4	Airfix 12/4	Airfix 8/4	Airfix 8/4	Airfix 8/4
120	3	Airfix 8/3	Airfix 8/3	Airfix 8/3	Airfix 8/3
120	4	Airfix 18/4	Airfix 12/4	Airfix 8/4	Airfix 8/4
150	3	Airfix 12/3	Airfix 8/3	Airfix 8/3	Airfix 8/3
150	4	Airfix 18/4	Airfix 12/4	Airfix 12/4	Airfix 8/4
200	3	Airfix 18/3	Airfix 12/3	Airfix 12/3	Airfix 8/3
200	4	Airfix 25/4	Airfix 18/4	Airfix 12/4	Airfix 12/4
250	3	Airfix 18/3	Airfix 18/3	Airfix 12/3	Airfix 12/3
250	4	Airfix 35/4	Airfix 25/4	Airfix 18/4	Airfix 12/4
300	3	Airfix 25/3	Airfix 18/3	Airfix 18/3	Airfix 12/3
300	4	Airfix 35/4	Airfix 25/4	Airfix 18/4	Airfix 18/4
400	3	Airfix 35/3	Airfix 25/3	Airfix 18/3	Airfix 18/3
400	4	Airfix 80/4	Airfix 35/4	Airfix 25/4	Airfix 18/4
500	3	Airfix 35/3	Airfix 25/3	Airfix 25/3	Airfix 18/3
500	4	Airfix 50/4 (2x)	Airfix 50/4	Airfix 35/4	Airfix 25/4

Airfix D 8 - 35

The Airfix D is fitted with a synthetic flow through construction and a special T-piece which eliminates the formation of unwanted bacteria.

- Including special brass flow dividing T-piece ($\frac{3}{4}$ ") and internal synthetic flow through construction.
- Quality Vignette DIN-DVGW: NW-9481 AU2096.
- Complete connector set including shut-off and drain (AirfixControl).



Type	Precharge [bar]	Max. working pressure [bar]	Dimensions		Connection	Weight [kg]		Order Code
			Ø [mm]	H. [mm]				
Airfix D 8 - 4.0 bar	4	10	245	301	R $\frac{3}{4}$ "	3.2	50	14259
Airfix D 12 - 4.0 bar	4	10	286	334	R $\frac{3}{4}$ "	4.3	36	14349
Airfix D 18 - 4.0 bar	4	10	328	325	R $\frac{3}{4}$ "	4.9	24	14459
Airfix D 25 - 4.0 bar	4	10	358	378	R $\frac{3}{4}$ "	6.6	18	14559
Airfix D 35 - 4.0 bar	4	8	396	437	R $\frac{3}{4}$ "	8.1	18	14659




Airfix A 8 - 80

The Airfix A is fitted with a synthetic flow through device in a standard T-piece (not included) which eliminates the formation of unwanted bacteria.

- Including synthetic flow divider.
- Quality Vignette DIN-DVGW: 04-0359-W M 003/04.
- Complete connector set including shut-off and drain (AirfixControl).



Type	Pre-charge [bar]	Max. working pressure [bar]	Dimensions		Connection	Weight [kg]		Order Code
			Ø [mm]	H. [mm]				
Airfix A 8 - 4.0 bar	4	10	245	301	R 3/4"	3.2	50	24259
Airfix A 12 - 3.0 bar	3	10	286	334	R 3/4"	4.3	36	24348
Airfix A 12 - 4.0 bar	4	10	286	334	R 3/4"	4.3	36	24349
Airfix A 18 - 3.0 bar	3	10	328	325	R 3/4"	4.9	24	24458
Airfix A 18 - 4.0 bar	4	10	328	325	R 3/4"	4.9	24	24459
Airfix A 25 - 3.0 bar	3	10	358	378	R 3/4"	6.6	18	24558
Airfix A 25 - 4.0 bar	4	10	358	378	R 3/4"	6.6	18	24559
Airfix A 35 - 4.0 bar	4	8	396	437	R 3/4"	8.1	18	24659
Airfix A 50 - 4.0 bar	4	8	437	473	R 3/4"	11.2	12	24749
Airfix A 80 - 4.0 bar	4	8	519	540	R 3/4"	15.0	12	24809



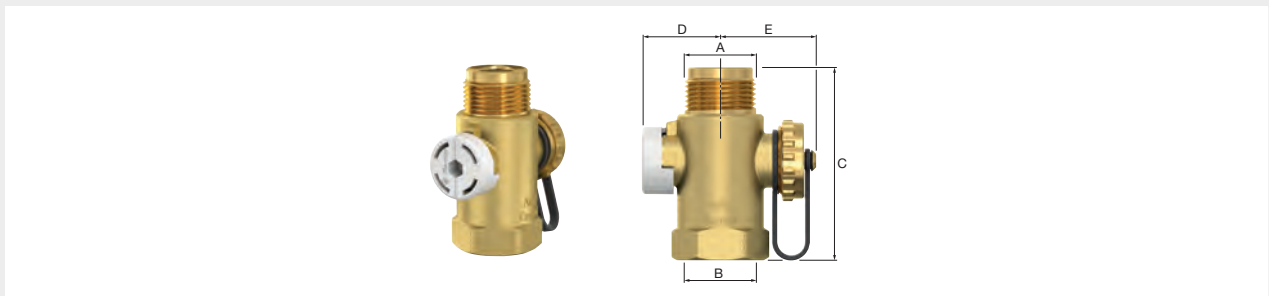
AirfixControl


With this component the flushing function is fully guaranteed. When the vessel is disconnected from the system the system flow remains in function.

AirfixControl enables an easy yearly precharge check of the Airfix A or D expansion vessel.

DVGW certification applied in combination with Airfix A or Airfix D.

- For contact with potable water this isolator consists of materials approved by the relevant authorities.
- Integrated vessel draining facility for yearly pre-charge check without vessel removal.
- In closed position the flow remains intact and system remains pressurized.
- Maximum water temperature: 70 °C.
- Maximum working pressure: 10 bar.



Type	Connections		Dimensions			Weight [kg]		Order Code
	A	B	C [mm]	D [mm]	E [mm]			
AirfixControl	G 3/4" M	G 3/4" F	71	29	34	0.24	1	28930

DIN
4807-5



AIRFIX 2 - 4


Small vessels for use in oxygen rich water installations (the vessels are not flow through and therefore not suitable for potable water).

- Nitrogen gas filling for longer retention of pre-charge.
- Maximum working temperature (diaphragm): 70 °C.
- Colour: White, RAL 9010.
- In accordance with Pressure Equipment Directive 2014/68/EU.

Airfix 2 - 4

- Maximum working pressure: 6.0 bar.



Type	Pre-charge [bar]	Dimensions		Connection	Weight [kg]		Order Code
		Ø [mm]	H. [mm]				
Airfix 2 - 4.0 bar	4	216	144	G 3/4" M	1.7	120	24001
Airfix 2 - specify	*	216	144	G 3/4" M	1.7	120	24002
Airfix 4 - 4.0 bar	4	216	194	G 3/4" M	2.1	90	24101
Airfix 4 - specify	*	216	194	G 3/4" M	2.1	90	24102

* Gas charge must be stated on order.

AIRFIX P

Potable water expansion vessels for use in domestic and commercial sealed chilled and hot water systems.

- Nitrogen gas filling for longer retention of pre-charge.
- Designed to incorporate a unique contoured, replaceable bladder.
- With single threaded steel connection and plastic insert (no flow through function).
- Suitable for addition of glycol-based anti-freeze up to 50%.
- In accordance with Pressure Equipment Directive 2014/68/EU.

Sizing chart for potable water expansion vessels


Cold Feed Pressure 3 bar. Sized using 3 bar mains supply, 6 bar expansion relief valve setting and a maximum temperature of 60° C

Potable vessel size [l]	System volume [l]
2	
3	
5	
8	
12	200
16	270
18	300
24	400
32	590
50	840
60	1.000
80	1.350
100	1.680
150	2.530
200	3.370
300	5.050
500	8.430
750	12.650
1,000	16.850

Airfix P 2 - 300

- Maximum working pressure: 10.0 bar.
- Min./ max. working temperature (bladder): -10 / 100 °C.
- Colour: Coated aluminium (RAL 9006).
- Airfix P 50 - 300: With feet.



Type	Capacity [l]	Pre-charge [bar]	Dimensions		Connec- tion	Bladder	Weight [kg]		Order Code
			Ø [mm]	H. [mm]					
Airfix P - UK 2 - 2.7 bar	2	2.7	120	235	G 1/2" M	Butyl	4.6*	336	24900
Airfix P 2 - 3.5 bar	2	3.5	120	235	G 1/2" M	Butyl	4.6*	336	24850
Airfix P - UK 3 - 2.7 bar	3	2.7	170	240	G 3/4" M	Butyl	1.5	168	24901
Airfix P 3 - 3.5 bar	3	3.5	170	240	G 3/4" M	Butyl	1.5	168	24851
Airfix P - UK 5 - 2.7 bar	5	2.7	170	275	G 3/4" M	Butyl	1.7	144	24902
Airfix P 5 - 3.5 bar	5	3.5	170	275	G 3/4" M	Butyl	1.7	144	24852
Airfix P - UK 8 - 2.7 bar	8	2.7	220	305	G 3/4" M	Butyl	2.2	90	24903
Airfix P 8 - 3.5 bar	8	3.5	220	305	G 3/4" M	Butyl	2.2	90	24853
Airfix P - UK 12 - 2.7 bar	12	2.7	260	310	G 3/4" M	Butyl	2.9	72	24904
Airfix P 12 - 3.5 bar	12	3.5	260	310	G 3/4" M	Butyl	2.9	72	24854
Airfix P - UK 16 - 2.7 bar	16	2.7	260	345	G 3/4" M	EPDM	3.4	60	24905
Airfix P 16 - 3.5 bar	16	3.5	260	345	G 3/4" M	EPDM	3.4	60	24855
Airfix P - UK 18 - 2.7 bar	18	2.7	260	375	G 3/4" M	EPDM	3.5	60	24906
Airfix P 18 - 3.5 bar	18	3.5	260	375	G 3/4" M	EPDM	3.5	60	24856
Airfix P - UK 24 - 2.7 bar	24	2.7	260	485	G 3/4" M	EPDM	4.3	56	24907
Airfix P 24 - 3.5 bar	24	3.5	260	485	G 3/4" M	EPDM	4.3	56	24857
Airfix P - UK 35 - 2.7 bar	35	2.7	380	470	G 1" M	EPDM	8.0	24	24910
Airfix P 35 - 3.5 bar	35	3.5	380	470	G 1" M	EPDM	8.0	24	24858
Airfix P - UK 50 - 2.7 bar	50	2.7	380	720	G 1" M	EPDM	9.9	15	24911
Airfix P 50 - 3.5 bar	50	3.5	380	720	G 1" M	EPDM	9.9	15	24859
Airfix P - UK 60 - 2.7 bar	60	2.7	380	830	G 1" M	EPDM	12.1	15	24913
Airfix P 60 - 3.5 bar	60	3.5	380	830	G 1" M	EPDM	12.1	15	24860
Airfix P - UK 80 - 2.7 bar	80	2.7	460	760	G 1" M	EPDM	14.0	10	24915
Airfix P 80 - 3.5 bar	80	3.5	460	760	G 1" M	EPDM	14.0	10	24861
Airfix P - UK 100 - 2.7 bar	100	2.7	460	880	G 1" M	EPDM	16.0	10	24917
Airfix P 100 - 3.5 bar	100	3.5	460	880	G 1" M	EPDM	16.0	10	24862
Airfix P - UK 150 - 2.7 bar	150	2.7	510	1030	G 1" M	EPDM	25.5	8	24920
Airfix P 150 - 3.5 bar	150	3.5	510	1030	G 1" M	EPDM	25.5	8	24863
Airfix P - UK 200 - 2.7 bar	200	2.7	590	1070	G 1 1/4" M	EPDM	37.5	8	24922
Airfix P 200 - 3.5 bar	200	3.5	590	1070	G 1 1/4" M	EPDM	37.5	8	24864
Airfix P - UK 300 - 2.7 bar	300	2.7	650	1250	G 1 1/4" M	EPDM	50.5	3	24924
Airfix P 300 - 3.5 bar	300	3.5	650	1250	G 1 1/4" M	EPDM	50.5	3	24865


* Per set of four in one box.



Airfix P 400 - 5000

- Maximum working pressure: 10.0 bar.
- Minimum / maximum working temperature (bladder): 1 / 70 °C.
- Colour: white epoxy powder coating (RAL 9010).
- Airfix P 400 - 1000: With height adjustable feet.
- Airfix P 1500 - 5000: With manometer, feet (not adjustable).

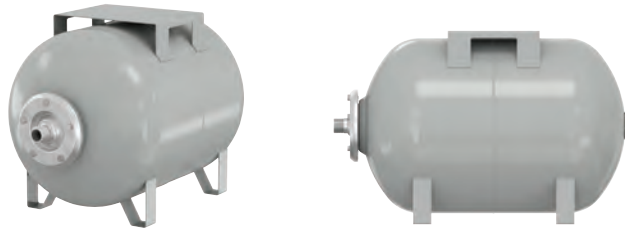



Type	Capacity [l]	Pre-charge [bar]	Dimensions		Connec- tion	Bladder	Weight [kg]		Order Code
			Ø [mm]	H [mm]					
Airfix P 400 - 3.5 bar	400	3.5	790	1287	G 1 1/4" M	EPDM	84	3	24933
Airfix P 600 - 3.5 bar	600	3.5	790	1647	G 1 1/4" M	EPDM	106	1	24934
Airfix P 800 - 3.5 bar	800	3.5	790	1994	G 1 1/4" M	EPDM	145	1	24935
Airfix P 1000 - 3.5 bar	1000	3.5	790	2345	G 1 1/4" M	EPDM	167	1	24936
Airfix P 1500 - 3.5 bar	1500	3.5	1000	2510	Rp 2 1/2"	Butyl	423	1	24869
Airfix P 2000 - 3.5 bar	2000	3.5	1100	2745	Rp 2 1/2"	Butyl	483	1	24870
Airfix P 2500 - 3.5 bar	2500	3.5	1200	3295	Rp 2 1/2"	Butyl	537	1	24871
Airfix P 3000 - 3.5 bar	3000	3.5	1200	3425	Rp 2 1/2"	Butyl	766	1	24872
Airfix P 5000 - 3.5 bar	5000	3.5	1500	3615	Rp 2 1/2"	Butyl	1620	1	24873



Airfix P Horizontal

- Maximum working pressure: 10.0 bar (Airfix P 24-H: 8.0 bar).
- Min./ max. working temperature (bladder): -10 / 100 °C.
- Colour: Coated aluminium (RAL 9006).



Type	Capacity [l]	Pre-charge [bar]	Dimensions			Connec- tion	Bladder	Weight [kg]		Order Code
			Ø [mm]	L. [mm]	H. [mm]					
Airfix P - UK 24-H - 2.7 bar	24	2.7	260	485	280	G 3/4" M	EPDM	4.7	56	24909
Airfix P 24-H - 3.5 bar	24	3.5	260	485	280	G 3/4" M	EPDM	4.7	56	24880
Airfix P - UK 50-H - 2.7 bar	50	2.7	380	595	408	G 1" M	EPDM	8.1	20	24912
Airfix P 50-H - 3.5 bar	50	3.5	380	595	408	G 1" M	EPDM	8.1	20	24890
Airfix P - UK 60-H - 2.7 bar	60	2.7	380	720	408	G 1" M	EPDM	10.4	15	24914
Airfix P 60-H - 3.5 bar	60	3.5	380	720	408	G 1" M	EPDM	10.4	15	24881
Airfix P - UK 80-H - 2.7 bar	80	2.7	460	660	485	G 1" M	EPDM	12.3	12	24916
Airfix P 80-H - 3.5 bar	80	3.5	460	660	485	G 1" M	EPDM	12.3	12	24882
Airfix P - UK 100-H - 2.7 bar	100	2.7	460	780	485	G 1" M	EPDM	14.0	12	24919
Airfix P 100-H - 3.5 bar	100	3.5	460	780	485	G 1" M	EPDM	14.0	12	24883
Airfix P - UK 150-H - 2.7 bar	150	2.7	510	950	545	G 1" M	EPDM	23.5	6	24921
Airfix P 150-H - 3.5 bar	150	3.5	510	950	545	G 1" M	EPDM	23.5	6	24884
Airfix P - UK 200-H - 2.7 bar	200	2.7	590	940	635	G 1 1/4" M	EPDM	34.2	6	24923
Airfix P 200-H - 3.5 bar	200	3.5	590	940	635	G 1 1/4" M	EPDM	34.2	6	24885
Airfix P - UK 300-H - 2.7 bar	300	2.7	650	1150	700	G 1 1/4" M	EPDM	44.0	6	24925
Airfix P 300-H - 3.5 bar	300	3.5	650	1150	700	G 1 1/4" M	EPDM	44.0	6	24886
Airfix P - UK 500-H - 2.7 bar	500	2.7	750	1420	820	G 1 1/4" M	EPDM	58.0	6	24927



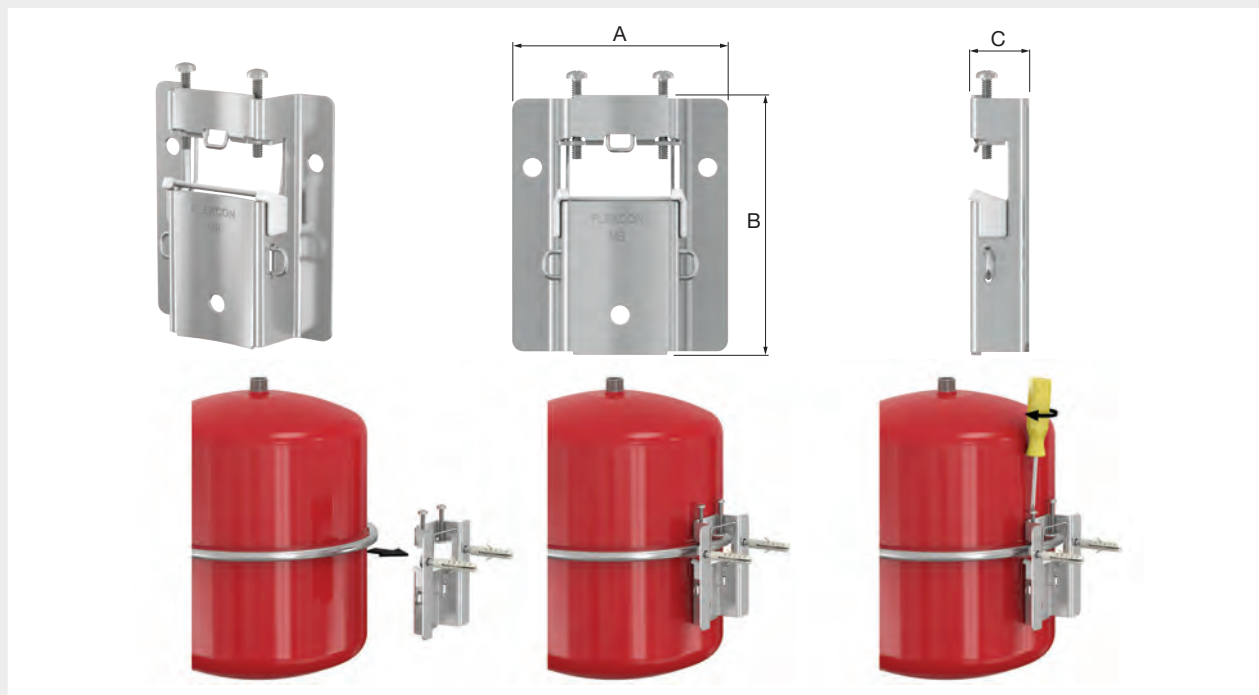
WALL MOUNTING


MB

For mounting Flexcon/Airfix vessels of 8 - 25 litres. Provided with a slot into which the Flexcon vessel clamp ring fits precisely. Tightening the two bolts is all that is needed to make a sturdy connection.

- Material: DC01 A-m, zinc coated.
- Connection to the wall with two Ø8 plugs and two Ø6 screws with hexagon head (wrench 10).
- Connection of the vessel to the MB by means of two M5 bolts with cross head.
- Separately available are sets of 5 bands for connection vessels without clench ring (size approx. Ø 325 mm).

- **MB 3: With spring and adapter for easy mounting.**




Type	Dimensions				Order Code
	A [mm]	B [mm]	C [mm]		
Flexcon vessel support MB 2	94	113	26	25	27913
Flexcon vessel support MB 3	94	113	26	25	27903

SB-A Band

For mounting expansion vessels without clench ring (2 - 35 litres) to the wall.

- To be combined with MB 2.



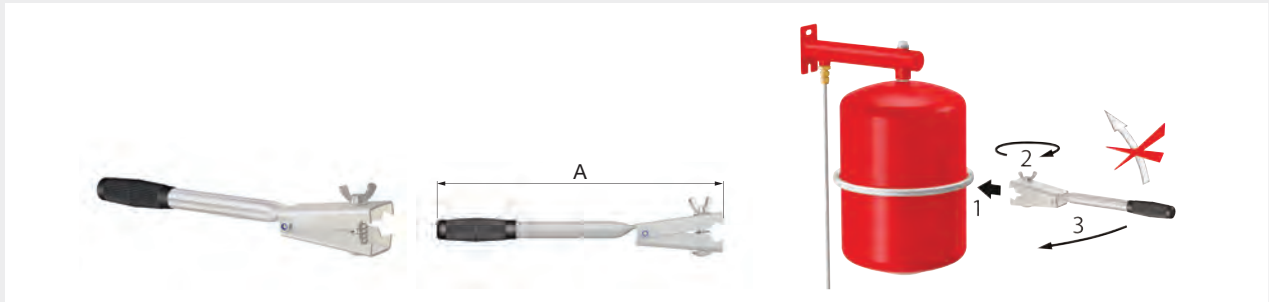
Type	Application		Order Code
SB-A	Band for fitting expansion vessels without clench ring, to be combined with MB 2	5	27914

ACCESSORIES FOR THE INSTALLER

Flexcon DT

An easy tool to assist with mounting and removing Flexcon and Airfix expansion vessels of 2 - 25 litres.

By tightening the wing nut, the Flexcon DT is attached to the expansion vessel clamp ring. Thereafter, the expansion vessel can be unscrewed with a lateral movement.



Type	Application	Dimensions A [mm]		Order Code
Flexcon DT	Flexcon/Airfix 2 - 25	350	1	27925

Vessel Carrier



A handy vessel carrier which makes it very easy and safe to handle or transport the exchanged vessel.


- Easy to use.
- Prevents spilling of (polluted) heating installation water in your transporter or at home with the customer.
- The vessel can be handled with one hand only.
- Easy to be mounted and removed (for multiple use).

Type	Connection	Application		Order Code
Vessel carrier	G 3/4" F	Flexcon/Airfix 2 - 25	1	27902

Precharge Pressure Tester

Tool to check the pre-charge pressure of Flexcon and Airfix expansion vessels.



Type	Pressure range [bar]		Order Code
Precharge tester (0.15 - 7.0 bar)	0.15 - 7.0	1	27907

AIRFIX D-E

High quality pressure expansion vessels for use in all (potable) water installations.

Its special flow through construction eliminates the formation of unwanted bacteria. The composition of the bladders has been made for this range in such a way that there will be no variation in smell, colour or taste. The inside of the Airfix connection flange has a special coating which prevents oxidation.

- Coated, two-way system connection for complete vessel flow through.
- Low pressure drop.
- Nitrogen gas filling for longer retention of pre-charge.
- Replaceable butyl rubber bladder according to DIN4807/5.
- Easy to install with long service life.
- Pressure gauge with blow back protection.

- Quality Vignette DIN-DVGW: NW-0411 BQ 0340.
- Colour: White, RAL 9010.
- Standard pre-charge: 6 bar.
- Suitable for systems with a maximum flow temperature of 120 °C.
- Maximum temperature bladder: 70 °C.
- In accordance with Pressure Equipment Directive 2014/68/EU.

Airfix D-E - 10.0 bar

- Maximum working pressure: 10 bar.


Airfix D-E 100 - 1000:

- In accordance with EN13831.
- Delivered with pressure gauge, sight-glass, threaded flow through connection and height adjustable feet.

Airfix D-E 1600 - 3000:

- In accordance with AD2000.
- With electronic diaphragm rupture sensor and flanged connections.
- The diaphragm rupture sensor may be configured for remote read-out.



Type	Capacity [l]	Dimensions		System connection (2x)	Flanges * (2x)	Weight [kg]		Order Code
		Ø [mm]	H. [mm]					
Airfix D-E 100	100	484	897	G 1 1/2" M	-	38	1	14750
Airfix D-E 200	200	600	1075	G 1 1/2" M	-	51	1	14751
Airfix D-E 300	300	600	1444	G 1 1/2" M	-	65	1	14752
Airfix D-E 400	400	790	1287	G 2" M	-	89	1	14753
Airfix D-E 600	600	790	1647	G 2" M	-	110	1	14754
Airfix D-E 800	800	790	1994	G 2" M	-	148	1	14755
Airfix D-E 1000	1000	790	2345	G 2" M	-	170	1	14756
Airfix D-E 1600	1600	1000	2663	-	DN 80	550	1	14916
Airfix D-E 2000	2000	1200	2412	-	DN 80	620	1	14920
Airfix D-E 3000	3000	1200	3312	-	DN 80	805	1	14930


* According to EN 1092-1 PN16.



Airfix D-E - 16.0 bar

- Maximum working pressure: 16 bar.
- In accordance with AD2000.
- With electronic diaphragm rupture sensor and flanged connections.
- The diaphragm rupture sensor may be configured for remote read-out.



Type	Capacity [l]	Dimensions		Flanges * (2x)	Weight [kg]		Order Code
		Ø [mm]	H. [mm]				
Airfix D-E 50	50	450	839	DN 40	70	1	14701
Airfix D-E 80	80	450	1019	DN 40	80	1	14801
Airfix D-E 120	120	450	1274	DN 40	95	1	14813
Airfix D-E 180	180	550	1238	DN 40	135	1	14819
Airfix D-E 240	240	550	1498	DN 40	160	1	14825
Airfix D-E 300	300	550	1838	DN 40	190	1	14831
Airfix D-E 600	600	750	1843	DN 50	300	1	14861
Airfix D-E 800	800	750	2233	DN 50	350	1	14881
Airfix D-E 1000	1000	750	2733	DN 50	415	1	14911
Airfix D-E 1600	1600	1000	2682	DN 80	610	1	14917
Airfix D-E 2000	2000	1200	2425	DN 80	680	1	14921
Airfix D-E 3000	3000	1200	3335	DN 80	890	1	14931

* According to EN 1092-1 PN16.



Mono Connections




Stainless steel (AISI 304) and powder coated steel mono connections for non-potable water systems.

Stainless steel connections suitable for:

- Airfix D-E-B 10 bar: 1600 - 3000 l.
- Airfix D-E-B 16, 25 bar: 50 - 3000 l.
- Airfix D-E 10 bar: 100 - 1000 l.: Available on request.
- Airfix D-E 10 bar: 1600 - 3000 l.
- Airfix D-E 16 bar: 50 - 3000 l.

Coated steel connections suitable for:

- Airfix D-E 10 bar: 1600 - 3000 l.
- Airfix D-E 16 bar: 50 - 3000 l.

Type	Capacity [l]	Connection		Order Code
Mono small - Stainless steel	50 - 300	G 1 1/2"	1	14960
Mono medium - Stainless steel	600 - 1000	G 2"	1	14961
Mono large - Stainless steel	1600 - 3000	G 2 1/2"	1	14962
Mono small - Coated steel	50 - 300	G 1 1/2"	1	14955
Mono medium - Coated steel	600 - 1000	G 2"	1	14956
Mono large - Coated steel	1600 - 3000	G 2 1/2"	1	14957


Duo Connections



Stainless steel (AISI 304) flow through armature with double system connection.

Suitable for:

- Airfix D-E 10 bar: 100 - 1000 l.; Available on request.
- Airfix D-E 10 bar: 1600 - 3000 l.
- Airfix D-E 16 bar: 50 - 3000 l.

Type	Capacity [l]	Connection*		Order Code
Duo small - Stainless steel	50 - 300	PN16 DN40	1	14950
Duo medium - Stainless steel	600 - 1000	PN16 DN50	1	14951
Duo large - Stainless steel	1600 - 3000	PN16 DN80	1	14952

* According to EN 1092-1 PN 16.

AIRFIX D-E-B

Standard vessels for use in all (potable) water installations. The construction also permits use in closed HVAC installations with a maximum temperature of 70 °C.

The composition of the bladder has been made for this range in such a way that there will be no variation in smell, colour or taste. The inside of the Airfix connection flange has a special coating which prevents oxidation.


- Nitrogen gas filling for longer retention of pre-charge.
- Replaceable butyl rubber bladder according to DIN4807/5.
- With single threaded coated steel connection (no flow-through function).
- Maximum working temperature (bladder): 70 °C.
- Standard pre-charge: 6.0 bar.
- Colour: White, RAL 9010.
- In accordance with Pressure Equipment Directive 2014/68/EU.
- Material quality:
S235JR.
EN/ISO: P245N.

40 bar execution available on request.

Airfix D-E-B - 10.0 bar

- Maximum working pressure: 10.0 bar.



Type	Capacity [l]	Dimensions		Connection	Weight [kg]		Order Code
		Ø [mm]	H. [mm]				
Airfix D-E-B 1600	1600	1000	2680	Rp 2 1/2"	529	1	14918
Airfix D-E-B 2000	2000	1200	2400	Rp 2 1/2"	593	1	14922
Airfix D-E-B 3000	3000	1200	3300	Rp 2 1/2"	782	1	14932

Airfix D-E-B - 16.0 bar




- Maximum working pressure: 16.0 bar.

Type	Capacity [l]	Dimensions		Connection	Weight [kg]		Order Code
		Ø [mm]	H. [mm]				
Airfix D-E-B 50	50	450	830	Rp 1 1/2"	58	1	14703
Airfix D-E-B 80	80	450	1010	Rp 1 1/2"	69	1	14803
Airfix D-E-B 120	120	450	1265	Rp 1 1/2"	83	1	14815
Airfix D-E-B 180	180	550	1255	Rp 1 1/2"	124	1	14821
Airfix D-E-B 240	240	550	1515	Rp 1 1/2"	147	1	14827
Airfix D-E-B 300	300	550	1855	Rp 1 1/2"	178	1	14833
Airfix D-E-B 600	600	750	1840	Rp 2"	282	1	14863
Airfix D-E-B 800	800	750	2230	Rp 2"	333	1	14883
Airfix D-E-B 1000	1000	750	2730	Rp 2"	398	1	14913
Airfix D-E-B 1600	1600	1000	2680	Rp 2 1/2"	587	1	14919
Airfix D-E-B 2000	2000	1200	2400	Rp 2 1/2"	657	1	14923
Airfix D-E-B 3000	3000	1200	3300	Rp 2 1/2"	864	1	14933

Airfix D-E-B - 25.0 bar



- Maximum working pressure: 25.0 bar.

Type	Capacity [l]	Dimensions		Connection	Weight [kg]		Order Code
		Ø [mm]	H. [mm]				
Airfix D-E-B 50	50	450	830	Rp 1 1/2"	59	1	14705
Airfix D-E-B 80	80	450	1010	Rp 1 1/2"	71	1	14805
Airfix D-E-B 120	120	450	1265	Rp 1 1/2"	87	1	14811
Airfix D-E-B 180	180	550	1255	Rp 1 1/2"	123	1	14817
Airfix D-E-B 240	240	550	1515	Rp 1 1/2"	149	1	14829
Airfix D-E-B 300	300	550	1855	Rp 1 1/2"	182	1	14835
Airfix D-E-B 600	600	750	1840	Rp 2"	349	1	14865
Airfix D-E-B 800	800	750	2230	Rp 2"	417	1	14885
Airfix D-E-B 1000	1000	750	2730	Rp 2"	500	1	14905

Mono Connections




Stainless steel (AISI 304) and powder coated steel mono connections for non-potable water systems.

Stainless steel connections suitable for:

- Airfix D-E-B 10 bar: 1600 - 3000 l.
- Airfix D-E-B 16, 25 bar: 50 - 3000 l.
- Airfix D-E 10 bar: 100 - 1000 l.: Available on request.
- Airfix D-E 10 bar: 1600 - 3000 l.
- Airfix D-E 16 bar: 50 - 3000 l.

Coated steel connections suitable for:

- Airfix D-E 10 bar: 1600 - 3000 l.
- Airfix D-E 16 bar: 50 - 3000 l.

Type	Capacity [l]	Connection		Order Code
Mono small - Stainless steel	50 - 300	G 1 1/2"	1	14960
Mono medium - Stainless steel	600 - 1000	G 2"	1	14961
Mono large - Stainless steel	1600 - 3000	G 2 1/2"	1	14962
Mono small - Coated steel	50 - 300	G 1 1/2"	1	14955
Mono medium - Coated steel	600 - 1000	G 2"	1	14956
Mono large - Coated steel	1600 - 3000	G 2 1/2"	1	14957

DUO UPRIGHT WATER HEATERS

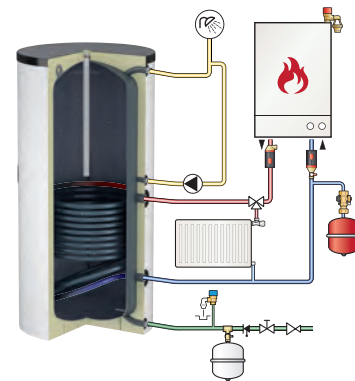
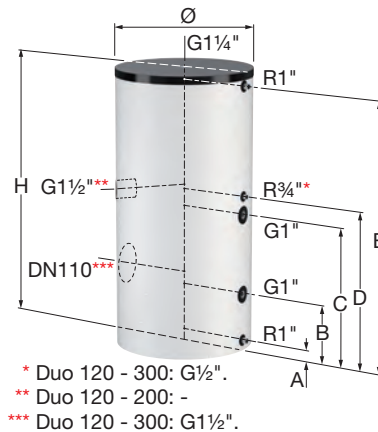
Duo 120 - 500

An indirectly heated and upright water heater including a permanently welded-in heating coil, suitable for all modern heating systems.

- Minimum lime deposits due to smooth surfaces. High-quality glass lining according to DIN 4753/part 3 for potable hot water production and optimum corrosion protection by means of a standard Mg-anode.
- Equipped with a built-in thermometer and immersion pipe.
- A set of adjustable feet is optionally available (Art.No. 18989).
- From 400 litres, equipped with a DN 110 inspection flange at the side, suitable for connecting additional heating elements; Ex Works - closed with a removeable blind flange.
- The heating coil is designed to ensure full depth heating to prevent the accretion of Legionella bacteria.
- Maximum working pressure: 10 bar (potable water vessel) / 16 bar (heating coil).
- Maximum working temperature: 95 °C (potable water vessel) / 130 °C (heating coil).

Insulation:

- Standard colours: white (RAL 9010) and white aluminium (RAL 9006).
- Including hard foam insulation (direct foam injection) with a polystyrene outer shell.



Type	Capacity [l]	Dimensions *			Heating surface area [m²]	Heating capacity [kW] **	Water capacity [l/h] **	Insulation colour	Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting-height [mm]							
Duo 120	120	560	940	1090	0.5	10.2	177	white alu.	63	1	18501
Duo 120	120	560	940	1090	0.5	10.2	177	white	63	1	18500
Duo 150	150	560	1050	1200	0.6	11.6	202	white alu.	68	1	18503
Duo 150	150	560	1050	1200	0.6	11.6	202	white	68	1	18502
Duo 200	200	560	1350	1500	0.9	18.6	323	white alu.	86	1	18505
Duo 200	200	560	1350	1500	0.9	18.6	323	white	86	1	18504
Duo 300	300	660	1620	1750	1.3	29.5	513	white alu.	105	1	18447
Duo 300	300	660	1620	1750	1.3	29.5	513	white	105	1	18435
Duo 400	400	750	1530	1715	1.6	35.4	615	white alu.	158	1	18390
Duo 400	400	750	1530	1715	1.6	35.4	615	white	158	1	18423
Duo 500	500	750	1730	1895	2.0	45.2	785	white alu.	181	1	18395
Duo 500	500	750	1730	1895	2.0	45.2	785	white	181	1	18429

* Dimensions including insulation.

** At 80 °C supply temperature and 60 °C potable water temperature.



Duo 120 - 500 - Connection diagram

Type	Distance from floor to connection centres [mm]				
	A	B	C	D	E
Duo 120	65	245	545	635	885
Duo 150	65	245	590	690	985
Duo 200	65	245	710	885	1285
Duo 300	65	310	750	850	1560
Duo 400	70	330	770	870	1470
Duo 500	70	330	890	990	1670

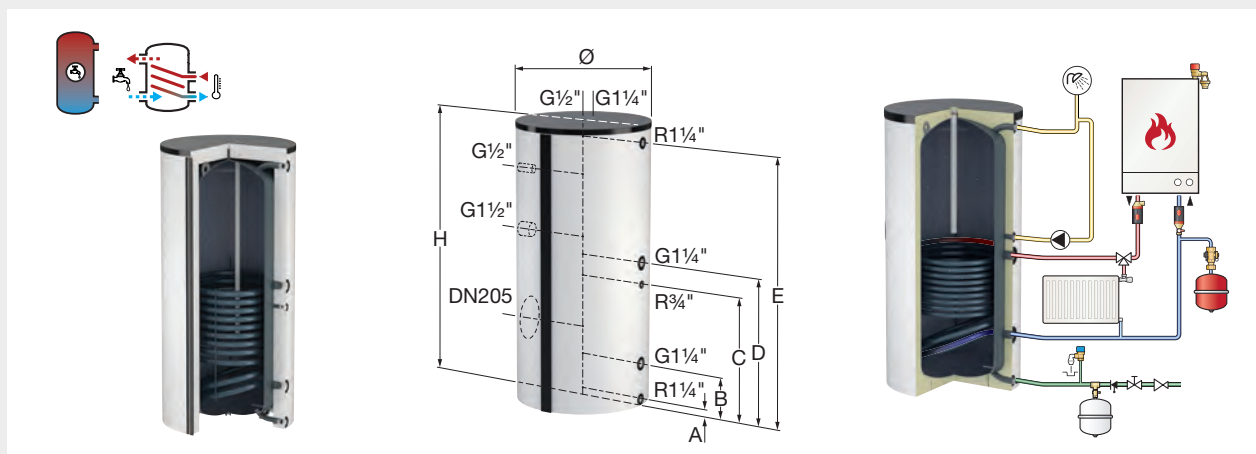
Duo 750 - 1000

An indirectly heated and upright water heater including a permanently welded-in heating coil, suitable for all modern heating systems.

- Minimum lime deposits due to smooth surfaces. High-quality glass lining according to DIN 4753/part 3 for potable hot water production and optimum corrosion protection by means of a standard Mg-anode.
- Equipped with a built-in thermometer.
- Including a clamping strip with which a temperature sensor can be affixed at any chosen height to enable optimum heat efficiency of the water heater.
- Feet adjustable in height for accurate levelling.
- Inspection flange at the side: DN 205, suitable for connecting additional heating elements; Ex Works - closed with a removeable blind flange.
- Suitable for connecting additional heating elements and fitted with a coupling sleeve for accessories.
- The heating coil is designed to ensure full depth heating to prevent the accretion of Legionella bacteria.
- Maximum working pressure: 10 bar (potable water vessel) / 16 bar (heating coil).
- Maximum working temperature: 95 °C (potable water vessel) / 110 °C (heating coil).

Insulation:

- Standard colours: white (RAL 9010) and white aluminium (RAL 9006).
- Including EPS insulating mantle (fire category B1) with a polypropylene outer shell (fire category B2).



Type	Capacity [l]	Dimensions *			Heating surface area [m²]	Heating capacity [kW] **	Water capacity [l/h] **	Insulation colour	Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting height [mm]							
Duo 750	750	750	1970	2070	2.7	67.1	1166	white	280	1	19297
Duo 750	750	750	1970	2070	2.7	67.1	1166	white alu.	280	1	19298
Duo 1000	1000	800	2230	2320	3.2	73.9	1283	white	360	1	19305
Duo 1000	1000	800	2230	2320	3.2	73.9	1283	white alu.	360	1	19306

* Dimensions excluding insulation.

** At 80 °C supply temperature and 60 °C potable water temperature.



Duo 750 - 1000 - Connection diagram

Type	Distance from floor to connection centres [mm]				
	A	B	C	D	E
Duo 750	60	320	890	1040	1880
Duo 1000	70	330	960	1110	2140

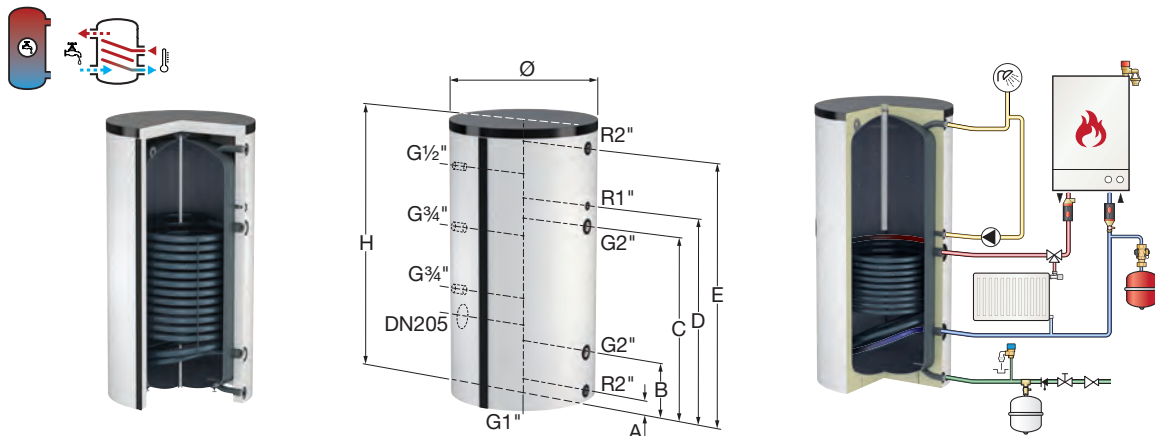
Duo 1500 - 3000

An indirectly heated and upright water heater including a permanently welded-in heating coil, suitable for all modern heating systems.

- Minimum lime deposits due to smooth surfaces. High-quality glass lining according to DIN 4753/part 3 for potable hot water production and optimum corrosion protection by means of a FSA no-maintenance anode.
- Equipped with a built-in thermometer.
- Feet adjustable in height for accurate levelling.
- Inspection flange at the side: DN 205, suitable for connecting additional heating elements; Ex Works - closed with a removeable blind flange.
- Suitable for connecting additional heating elements and fitted with a coupling sleeve for accessories.
- The heating coil is designed to ensure full depth heating to prevent the accretion of Legionella bacteria.
- Maximum working pressure: 10 bar (potable water vessel) / 16 bar (heating coil).
- Maximum working temperature: 95 °C (potable water vessel) / 110 °C (heating coil).

Insulation:

- Standard colours: white (RAL 9010) and white aluminium (RAL 9006).
- Including EPS insulating mantle (fire category B1) with a polypropylene outer shell (fire category B2).



Type	Capacity [l]	Dimensions *			Heating surface area [m²]	Heating capacity [kW] **	Water capacity [l/h] **	Insulation colour	Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting height [mm]							
Duo 1500	1500	1000	2320	2480	6.4	143	2383	white	570	1	19310
Duo 1500	1500	1000	2320	2480	6.4	143	2383	white alu.	570	1	19311
Duo 2000	2000	1100	2400	2600	7.3	170	2951	white	666	1	19315
Duo 2000	2000	1100	2400	2600	7.3	170	2951	white alu.	666	1	19316
Duo 3000	3000	1200	2830	3000	7.3	170	2951	white	939	1	19318

* Dimensions excluding insulation.

** At 80 °C supply temperature and 60 °C potable water temperature.



Duo 1500 - 3000 - Connection diagram

Type	Distance from floor to connection centres				
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]
Duo 1500	85	435	1555	1735	2235
Duo 2000	105	455	1575	1755	2255
Duo 3000	95	470	1590	2205	2730

Duo - Performance

Technical specifications	Duo										
	120	150	200	300	400	500	750	1000	1500	2000	3000
Total heat loss (EN 12897) [W]	56	63	83	87	96	102	117	145	160	181	n/a
Energy label	C	C	C	C	C	C	C	C	C	C	n/a
Insulation thickness [mm]	80	80	80	80	80	80	80	100	100	100	100
Performance index (T => 60 °C) [NL]	1.3	2.1	4.0	8.6	14.0	20.0	29.0	42.0	80.0	110.0	201.0
Continuous power (T => 45 °C) [kW] **	14.7	16.7	26.8	42.8	51.3	65.4	97.7	107.5	207.9	247.9	247.9
Continuous power (T => 60 °C) [kW] **	10.2	11.6	18.6	29.5	35.4	45.2	67.1	73.9	143.0	170.0	170.0
Continuous power (T => 70 °C) [kW] **	11.8	13.5	21.5	34.3	41.1	52.4	78.2	86.1	166.5	198.2	198.2
Peak flow (T => 40 °C) [l/10 min.] *	94	100	147	200	294	300	574	600	800	1000	1200
Peak flow (T => 60 °C) [l/10 min.] *	89	100	144	200	287	300	549	600	800	1000	1200
Continuous output (T => 40 °C) [l/h] *	357	409	653	1038	1245	1588	2362	2599	5028	5980	5980
Continuous output (T => 40 °C) [l/h] **	440	500	799	1279	1532	1953	2917	3211	6208	7402	7402
Continuous output (T => 45 °C) [l/h] **	364	414	662	1059	1269	1617	2415	2659	5141	6128	6128
Continuous output (T => 60 °C) [l/h] *	177	202	323	513	615	785	1166	1283	2483	2951	2951
Continuous output (T => 70 °C) [l/h] **	171	195	312	497	595	759	1132	1246	2410	2869	2869
First hour output (T => 40 °C) [l/h] *	391	442	691	1066	1331	1629	2543	2794	4978	5985	6336
First hour output (T => 60 °C) [l/h] *	236	272	413	633	799	982	1521	1734	2990	3662	4190
First hour output (T => 70 °C) [l/h] *	231	266	403	620	782	961	1492	1704	2933	3600	4132
Heat up time (T => 40 °C) [min.] **	16	18	15	14	16	15	15	19	14	16	24
Heat up time (T => 45 °C) [min.] **	20	22	18	17	19	19	19	23	18	20	29
Set drain rate [l/min.]	10	10	15	20	30	30	60	60	80	100	120
Hot water flow (T => 60 °C) [l/h] *	500	500	800	1500	1700	2100	3900	4400	8000	11000	11000
Heating surface of the coil [m²]	0.5	0.6	0.9	1.3	1.6	2.0	2.7	3.2	6.4	7.3	7.3
Pressure drop coil 80/60 °C [kPa]	0.4	0.5	1.6	6.8	10.2	18.7	5.4	7.3	5.0	9.8	9.8

* Hot leg temperature: 80 °C, cold water temperature: 10 °C.

** Hot leg temperature: 90 °C, cold water temperature: 10 °C.

n/a = not applicable.

DUO HLS-E STAINLESS STEEL WATER HEATERS

Duo HLS-E 120 - 500

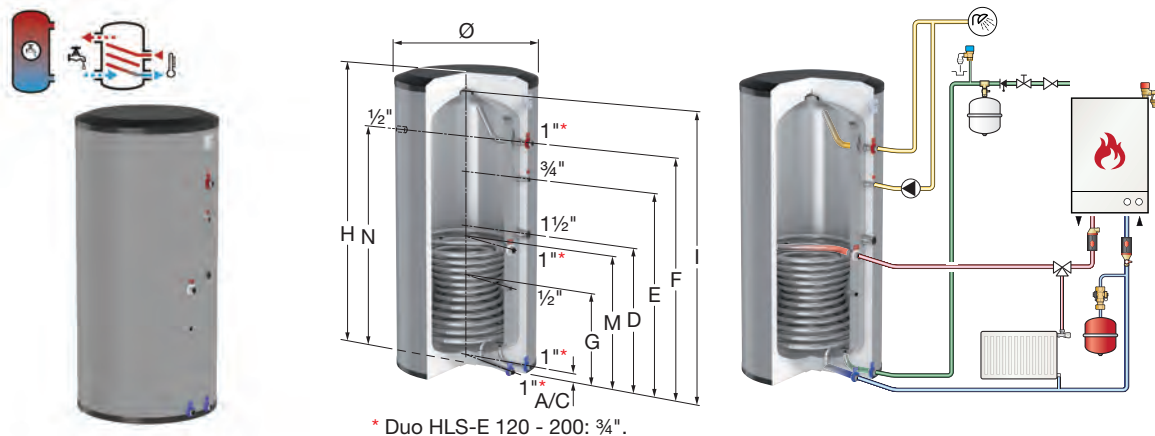
An indirectly heated water heater that can be combined with all heating installations.

The Diabolo-shaped coil guarantees an efficient heat exchange with a short heat up time. The Duo HLS-E provides optimum performance combined with a high level of energy efficiency.

- Efficient: Minimum heat loss and very fast heating up.
- Requires little maintenance and no anode.
- Light weight.
- Excellent stratification of the water in the vessel.
- High resistance to chloride (up to 250 ppm).
- From 300 litres, including an 1 1/2" connection suitable for connecting an additional electric heating element.
- Maximum working pressure: 10 bar (potable water vessel) / 40 bar (heating coil).
- Maximum working temperature: 95 °C (potable water vessel) / 130 °C (heating coil).
- Stainless steel type: 1.4521.

Insulation:

- Standard colours: white and silver.
- Including graphite polystyrene (GPS) insulation (direct foam injection) with a polypropylene outer shell (fire category B2).



* Duo HLS-E 120 - 200: 3/4\".

Type	Capacity [l]	Ø [mm]	Dimensions *		Insulation colour	Weight [kg]		Order Code
			H [mm]	Tilting height [mm]				
Duo HLS-E 120	119	595	994	1116	white	23	1	19900
Duo HLS-E 150	148	595	1185	1282	white	27	1	19901
Duo HLS-E 150	148	595	1185	1282	silver	27	1	19902
Duo HLS-E 200	194	595	1487	1558	white	34	1	19903
Duo HLS-E 200	194	595	1487	1558	silver	34	1	19904
Duo HLS-E 300	296	675	1805	1884	white	48	1	19905
Duo HLS-E 300	296	675	1805	1884	silver	48	1	19906
Duo HLS-E 400	393	795	1720	1844	white	69	1	19907
Duo HLS-E 400	393	795	1720	1844	silver	69	1	19908
Duo HLS-E 500	479	795	2020	2126	white	77	1	19909
Duo HLS-E 500	479	795	2020	2126	silver	77	1	19910

* Dimensions including insulation.

Duo HLS-E 120 - 500 - Connection diagram



Type	Distance from floor to connection centres [mm]						
	A/C	M	D	E	F/N	G	I
Duo HLS-E 120	50	390	-	618	748	293	933
Duo HLS-E 150	50	450	-	808	938	353	1123
Duo HLS-E 200	50	553	-	1110	1240	378	1425
Duo HLS-E 300	53	658	798	1028	1278	458	1728
Duo HLS-E 400	55	690	745	1228	1413	490	1613
Duo HLS-E 500	55	690	745	1523	1723	490	1923

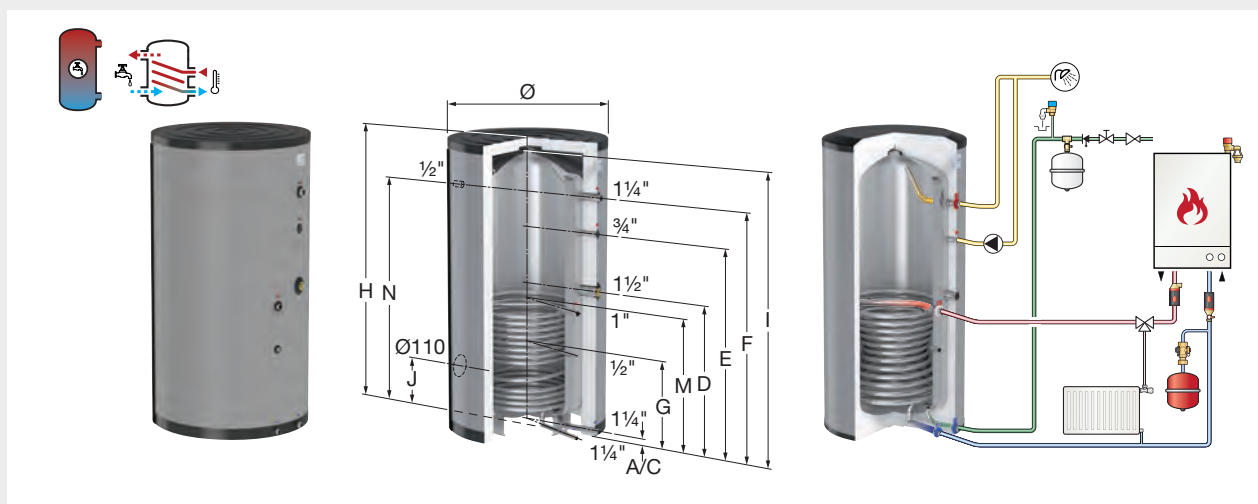
Duo HLS-E 750 - 1000


An indirectly heated water heater that can be combined with all heating installations. The Diabolo-shaped coil guarantees an efficient heat exchange with a short heat up time. The Duo HLS-E Solar provides optimum performance combined with a high level of energy efficiency.

- Efficient: Minimum heat loss and very fast heating up.
- Requires little maintenance and no anode.
- Light weight.
- Excellent stratification of the water in the vessel.
- High resistance to chloride (up to 250 ppm).
- Including an 1 1/2" connection suitable for connecting an additional electric heating element.
- Including an inspection flange DN 110 at the side.
- Maximum working pressure: 10 bar (potable water vessel) / 40 bar (heating coil).
- Maximum working temperature: 95 °C (potable water vessel) / 130 °C (heating coil).
- Stainless steel type: 1.4521.

Insulation:

- Standard colour: silver.
- Including graphite polystyrene (GPS) insulation with a polypropylene outer shell (fire category B1).



Type	Capacity [l]	Dimensions *			Insulation colour	Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting height [mm]				
Duo HLS-E 750	748	990	1859	2098	silver	98	1	19411
Duo HLS-E 1000	950	990	2284	2481	silver	114	1	19912

* Dimensions including insulation.



Duo HLS-E 750 - 1000 - Connection diagram

Type	Distance from floor to connection centres							
	A/C [mm]	M [mm]	D [mm]	E [mm]	F/N [mm]	G [mm]	I [mm]	J [mm]
Duo HLS-E 750	50	838	936	1293	1518	568	1753	413
Duo HLS-E 1000	50	838	936	1718	1943	568	2188	413

Duo HLS-E - Performance

Technical specifications	Duo HLS-E							
	120	150	200	300	400	500	750	1000
Heating surface area of the coil [m ²]	0.57	0.66	0.91	1.32	1.59	1.59	2.25	2.25
Continuous power output (DIN 4708) [kW]	29	33	42	65	85	85	130	130
Service water flow (10 - 45 °C) [l/h]	712	810	1031	1596	2088	2088	3193	3193
Total heat loss (EN 12897) [W]	33	38	47	54	60	69	100	118
Insulation thickness [mm]	70	70	70	85	95	95	100	100
Energy label	A	A	B	B	B	B	C	C
Heating water throughput [m ³ /h]	2.5	2.5	2.5	3	4	4	5	5
Pressure loss [mbar]	75	90	125	260	190	190	380	380
Performance index (60 °C) [NL]	1.5	2.5	6	16	22	27	47	54
Peak flow (T = 40 °C) [l/10 min.]*	211	261	365	552	685	772	1211	1428
Peak flow (T = 60 °C) [l/10 min.]*	157	194	268	403	513	600	890	1107
Peak flow (T = 40 °C) [l/h]*	746	911	1320	2007	2370	2457	4001	4218
Peak flow (T = 60 °C) [l/h]*	422	512	738	1113	1338	1425	2075	2292
Permanent flow (T = 40 °C) [l/h]**	642	780	1146	1746	2022	2022	3348	3348
Permanent flow (10 -> 40 °C, with water of 90 °C) [l/h]	714	864	1272	1938	2250	2250	3240	3240
Heat up time (10 -> 40 °C, with water of 90 °C) [min.]	10	10	9	9	10	12	13	17
Power output (at ΔT = 35 °C) [kW]	21.4	26	38.2	58.3	67.3	67.3	97.2	97.2
Heat up time (at ΔT = 35 °C) [min.]	13	13	12	12	13	17	18	23
Rated power output 85/65 °C coil [kW]	16.9	20.5	30.1	45.7	52.9	52.9	76.1	76.1
Continuous flow 85/65 °C [l/h]	266	322	474	720	834	834	1200	1200
First hour continuous flow 85/65 °C [l]	370	453	648	981	1182	1269	1853	2070
Pressure drop coil 85/65 °C [kPa]	1.1	1.9	5.2	15.9	8.3	8.3	22.9	22.9
Rated power output 90/70 °C coil [kW]	21.2	25.7	37.3	56.3	65.4	65.4	93.9	93.9
Continuous flow 90/70 °C [l/h]	335	406	587	888	1031	1031	1479	1479
First hour continuous flow 90/70 °C [l]	439	537	761	1149	1379	1466	2132	2349
Pressure drop coil 90/70 °C [kPa]	1.7	2.8	7.6	23	12	12	34.1	34.1

* Hot leg temperature: 85 °C. Heating water throughput as per rated output 85/65 °C. Cold water temperature: 10 °C.

SUPASTOR INDIRECT WATER HEATERS

Supastor Indirect 125 - 1000

Indirect unvented cylinders for potable water installations.

Economical, high performance, stainless steel vessels for hot and cold water storage which can be combined with all modern central heating systems. Tanks for use in all closed circuit water supply systems, demand satisfied by storage volume.

Supastor indirect unvented cylinders have been designed around UK specifications being compact, easy to install with 'in-line' connections and are supplied with all necessary controls.

Technical specification:

- Maximum working pressure: 6.0 bar.
- Maximum working temperature: 90 °C.
- T&P pressure setting: 7.0 bar.
- T&P temperature setting: 90 °C.
- Expansion relief valve setting: 6.0 bar.
- Electrical Heaters: 3 kW 230V/50Hz Immersion Heater (Factory standard, but other Immersion heaters can be used (See table for compatibility)).


Materials:

- Tank: Stainless steel DUPLEX LDX 2101 (EN1.4162).
- Coils and Connections: Stainless steel AISI 316L.

Insulation & Casing:

- 125 - 500 l.: 50 mm CFC-free and HCFC-free polyurethane thermal insulation with Painted Galvanized carbon steel DX51D.
- 800 - 1000 l.: 100 mm HITEC thermal insulation with ABS Silver Grey Casing.

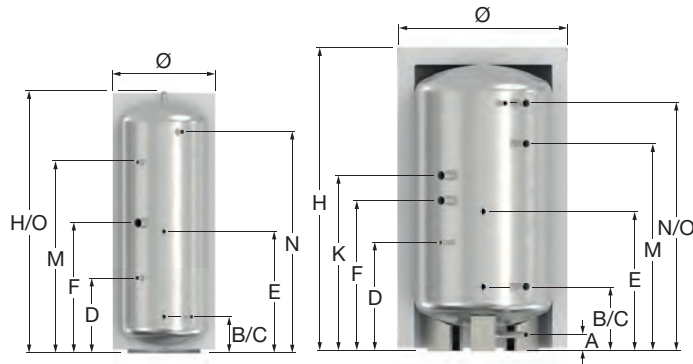


Type	Capacity [l]	Heating surface area [m²]	Heating capacity [kW]	Water capacity [l/h]	Dimensions		Insulation colour	Weight [kg]		Order Code
					Ø [mm]	H [mm]				
Supastor Indirect 125 + Kit	125	0.46	21.7	415	550	1020	white	36	1	45209
Supastor Indirect 150 + Kit	150	0.56	23.0	440	550	1180	white	42	1	45210
Supastor Indirect 170 + Kit	170	0.56	22.5	430	550	1260	white	48	1	45211
Supastor Indirect 200 + Kit	200	0.86	31.7	605	550	1440	white	50	1	45212
Supastor Indirect 250 + Kit	250	0.93	33.2	635	550	1760	white	59	1	45213
Supastor Indirect 300 + Kit	300	1.31	42.6	815	620	1590	white	65	1	45214
Supastor Indirect 500 + Kit	500	1.60	50.2	960	710	1900	white	100	1	45215
Supastor Indirect 800 + Kit	800	2.21	82.2	1570	820 *	1850	white	165	1	45216
Supastor Indirect 1000 + Kit	1000	2.21	80.1	1530	820 *	2300	white	197	1	45217

* Dimensions excluding insulation.

kiwa 

Connection diagram Supastor Indirect 125 - 1000



Type	Distance from floor to connection centres								
	A [mm]	B/C [mm]	D [mm]	E [mm]	F [mm]	K [mm]	M [mm]	N [mm]	O [mm]
Supastor Indirect 125	-	196	299	421	471	-	651	751	1020
Supastor Indirect 150	-	196	341	486	536	-	786	911	1180
Supastor Indirect 170	-	196	341	486	536	-	881	1031	1260
Supastor Indirect 200	-	196	376	646	696	-	981	1211	1440
Supastor Indirect 250	-	196	396	676	726	-	1271	1531	1760
Supastor Indirect 300	-	218	448	733	783	-	1153	1333	1590
Supastor Indirect 500	-	225	500	835	885	-	1440	1640	1640
Supastor Indirect 800	?	380	650	900	960	1160	1240	1490	1490
Supastor Indirect 1000	?	380	650	900	960	1160	1575	1920	1920

Connections Supastor Indirect 125 - 1000

Type	Connections								
	Drain (A)	Boiler return (B)	Cold water inlet (C)	Aquastat pocket * (D)	Boiler Flow (E)	Immersion Heater (F & K)	Secondary Return (M)	T&P Relief Valve (N)	Hot Water Draw Off (O)
Supastor Indirect 125	-	22 mm	22 mm	?	22 mm	1 3/4" F	1/2" F (Blank)	3/4" F	22 mm
Supastor Indirect 150	-	22 mm	22 mm	?	22 mm	1 3/4" F	1/2" F (Blank)	3/4" F	22 mm
Supastor Indirect 170	-	22 mm	22 mm	?	22 mm	1 3/4" F	1/2" F (Blank)	3/4" F	22 mm
Supastor Indirect 200	-	22 mm	22 mm	?	22 mm	1 3/4" F	1/2" F (Blank)	3/4" F	22 mm
Supastor Indirect 250	-	22 mm	22 mm	?	22 mm	1 3/4" F	1/2" F (Blank)	3/4" F	22 mm
Supastor Indirect 300	-	22 mm	22 mm	?	22 mm	1 3/4" F	1/2" F (Blank)	3/4" F	22 mm
Supastor Indirect 500	-	28 mm	28 mm	?	28 mm	1 3/4" F	1/2" F (Blank)	3/4" F	28 mm
Supastor Indirect 800	1" F	1" F	1 1/2" F	?	1" F	1 3/4" F	1 1/2" F	3/4" F	1 1/2" F
Supastor Indirect 1000	1" F	1" F	1 1/2" F	?	1" F	1 3/4" F	1 1/2" F	3/4" F	1 1/2" F

* 800 - 1000 Litres: Sensor

Supastor Indirect - Performance

Technical specifications	Supastor Indirect								
	125	150	170	200	250	300	500	800	1000
Energy Efficiency (EN 12897) [W]	37	37	37	36	37	37	36	n/a	n/a
Energy label	B	B	C	C	C	C	C	n/a	n/a
Total heat loss [W]	48	52	62	77	83	94	133	133	231
Standing heat loss [kWh/24hr]	1.15	1.25	1.49	1.85	1.99	2.26	3.19	3.19	5.54
Heating surface area [m ²]	0.46	0.56	0.56	0.86	0.93	1.31	1.60	2.21	2.21
Coil pressure drop [mbar]	40	42	42	77	80	92	96	96	123
Rated power output 82/71 °C [kW]	21.7	23.0	22.5	31.7	33.2	42.6	50.2	82.2	80.1
Water capacity [l/h]	415	440	430	605	635	815	960	1570	1530
Primary flow rate required for primary heating power [l/min.]	25	34	34	42	42	59	60	92	92
Heat up time [mins] *	21	23	25	30	34	39	48	50	57
Re-heat-up time 70% draw off [mins] *	14	15	17	20	22	24	31	33	37
Hot water storage tank volume [l]	126	151	169	200	250	294	498	770	1000
Expansion vessel (Airfix P, 10 bar) [l]	12	12	12	12	12	12	24	35	35
Weight empty [kg]	36	42	48	50	59	65	100	165	197
Weight full [kg]	159	190	216	250	305	354	495	916	1193

* Heat up time and re-heat time are based on a primary flow temperature of 60 °C and a temperature rise from 15 °C to 60 °C.
n/a = not applicable.

Supastor Indirect - Selection Guide

In known hard water areas additional protection must be used to prevent the build up of limescale deposits. Failure to do so may limit the cathodic protection and affect the warranty period as this will not constitute a manufacturing defect.

Property Type	Size [l]
1/2 beds with 1 bath / shower	125
3 beds with 1 bath / shower	150 or 170
4 beds with 1 bath / shower	170 or 200
2/3 beds with 2 baths / showers	200
4/5 beds with 2 baths / showers	200 or 250
Sports club, restaurant etc.	300 or 500
Hotels, schools etc.	800 or 1000

Immersion Size Compatibility Chart

Immersion sizes	Supastor Indirect								
	125	150	170	200	250	300	500		
3 kW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6 kW	✓	✓	✓	✓	✓	✓	✓	✓	✓
9 kW	n/a	n/a	n/a	n/a	n/a	n/a	✓	✓	✓
12 kW	n/a	n/a	n/a	n/a	n/a	n/a	✓	✓	✓
18 kW	n/a	n/a	n/a	n/a	n/a	n/a	n/a	✓	✓

n/a = not applicable.

DUO HLS HIGH-YIELD WATER HEATERS

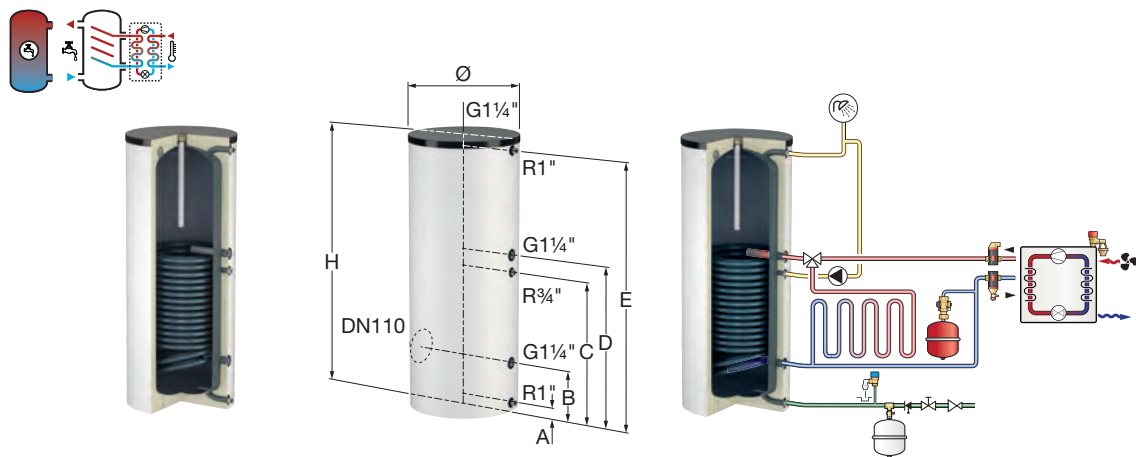
Duo HLS 300 - 500

An indirectly heated and high yield water heater that is specially developed for combination with heat pumps. Including a permanently welded-in, extra large and double heat exchanger.

- High-quality glass lining according to DIN 4753/part 3 for potable hot water production and optimum corrosion protection by means of a standard Mg-anode.
- Equipped with a built-in thermometer and immersion pipe.
- Equipped with a DN 110 inspection flange at the side, suitable for connecting additional heating elements; Ex Works - closed with a removeable blind flange.
- The heating coil is designed to ensure full depth heating to prevent the accretion of Legionella bacteria.
- A set of adjustable feet is optionally available (Art.No. 18989).
- Circulation connection R ¾".
- Maximum working pressure: 10 bar (potable water vessel) / 16 bar (heating coil).
- Maximum working temperature: 95 °C (potable water vessel) / 110 °C (heating coil).

Insulation:

- Standard colours: white (RAL 9010).
- Including hard foam insulation (direct foam injection) with a polystyrene outer shell.



Type	Capacity [l]	Dimensions *			Heating surface area [m²]	Heating capacity [kW] **	Water capacity [l/h] **	Insulation colour	Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting height [mm]							
Duo HLS 300	300	660	1710	1750	3.2	64.3	1117	white	160	1	18171
Duo HLS 400	400	750	1630	1715	4.1	80.6	1401	white	198	1	18176
Duo HLS 500	500	750	1830	1895	4.8	95.7	1663	white	222	1	18181

* Dimensions including insulation.

** At 80 °C supply temperature and 60 °C potable water temperature.



Duo HLS 300 - 500 - Connection diagram

Type	Distance from floor to connection centres				
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]
Duo HLS 300	65	305	845	945	1560
Duo HLS 400	70	330	870	970	1470
Duo HLS 500	70	330	990	1090	1670

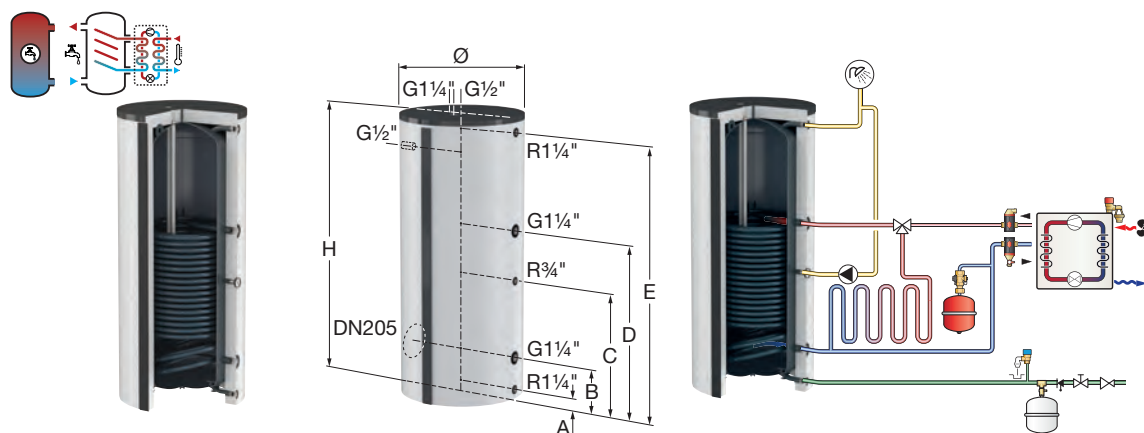
Duo HLS 750 - 1000

An indirectly heated and high yield water heater that is specially developed for combination with heat pumps. Including a permanently welded-in, extra large and double heat exchanger.

- High-quality glass lining according to DIN 4753/part 3 for potable hot water production and optimum corrosion protection by means of a standard Mg-anode.
- Equipped with a built-in thermometer.
- Equipped with a DN 205 inspection flange at the side, suitable for connecting additional heating elements; Ex Works - closed with a removeable blind flange.
- Feet adjustable in height for accurate levelling.
- Including a clamping strip with which a temperature sensor can be affixed at any chosen height to enable optimum heat efficiency of the water heater.
- The heating coil is designed to ensure full depth heating to prevent the accretion of Legionella bacteria.
- Circulation connection R ¾".
- Maximum working pressure: 10 bar (potable water vessel) / 16 bar (heating coil).
- Maximum working temperature: 95 °C (potable water vessel) / 110 °C (heating coil).

Insulation:

- Standard colour: white (RAL 9010).
- Including EPS insulating mantle (fire category B1) with a polypropylene outer shell (fire category B2).



Type	Capacity [l]	Dimensions *			Heating surface area [m²]	Heating capacity [kW] **	Water capacity [l/h] **	Insulation colour	Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting height [mm]							
Duo HLS 750	750	750	1880	2070	6.2	123.6	2146	white	300	1	18184
Duo HLS 1000	1000	800	2250	2320	7.6	150.5	2614	white	360	1	18187

* Dimensions excluding insulation.

** At 80 °C supply temperature and 60 °C potable water temperature.



Duo HLS 750 - 1000 - Connection diagram

Type	Distance from floor to connection centres				
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]
Duo HLS 750	60	320	890	1240	1880
Duo HLS 1000	70	330	900	1360	2140

Duo HLS - Performance

Technical specifications	Duo HLS				
	300	400	500	750	1000
Total heat loss (EN 12897) [W]	91	95	101	115	143
Energy label	C	C	C	C	C
Performance index (T => 60 °C) [NL] *	12.0	18.0	23.0	37.0	51.0
Continuous power (T => 45 °C) [kW] **	93.4	116.9	138.7	179.6	218.6
Continuous power (T => 60 °C) [kW] *	64.3	80.6	95.7	123.6	150.5
Continuous power (T => 70 °C) [kW] **	75.2	94.1	111.7	144.5	175.9
Peak flow (T => 40 °C) [l/10 min.] *	323	421	518	705	810
Peak flow (T => 60 °C) [l/10 min.] *	266	350	433	614	754
Continuous output (T => 40 °C) [l/h] *	2255	2824	3353	4330	5272
Continuous output (T => 40 °C) [l/h] **	2786	3487	4138	5356	6519
Continuous output (T => 45 °C) [l/h] **	2309	2891	3430	4440	5404
Continuous output (T => 60 °C) [l/h] *	1117	1401	1663	2146	2614
Continuous output (T => 70 °C) [l/h] **	1088	1362	1617	2091	2546
First hour output (T => 40 °C) [l/h] *	2202	2775	3312	4314	5203
First hour output (T => 60 °C) [l/h] *	1197	1518	1819	2403	2933
First hour output (T => 70 °C) [l/h] **	1171	1483	1778	2355	2875
Heat up time (T => 40 °C) [min.] **	6	7	7	8	9
Heat up time (T => 45 °C) [min.] **	8	8	9	10	11
Heating surface of the coil [m²]	3.10	4.10	4.80	6.20	7.60
Pressure drop coil 80/60 °C [kPa]	11.6	18.4	26.8	17.7	27.1
Set drain rate [l/min.]	30	40	50	70	80
Heated potable water flow (T => 60 °C) [l/h] *	3000	3500	4000	6000	7000

* Hot leg temperature: 80 °C, cold water temperature: 10 °C.

** Hot leg temperature: 90 °C, cold water temperature: 10 °C.

WPS-E STAINLESS STEEL HEAT PUMP WATER HEATERS

WPS-E

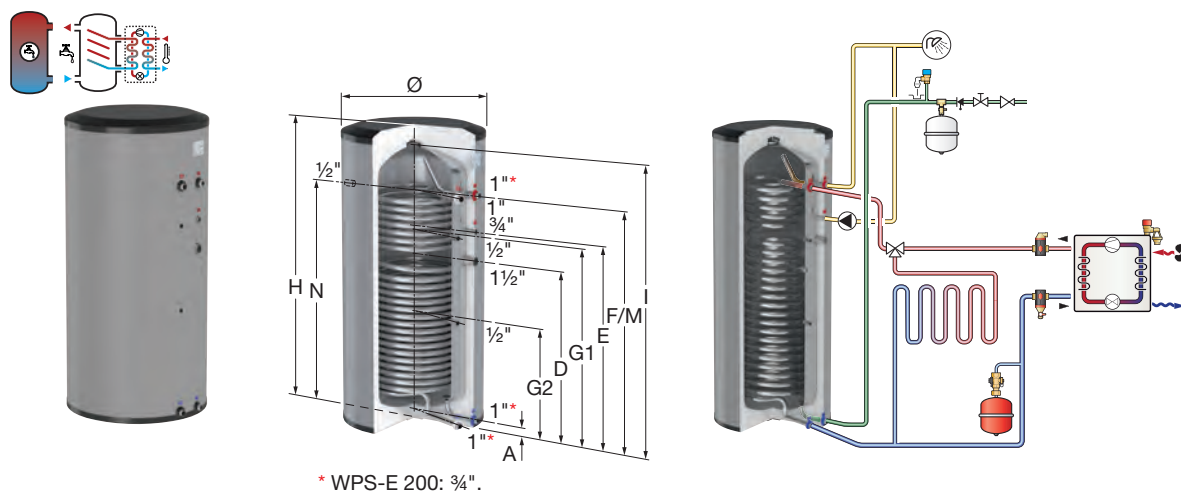
An indirectly heated water heater that can be used in combination with heat pumps.

A water heater specially developed for combination with heat pumps. The large surface area of the heating coils and their innovative Diabolo shape guarantee very efficient potable hot water production. This results in a short heat up time and guaranteed hot water performance.

- Efficient: Minimum heat loss and very fast heating up.
- Requires little maintenance and no anode.
- Light weight.
- Excellent stratification of the water in the vessel.
- High resistance to chloride (up to 250 ppm).
- Including an 1 ½" connection suitable for connecting an additional electric heating element.
- Maximum working pressure: 10 bar (potable water vessel) / 40 bar (heating coil).
- Maximum working temperature: 95 °C (potable water vessel) / 110 °C (heating coil).
- Stainless steel type: 1.4521.

Insulation:

- Standard colour: silver.
- Including graphite polystyrene (GPS) insulation (direct foam injection) with a polypropylene outer shell (fire category B2).



Type	Capacity [l]	Dimensions *			Insulation colour	Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting height [mm]				
WPS-E 200	181	595	1487	1558	silver	41	1	19930
WPS-E 300	283	675	1804	1884	silver	61	1	19931

* Dimensions including insulation.



WPS-E - Connection diagram

Type	Distance from floor to connection centres							
	A [mm]	D [mm]	E [mm]	F/M [mm]	G1 [mm]	G2 [mm]	N [mm]	I [mm]
WPS-E 200	50	900	1010	1240	953	553	1240	1425
WPS-E 300	53	1158	1293	1543	1258	728	1543	1728

WPS-E - Performance

Technical specifications	WPS-E	
	200	300
Heating surface area of the coil [m ²]	2.5	2.9
Continuous power output (DIN 4708) [kW]	41 / 47	45 / 52
Service water flow (10 - 45 °C) [l/h]	1008 / 1163	1104 / 1284
Total heat loss (EN 12897) [W]	48	55
Insulation thickness [mm]	70	85
Energy label	B	B
Heating water throughput [m ³ /h]	2 / 3	2 / 3
Pressure loss [mbar]	117 / 243	132 / 276
Performance index (60 °C) [NL]	6	9
Peak flow (T = 40 °C) [l/10 min.]*	707	868
Peak flow (T = 60 °C) [l/10 min.]*	424	543
Peak flow (T = 40 °C) [l/h]*	3472	4053
Peak flow (T = 60 °C) [l/h]*	1774	2103
Permanent flow (T = 40 °C) [l/h]*	3318	3822
Permanent flow (10 -> 40 °C, with water of 90 °C) [l/h]	3672	4260
Heat up time (10 -> 40 °C, with water of 90 °C) [min.]	3	3
Power output (at ΔT = 35 °C) [kW]	115.3	127.1
Heat up time (at ΔT = 35 °C) [min.]	4	5
Rated power output 85/65 °C coil [kW]	86.5	99.7
Continuous flow 85/65 °C [l/h]	474	1572
First hour continuous flow 85/65 °C [l]	648	1803
Pressure drop coil 85/65 °C [kPa]	35.3	51.5
Rated power output 90/70 °C coil [kW]	107.1	123.7
Continuous flow 90/70 °C [l/h]	293	1950
First hour continuous flow 90/70 °C [l]	467	2181
Pressure drop coil 90/70 °C [kPa]	51.8	75.9

* Hot leg temperature: 85 °C. Heating water throughput as per rated output 85/65 °C. Cold water temperature: 10 °C.

UHP LOW HEIGHT WATER HEATERS

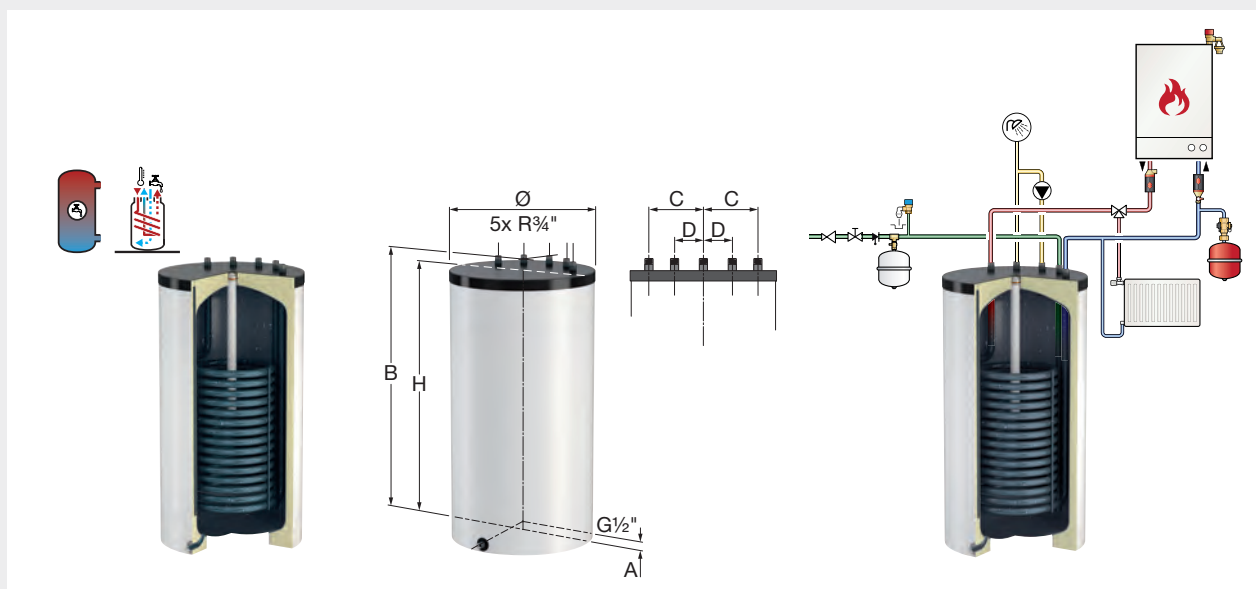
UHP

An indirectly heated water heater with all connections on top including a permanently welded-in heating coil.

- High-quality glass lining according to DIN 4753/part 3.
- High exchange performance by a very large heating surface area.
- Equipped with an immersion pipe for temperature sensor; drain connection at the side.
- All system connections are located at the top.
- Including a standard Mg-anode.
- Special version including a thermometer and cleaning & inspection flange available upon request.
- Maximum working pressure: 10 bar (potable water vessel) / 16 bar (heating coil).
- Maximum working temperature: 95 °C (potable water vessel) / 130 °C (heating coil).

Insulation:

- Standard colour: white (RAL 9010).
- Including hard foam insulation (direct foam injection) with a polystyrene outer shell.



Type	Capacity [l]	Dimensions *		Heating surface area [m²]	Heating capacity [kW] **	Water capacity [l/h] **	Insulation colour	Weight [kg]		Order Code
		Ø [mm]	H [mm]							
UHP 110	110	550	805	1.1	24.7	428	white	69	1	19069
UHP 160	160	550	1055	1.3	29.9	519	white	88	1	19075

* Dimensions including insulation.

** At 80 °C supply temperature and 60 °C potable water temperature.



UHP - Connection diagram

Type	Dimensions			
	A [mm]	B [mm]	C [mm]	D [mm]
UHP 110	35	805	165	95
UHP 160	35	1055	165	95

UHP - Performance

Technical specifications	UHP	
	110	160
Total heat loss (EN 12897) [W]	65	79
Energy label	C	C
Performance index (T => 60 °C) [NL] *	1.7	2.9
Continuous power (T => 45 °C) [kW] **	35.5	43.2
Continuous power (T => 60 °C) [kW] *	24.7	29.9
Continuous power (PW=> 70 °C) [kW] **	28.5	34.6
Peak flow (T => 40 °C) [l/10 min.] *	110	156
Peak flow (T => 60 °C) [l/10 min.] *	93	134
Continuous output (PW=> 40 °C) [l/h] *	866	1049
Continuous output (PW=> 40 °C) [l/h] **	1059	1286
Continuous output (T => 45 °C) [l/h] **	877	1068
Continuous output (T => 60 °C) [l/h] *	428	519
Continuous output (T => 70 °C) [l/h] **	413	501
First hour output (T => 40 °C) [l/h] *	832	1030
First hour output (T => 60 °C) [l/h] *	450	566
First hour output (T => 70 °C) [l/h] **	437	551
Heat up time (T => 40 °C) [min.] **	6	7
Heat up time (T => 45 °C) [min.] **	8	9
Heating surface of the coil [m²]	1.10	1.30
Pressure drop coil 80/60 °C [kPa]	3.1	5.6
Heated potable water flow (T => 60 °C) [l/h] *	1000	1300
Set drain rate [l/min]	10	15

* Hot leg temperature: 80 °C, cold water temperature: 10 °C.

** Hot leg temperature: 90 °C, cold water temperature: 10 °C.

DUO SOLAR UPRIGHT WATER HEATERS

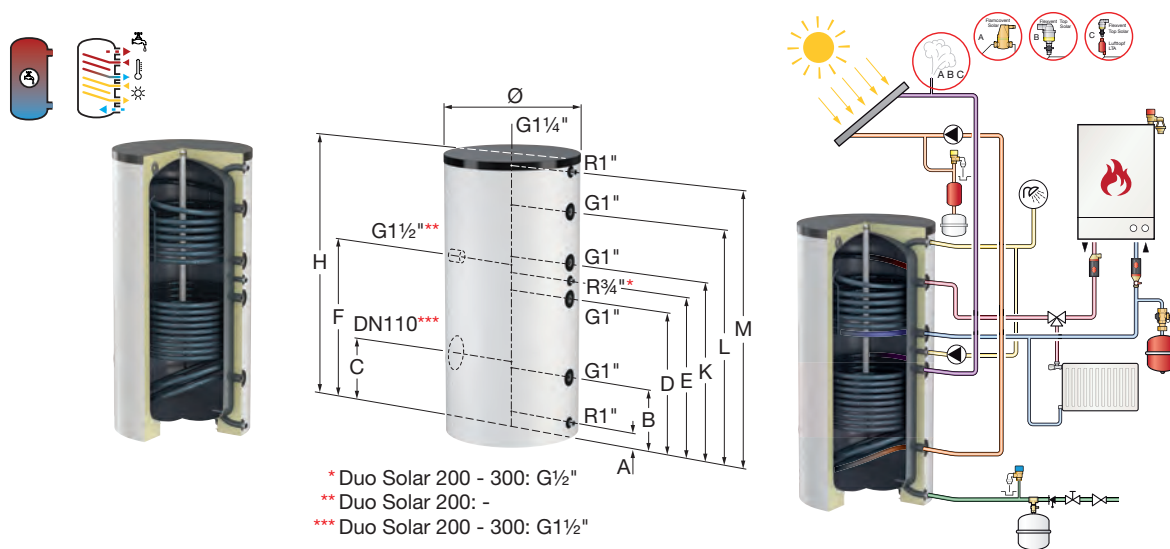
Duo Solar 200 - 500

An indirectly heated and upright water heater including two permanently welded-in heating coils, suitable for all modern heating systems. Special construction for combinations with solar systems.

- High-quality glass lining according to DIN 4753/part 3 for potable hot water production and optimum corrosion protection by means of a standard Mg-anode.
- Equipped with a built-in thermometer and immersion pipe.
- A set of adjustable feet is optionally available (Art.No. 18989).
- From 400 litres, equipped with a DN 110 inspection flange at the side, suitable for connecting additional heating elements; Ex Works - closed with removeable blind flange.
- The heating coil is designed to ensure full depth heating to prevent the accretion of Legionella bacteria.
- Maximum working pressure: 10 bar (potable water vessel) / 16 bar (heating coil).
- Maximum working temperature: 95 °C (potable water vessel) / 130 °C (heating coil).

Insulation:

- Standard colours: white (RAL 9010) and white aluminium (RAL 9006).
- Including hard foam insulation (direct foam injection) with a polystyrene outer shell.



Type	Capacity [l]	Dimensions *			Heating surface area [m²] **	Heating capacity [kW] ***	Water capacity [l/h] ***	Insulation colour	Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting height [mm]							
Duo Solar 200	200	560	1350	1500	0.5 / 0.9	12.0 / 18.6	208 / 323	white	96	1	18508
Duo Solar 200	200	560	1350	1500	0.5 / 0.9	12.0 / 18.6	208 / 323	white alu.	96	1	18509
Duo Solar 300	300	660	1620	1750	1.0 / 1.3	21.7 / 29.7	376 / 513	white	125	1	18431
Duo Solar 300	300	660	1620	1750	1.0 / 1.3	21.7 / 29.7	376 / 513	white alu.	125	1	18448
Duo Solar 400	400	750	1530	1715	1.0 / 1.6	23.6 / 35.4	410 / 615	white	176	1	18233
Duo Solar 400	400	750	1530	1715	1.0 / 1.6	23.6 / 35.4	410 / 615	white alu.	176	1	18367
Duo Solar 500	500	750	1730	1895	1.0 / 2.0	23.6 / 45.2	410 / 785	white	199	1	18239
Duo Solar 500	500	750	1730	1895	1.0 / 2.0	23.6 / 45.2	410 / 785	white alu.	199	1	18372

* Dimensions including insulation.

** Upper/lower heating surface area.

*** At 80 °C supply temperature and 60 °C potable water temperature.



Duo Solar 200 - 500 - Connection diagram

Type	Distance from floor to connection centres [mm]									
	A	B	C	D	E	F	K	L	M	
Duo Solar 200	65	245	-	710	545	-	885	1085	1285	
Duo Solar 300 Ø660	65	310	-	750	850	845	950	1270	1560	
Duo Solar 400	70	330	345	770	860	870	970	1250	1470	
Duo Solar 500	70	330	345	890	980	990	1090	1370	1670	

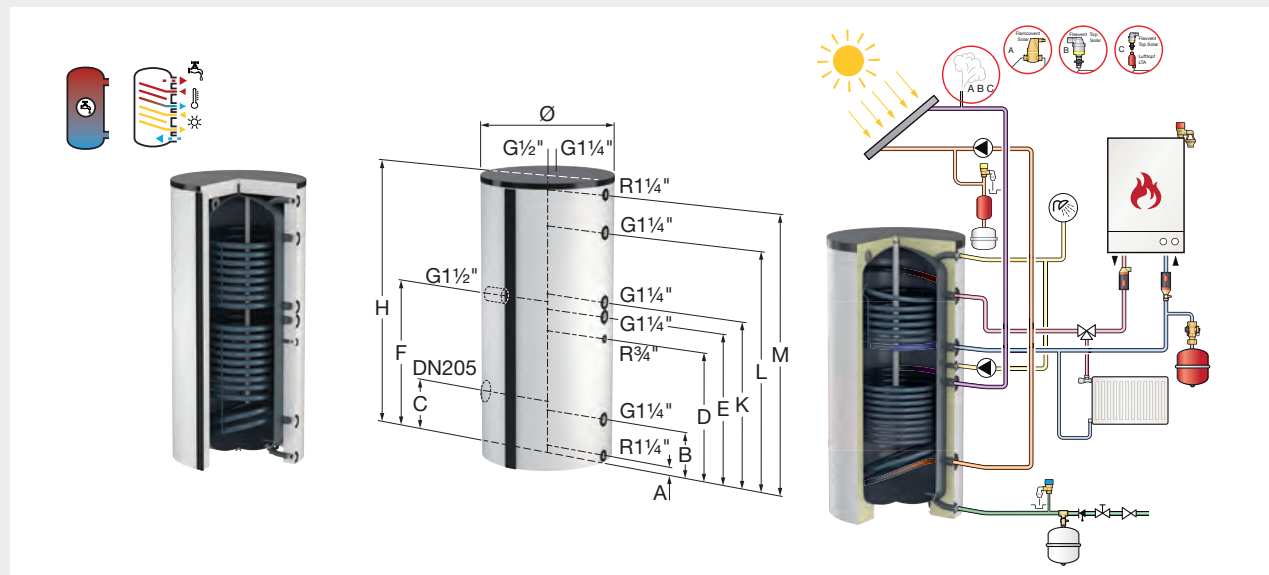
Duo Solar 750 - 1000

An indirectly heated and upright water heater including two permanently welded-in heating coils, suitable for all modern heating systems. Special construction for combinations with solar systems.

- High-quality glass lining according to DIN 4753/part 3 for potable hot water production and optimum corrosion protection by means of a standard Mg-anode.
- Feet adjustable in height for accurate levelling.
- Equipped with a built-in thermometer.
- Including a clamping strip with which a temperature sensor can be affixed at any chosen height to enable optimum heat efficiency of the water heater.
- Inspection flange at the side: DN 205, suitable for connecting additional heating elements; Ex Works - closed with a removeable blind flange.
- The heating coil is designed to ensure full depth heating to prevent the accretion of Legionella bacteria.
- Maximum working pressure: 10 bar (potable water vessel) / 16 bar (heating coil).
- Maximum working temperature: 95 °C (potable water vessel) / 110 °C (heating coil).

Insulation:

- Standard colours: white (RAL 9010) and white aluminium (RAL 9006).
- Including EPS insulating mantle (fire category B1) with a polypropylene outer shell (fire category B2).



Type	Capacity [l]	Dimensions *			Heating surface area [m ²] **	Heating capacity [kW] ***	Water capacity [l/h] ***	Insulation colour	Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting height [mm]							
Duo Solar 750	750	750	1970	2070	2.0 / 2.7	40.3 / 67.1	700 / 1166	white	320	1	19320
Duo Solar 750	750	750	1970	2070	2.0 / 2.7	40.3 / 67.1	700 / 1166	white alu.	320	1	19321
Duo Solar 1000	1000	800	2230	2320	2.1 / 3.2	46.0 / 73.9	798 / 1283	white	420	1	19325
Duo Solar 1000	1000	800	2230	2320	2.1 / 3.2	46.0 / 73.9	798 / 1283	white alu.	420	1	19326

* Dimensions excluding insulation.

** Upper/lower heating surface area.

*** At 80 °C supply temperature and 60 °C potable water temperature.



Duo Solar 750 - 1000 - Connection diagram

Type	Distance from floor to connection centres									
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]	L [mm]	M [mm]	
Duo Solar 750	60	320	405	890	1040	1200	1140	1620	1880	
Duo Solar 1000	70	330	415	960	1260	1210	1260	1740	2140	

Duo Solar - Performance

Technical specifications	Duo Solar					
	200	300	400	500	750	1000
Total heat loss (EN 12897) [W]	83	89	95	109	116	144
Energy label	C	C	C	C	C	C
Heating of vessel content by upper coil (non-solar) [l]	61	129	148	174	282	394
Performance index (T => 60 °C) [NL] *	0.9 / 4.0	2.9 / 8.6	3.4 / 14.0	4.3 / 20.0	11.0 / 29.0	17.0 / 42.0
Continuous power (T => 45 °C) [kW] **	17.4 / 26.8	31.5 / 42.8	34.4 / 51.3	34.4 / 65.4	58.5 / 97.7	66.3 / 107.5
Continuous power (T => 60 °C) [kW] *	12.0 / 18.6	21.7 / 29.5	23.6 / 35.4	23.6 / 45.2	40.3 / 67.1	46.0 / 73.9
Continuous power (T => 70 °C) [kW] **	13.9 / 21.5	25.2 / 34.3	27.5 / 41.1	27.5 / 52.4	46.9 / 78.2	53.5 / 86.1
Peak flow (T => 40 °C) [l/10 min.] *	96 / 147	165 / 200	202 / 294	214 / 300	373 / 574	443 / 600
Peak flow (T => 60 °C) [l/10 min.] *	72 / 144	133 / 200	160 / 287	176 / 300	298 / 549	378 / 600
Continuous output (T => 40 °C) [l/h] *	421 / 653	762 / 1038	831 / 1245	831 / 1588	1417 / 2362	1616 / 2599
Continuous output (T => 40 °C) [l/h] **	521 / 799	939 / 1279	1026 / 1532	1026 / 1953	1746 / 2917	1994 / 3211
Continuous output (T => 45 °C) [l/h] **	431 / 662	778 / 1059	850 / 1269	850 / 1617	1446 / 2415	1651 / 2659
Continuous output (T => 60 °C) [l/h] *	208 / 323	376 / 513	410 / 615	410 / 785	700 / 1166	798 / 1283
Continuous output (T => 70 °C) [l/h] **	202 / 312	365 / 497	398 / 595	398 / 759	678 / 1132	774 / 1246
First hour output (T => 40 °C) [l/h] *	447 / 691	800 / 1066	895 / 1331	906 / 1629	1554 / 2543	1790 / 2794
First hour output (T => 60 °C) [l/h] *	246 / 413	447 / 633	502 / 799	518 / 982	881 / 1521	1043 / 1734
First hour output (T => 70 °C) [l/h] **	240 / 403	437 / 620	490 / 782	507 / 961	861 / 1492	1021 / 1704
Heat up time (T => 40 °C) [min.] **	7 / 15	8 / 14	9 / 16	10 / 15	10 / 15	12 / 19
Heat up time (T => 45 °C) [min.] **	9 / 18	10 / 17	10 / 19	12 / 19	12 / 19	14 / 23
Heating surface of the coil [m²]	0.50 / 0.90	1.00 / 1.30	1.00 / 1.60	1.00 / 2.00	2.00 / 2.70	2.10 / 2.30
Pressure drop coil 80/60 °C [kPa]	1.0 / 1.6	3.4 / 6.8	4.7 / 10.2	4.7 / 18.7	1.1 / 5.4	1.8 / 7.3
Set drain rate [l/min.]	15 / 15	20 / 20	30 / 30	30 / 30	60 / 60	60 / 60
Heated potable water flow (T => 60 °C) [l/h] *	850 / 800	1200 / 1500	1400 / 1700	1400 / 2100	2000 / 3900	2500 / 4400

* Hot leg temperature: 80 °C, cold water temperature: 10 °C.

** Hot leg temperature: 90 °C, cold water temperature: 10 °C.

DUO HLS-E SOLAR STAINLESS STEEL WATER HEATERS

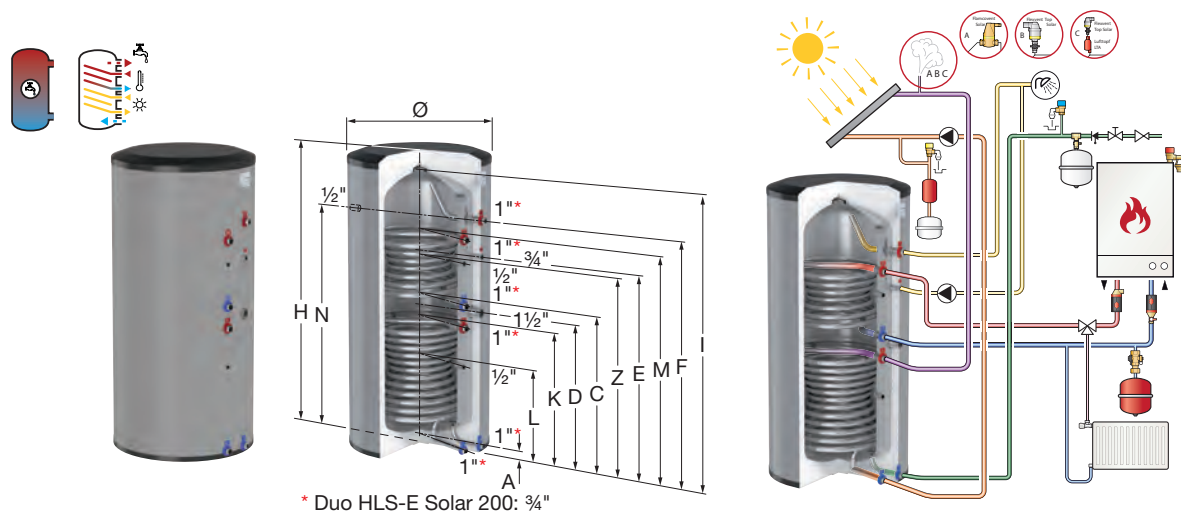
Duo HLS-E Solar 200 - 500

An indirectly heated water heater that can be combined with all heating installations. The Diabolo-shaped coil guarantees an efficient heat exchange with a short heat up time. The Duo HLS-E Solar provides optimum performance combined with a high level of energy efficiency.

- Efficient: Minimum heat loss and very fast heating up.
- Requires little maintenance and no anode.
- Light weight.
- Excellent stratification of the water in the vessel.
- High resistance to chloride (up to 250 ppm).
- From 200 litres, including an 1 1/2" connection suitable for connecting an additional electric heating element.
- Maximum working pressure: 10 bar (potable water vessel) / 40 bar (heating coil).
- Maximum working temperature: 95 °C (potable water vessel) / 130 °C (heating coil).
- Stainless steel type: 1.4521.

Insulation:

- Standard colours: white and silver.
- Including graphite polystyrene (GPS) insulation (direct foam injection) with a polypropylene outer shell (fire category B2).



Type	Capacity [l]	Ø [mm]	Dimensions *		Insulation colour	Weight [kg]		Order Code
			H [mm]	Tilting height [mm]				
Duo HLS-E Solar 200	191	595	1487	1558	white	37	1	19915
Duo HLS-E Solar 200	191	595	1487	1558	silver	37	1	19916
Duo HLS-E Solar 300	291	675	1804	1884	white	53	1	19917
Duo HLS-E Solar 300	291	675	1804	1884	silver	53	1	19918
Duo HLS-E Solar 400	386	795	1710	1844	white	76	1	19919
Duo HLS-E Solar 400	386	795	1710	1844	silver	76	1	19920
Duo HLS-E Solar 500	473	795	2020	2126	white	84	1	19921
Duo HLS-E Solar 500	473	795	2020	2126	silver	84	1	19922

* Dimensions including insulation.



Duo HLS-E Solar - Connection diagram

Type	Distance from floor to connection centres [mm]										
	A	L	K	D	C	Z	E	M	N	F	I
Duo HLS-E Solar 200	50	378	553	710	868	1010	1010	1108	1240	1240	1425
Duo HLS-E Solar 300	53	458	658	798	933	1173	1293	1293	1543	1543	1728
Duo HLS-E Solar 400	55	490	690	845	1001	1213	1228	1333	1413	1413	1613
Duo HLS-E Solar 500	55	490	690	940	1191	1403	1523	1523	1723	1723	1923

Duo HLS-E Solar 750 - 1000

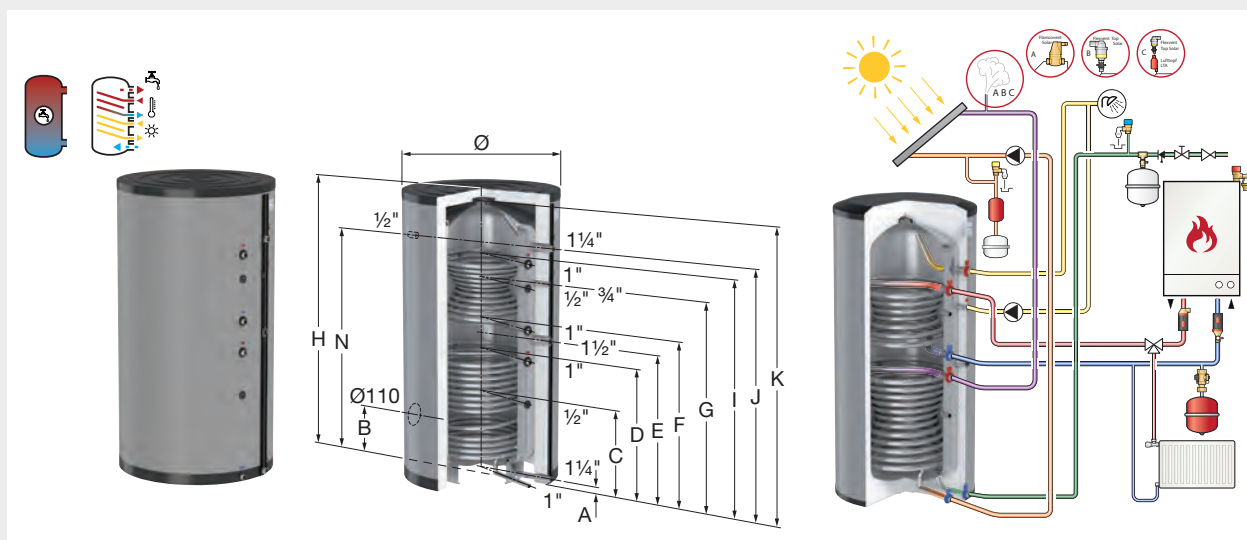
An indirectly heated water heater that can be combined with all heating installations.

The Diabolo-shaped coil guarantees an efficient heat exchange with a short heat up time. The Duo HLS-E Solar provides optimum performance combined with a high level of energy efficiency.

- Efficient: Minimum heat loss and very fast heating up.
- Requires little maintenance and no anode.
- Light weight.
- Excellent stratification of the water in the vessel.
- High resistance to chloride (up to 250 ppm).
- Including an 1 1/2" connection suitable for connecting an additional electric heating element.
- Including an inspection flange DN 110 at the side.
- Maximum working pressure: 10 bar (potable water vessel) / 40 bar (heating coil).
- Maximum working temperature: 95 °C (potable water vessel) / 130 °C (heating coil).
- Stainless steel type: 1.4521.

Insulation:

- Standard colour: silver.
- Including graphite polystyrene (GPS) insulation with a polypropylene outer shell (fire category B1).



Type	Capacity [l]	Dimensions *			Insulation colour	Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting height [mm]				
Duo HLS-E Solar 750	736	990	1860	2098	silver	108	1	19423
Duo HLS-E Solar 1000	938	990	2284	2481	silver	124	1	19924

* Dimensions including insulation.



Duo HLS-E Solar - Connection diagram

Type	Distance from floor to connection centres										
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	I [mm]	J [mm]	K [mm]	N [mm]
Duo HLS-E Solar 750	50	413	568	838	936	1033	1293	1443	1518	1753	1518
Duo HLS-E Solar 1000	50	413	568	838	1061	1458	1718	1868	1943	2188	1943

Duo HLS-E Solar - Performance

Technical specifications	Duo HLS-E Solar					
	200	300	400	500	750	1000
Heating surface area of the bottom coil [m ²]	0.91	1.32	1.59	1.59	2.25	2.25
Heating surface area of the top coil [m ²]	0.5	0.88	0.89	0.89	1.58	1.58
Power output (DIN 4708) [kW]	24 / 42	44 / 65	46 / 85	46 / 85	70 / 130	70 / 130
Service water flow (10 - 45 °C) [l/h]	590 / 1031	1031 / 1596	1130 / 2088	1130 / 2088	1720 / 3193	1720 / 3193
Total heat loss (EN 12897) [W]	49	56	62	71	104	122
Insulation thickness [mm]	70	85	95	95	100	100
Energy label	B	B	B	B	C	C
Heating water throughput [m ³ /h]	2 / 2.5	3 / 3	3.5 / 4	4 / 4	4 / 5	4 / 5
Pressure loss [mbar]	61 / 125	188 / 260	98 / 190	125 / 190	215 / 380	215 / 380
Performance index (60 °C) [NL]	1 / 6	3.5 / 16	6 / 22	6 / 27	15 / 47	24 / 54
Peak flow (T = 40 °C) [l/10 min.] *	365	552	685	772	1211	1428
Peak flow (T = 60 °C) [l/10 min.] *	268	403	513	600	890	1107
Peak flow (T = 40 °C) [l/h] *	1320	2007	2370	2457	4001	4128
Peak flow (T = 60 °C) [l/h] *	738	1113	1338	1425	2075	2292
Permanent flow (T = 40 °C) [l/h] *	1146	1746	2022	2022	3348	3348
Permanent flow (10 -> 40 °C, with water of 90 °C) [l/h]	1272	1938	2250	2250	3240	3240
Heat up time (10 -> 40 °C, with water of 90 °C) [min.]	9	9	10	12	13	17
Power output (at ΔT = 35 °C) [kW]	38.2	58.3	67.3	67.3	97.2	97.2
Heat up time (at ΔT = 35 °C) [min.]	12	12	13	17	18	23
Rated power output 85/65 °C bottom coil [kW]	30.1	45.7	52.9	52.9	76.1	76.1
Rated power output 85/65 °C top coil [kW]	14.5	28.9	25.9	25.9	52.7	52.7
Continuous flow 85/65 °C [l/h]	474	720	834	834	1200	1200
First hour continuous flow 85/65 °C [l]	648	981	1182	1269	1853	2070
Pressure loss at bottom of coil 85/65 °C [kPa]	5.2	15.9	8.3	8.3	22.9	22.9
Pressure loss at top of coil 85/65 °C [kPa]	0.8	4.6	1.3	1.3	8	8
Rated power output 90/70 °C bottom of coil [kW]	37.3	56.3	65.4	65.4	93.9	93.9
Rated power output 90/70 °C top of coil [kW]	18.6	35.8	32.5	32.5	64.9	64.9
Flow 90/70 °C [l/h]	293	564	513	513	1023	1023
First hour continuous flow 90/70 °C [l]	467	825	861	948	1676	1893
Pressure loss at bottom of coil 90/70 °C [kPa]	7.6	23	12	12	34.1	34.1
Pressure loss at top of coil 90/70 °C [kPa]	1.2	6.7	2	2	11.5	11.5

* Hot leg temperature: 85 °C. Heating water throughput as per rated output 85/65 °C. Cold water temperature: 10 °C.

HLS SOLAR HIGH-YIELD WATER HEATERS

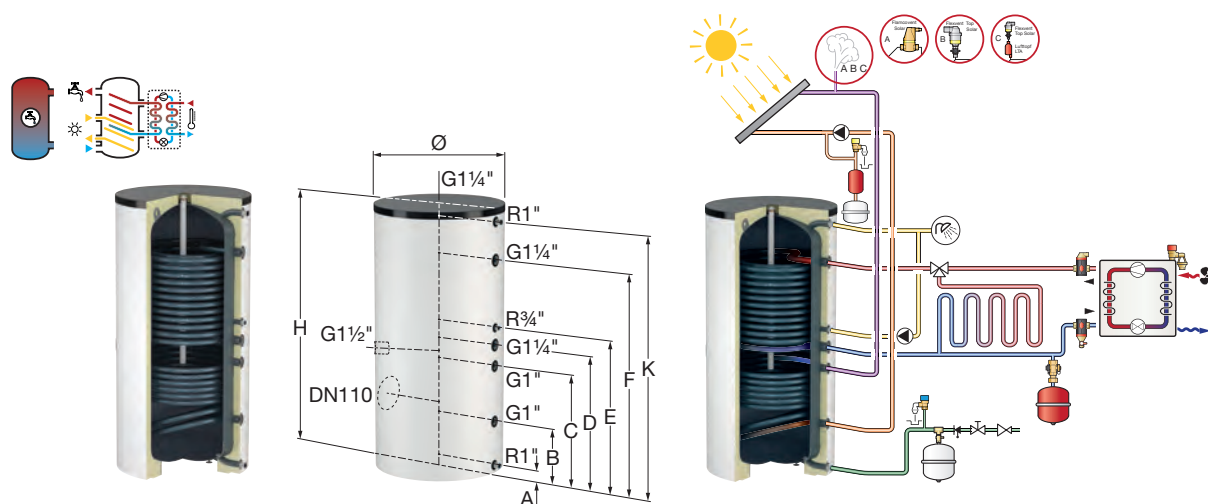
HLS Solar

An indirectly heated and high yield water heater that is specially developed for combining heat pumps with solar systems. Including a permanently welded-in, extra large and double heat exchanger for subsequent heating and additional, horizontal smooth-pipe heat exchanger for connection to the solar system.

- High-quality glass lining according to DIN 4753/part 3 for potable hot water production and optimum corrosion protection by means of a standard Mg anode.
- Equipped with a built-in thermometer and immersion pipe.
- The heating coil is designed to ensure full depth heating to prevent the accretion of Legionella bacteria.
- Including an 1 ½" sleeve for an optional connection of an EHK electric heating element.
- Inspection flange at the side: DN 110, suitable for connecting additional heating elements; Ex Works - closed with a removeable blind flange.
- A set of adjustable feet is optionally available (Art.No. 18989).
- Circulation connection R ¾".
- Maximum working pressure: 10 bar (potable water vessel) / 16 bar (heating coil).
- Maximum working temperature: 95 °C (potable water vessel) / 110 °C (heating coil).

Insulation:

- Standard colour: white (RAL 9010).
- Including hard foam insulation (direct foam injection) with a polystyrene outer shell.



Type	Capacity [l]	Dimensions *			Heating surface area [m²] **	Heating capacity [kW] ***	Water capacity [l/h] ***	Insulation colour	Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting height [mm]							
HLS Solar 400	400	750	1630	1715	3.0 / 1.2	59.1 / 25.1	1031 / 435	white	210	1	18126
HLS Solar 500	500	750	1830	1895	3.6 / 1.6	69.7 / 34.1	1211 / 592	white	240	1	18128

* Dimensions including insulation.

** Upper/lower heating surface area.

*** At 80 °C supply temperature and 60 °C potable water temperature.



HLS Solar - Connection diagram

Type	Distance from floor to connection centres						
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]
HLS Solar 400	65	320	640	760	860	1240	1455
HLS Solar 500	65	320	760	880	980	1440	1655

HLS Solar - Performance

Technical specifications	HLS Solar	
	400	500
Total heat loss (EN 12897) [W]	95	108
Energy label	C	C
Heating of vessel content by upper coil (non-solar) [l]	199	222
Performance index (T => 60 °C) [NL] *	11.0 / 12.0	15.0 / 18.0
Continuous power (T => 45 °C) [kW] **	86.1 / 36.3	101.1 / 49.3
Continuous power (T => 60 °C) [kW] *	59.4 / 25.1	69.7 / 34.1
Continuous power (T => 70 °C) [kW] **	69.3 / 29.1	81.4 / 39.5
Peak flow (T => 40 °C) [l/10 min.] *	322 / 290	344 / 300
Peak flow (T => 60 °C) [l/10 min.] *	240 / 285	260 / 300
Continuous output (T => 40 °C) [l/h] *	2079 / 884	2442 / 1197
Continuous output (T => 40 °C) [l/h] **	2567 / 1084	3015 / 1468
Continuous output (T => 45 °C) [l/h] **	2128 / 898	2499 / 1218
Continuous output (T => 60 °C) [l/h] *	1031 / 435	1211 / 592
Continuous output (T => 70 °C) [l/h] **	1003 / 421	1178 / 572
First hour output (T => 40 °C) [l/h] *	2054 / 1026	2379 / 1314
First hour output (T => 60 °C) [l/h] *	1099 / 647	1269 / 827
First hour output (T => 70 °C) [l/h] **	1073 / 636	1239 / 811
Heat up time (T => 40 °C) [min.] **	5 / 22	4 / 20
Heat up time (T => 45 °C) [min.] **	6 / 27	5 / 25
Heating surface of the coil [m ²]	3.00 / 1.20	3.60 / 1.60
Pressure drop coil 80/60 °C [kPa]	8.6 / 4.1	12.5 / 8.2
Set drain rate [l/min.]	30 / 30	30 / 30
Heated potable water flow (T => 60 °C) [l/h] *	2600 / 1200	3000 / 1500

* Hot leg temperature: 80 °C, cold water temperature: 10 °C.

** Hot leg temperature: 90 °C, cold water temperature: 10 °C.

WPS-E SOLAR STAINLESS STEEL HEAT PUMP WATER HEATERS

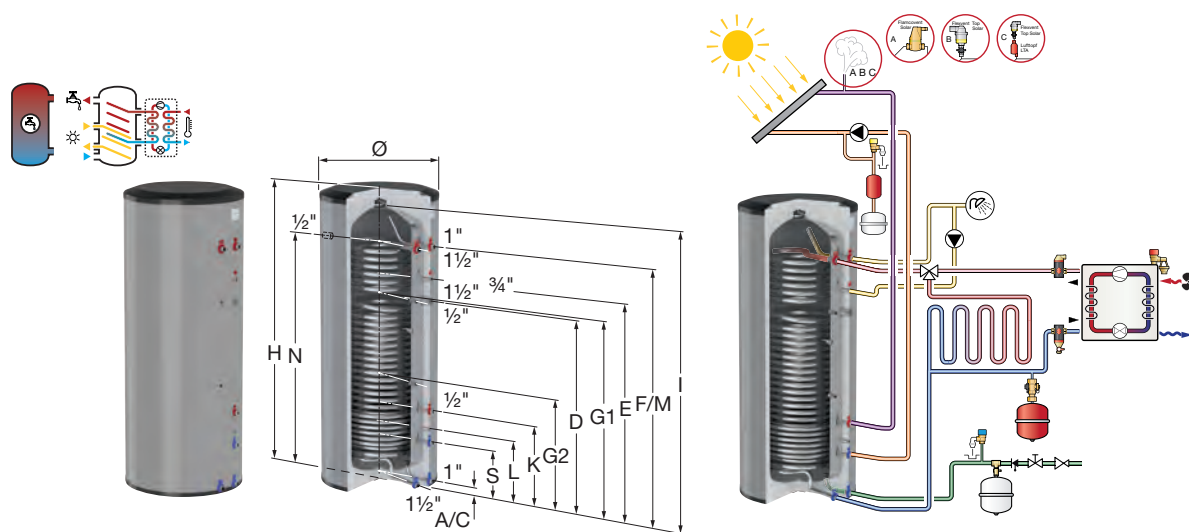
WPS-E Solar

An indirectly heated water heater that can be used for combining heat pumps and solar systems to produce potable hot water. A variant of the WPS-E, which is a combination of water heater for both heat pump systems and solar systems that is specially intended for use in renewable energy systems. The large surface of the coils guarantees a very efficient potable hot water production. This results in a short heat up time and guaranteed hot water performance.

- Efficient: Minimum heat loss and very fast heating up.
- Requires little maintenance and no anode.
- Light weight.
- Excellent stratification of the water in the vessel.
- High resistance to chloride (up to 250 ppm).
- Including an 1 ½" connection suitable for connecting an additional electric heating element.
- Maximum working pressure: 10 bar (potable water vessel) / 40 bar (heating coil).
- Maximum working temperature: 95 °C (potable water vessel) / 110 °C (heating coil).
- Stainless steel type: 1.4521.

Insulation:

- Standard colour: silver.
- Including graphite polystyrene (GPS) insulation (direct foam injection) with a polypropylene outer shell (fire category B2).



Type	Capacity [l]	Ø [mm]	Dimensions *		Insulation colour	Weight [kg]		Order Code
			H [mm]	Tilting height [mm]				
WPS-E 300 Solar	281	675	1803	1884	silver	63	1	19959
WPS-E 500 Solar	459	795	2020	2126	silver	95	1	19952

* Dimensions including insulation.



WPS-E Solar - Connection diagram

Type	Distance from floor to connection centres									
	A/C [mm]	S [mm]	L [mm]	K [mm]	G2 [mm]	D [mm]	G1 [mm]	E [mm]	F/M/N [mm]	I [mm]
WPS-E 300 Solar	53	258	333	408	728	1158	1258	1293	1543	1728
WPS-E 500 Solar	55	283	383	503	690	1286	1302	1422	1723	1923

WPS-E Solar - Performance

Technical specifications	WPS-E Solar	
	300	500
Total heat loss (EN 12897) [W]	57	73
Insulation thickness [mm]	85	95
Energy label	B	B
Heating surface area [m ²]	3.13	3.7
Heating surface area solar coil [m ²]	0.38	0.75
Power output (DIN 4708) [kW]	47 / 55	52 / 62
Power output solar coil (DIN 4708) [kW]	9.8	10.5
Service water flow (10 - 45 °C) [l/h]	1164 / 1368	1284 / 1530
Service water flow - solar coil only (10 - 45 °C) [l/h]	246	258
Heating water throughput [m ³ /h]	2 / 3	2 / 3
Heating water throughput solar coil [m ³ /h]	0.24	0.24
Pressure loss [mbar]	142 / 294	165 / 342
Pressure loss solar coil [mbar]	2	2

DWH DIRECT WATER HEATERS

DWH 500 - 3000

Direct water heaters for potable water installations, for use in systems in which heat can be exchanged by external heat exchangers.


All units are extremely compact and the connections are all conveniently placed 'in-line' to make installation easier, neater and, as a result, faster. This direct model can be fitted with two or more electric immersion heating elements.

- High quality single layer glass-lining to DIN 4753 Part 3 to provide hygienic hot water supply, optimum corrosion protection and minimal calcium build up.
- Connections for thermostat - thermometer - circulation.
- Maximum working pressure (cylinder): 10.0 bar.
- Maximum working temperature (cylinder): 95 °C.

Insulation:

- Standard colours: white (RAL 9010).
- Including EPS insulating mantle (fire category B1) with a polypropylene outer shell (fire category B2).

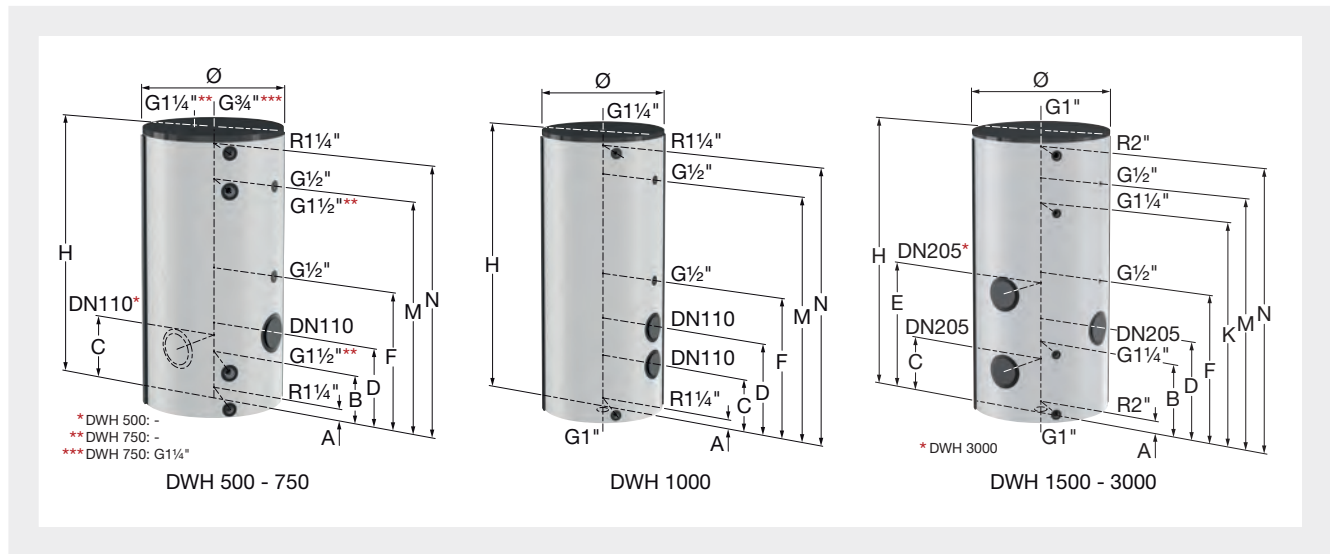


Type	Capacity [l]	Dimensions *		Weight [kg]		Order Code
		Ø [mm]	H. [mm]			
DWH 500	500	650	1680	110	1	17360
DWH 750	750	750	1920	175	1	17361
DWH 1000	1000	800	2180	205	1	17362
DWH 1500	1500	1000	2280	365	1	17363
DWH 2000	2000	1100	2320	420	1	17364
DWH 3000	3000	1200	2793	665	1	17365

* Dimensions excluding insulation.



DWH 500 - 3000 - Connection diagram



Type	Distance from floor to connection centres								
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]	M [mm]	N [mm]
DWH 500	60	285	-	485	-	830	1375	1375	1600
DWH 750	60	-	420	620	-	970	-	1620	1880
DWH 1000	70	-	430	730	-	1105	-	1900	2140
DWH 1500	70	690	490	890	-	1290	1890	1890	2240
DWH 2000	105	705	505	905	-	1305	1905	1905	2255
DWH 3000	95	720	520	920	1320	1320	2155	2405	2730

DWH - Performance

Technical specifications	DWH 500 - 3000					
	500	750	1000	1500	2000	3000
Total heat loss (EN 12897) [W]	89	119	147	161	183	n/a
Energy label	C	n/a	n/a	n/a	n/a	n/a

n/a = not applicable.

FWP COMBI WATER HEATERS

FWP 500 - 1500

Combined buffer and flow-through vessel. For combining several heating systems (such as solid fuel, oil and gas boilers) with potable water heating.

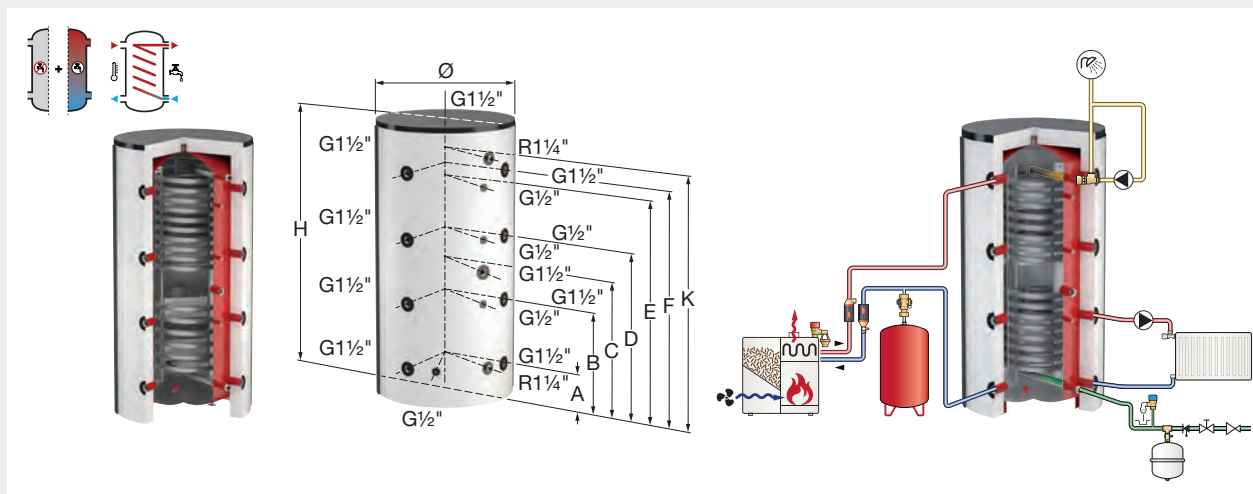
Potable water heating by means of stainless steel ribbed heating coil.

The capacity of the potable water coil is approx. 40 litres to guarantee the convenience of direct hot water supply.

- Maximum working pressure: 3 bar (buffer vessel) / 6 bar (potable water heating coil).
- Maximum working temperature: 95 °C.

Insulation (Excluded - Can be ordered separately (see Chapter 'Accessories for Water Heaters and Storage Vessels')):

- EPS insulating mantle (fire category B1) with a polypropylene outer shell in white (RAL 9010) / white aluminium (RAL 9006).



Type	Capacity [l]	Heating surface area [m²]	Ø [mm]	Dimensions *	Tilting height [mm]	Weight [kg]		Order Code
FWP 500	500	3.7	650	1650	1700	106	1	19373
FWP 750	750	3.7	790	1800	1850	126	1	18151
FWP 1000	1000	7.2	790	2200	2250	210	1	18161
FWP 1500	1500	7.4	1000	2320	2380	265	1	19377

* Dimensions excluding insulation.



FWP - Connection diagram

Type	Distance from floor to connection centres						
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]
FWP 500	180	600	770	1010	1350	1430	-
FWP 750	270	690	940	1100	1420	1520	1620
FWP 1000	270	820	1095	1370	1820	1920	2020
FWP 1500	340	890	1230	1440	1890	1990	2090

FWP - Performance

Technical specifications	FWP 500 - 1500			
	500	750	1000	1500
Total heat loss (EN 12897) [W]	93	109	141	161
Energy label	C	C	C	C

KPB COMBI WATER HEATERS

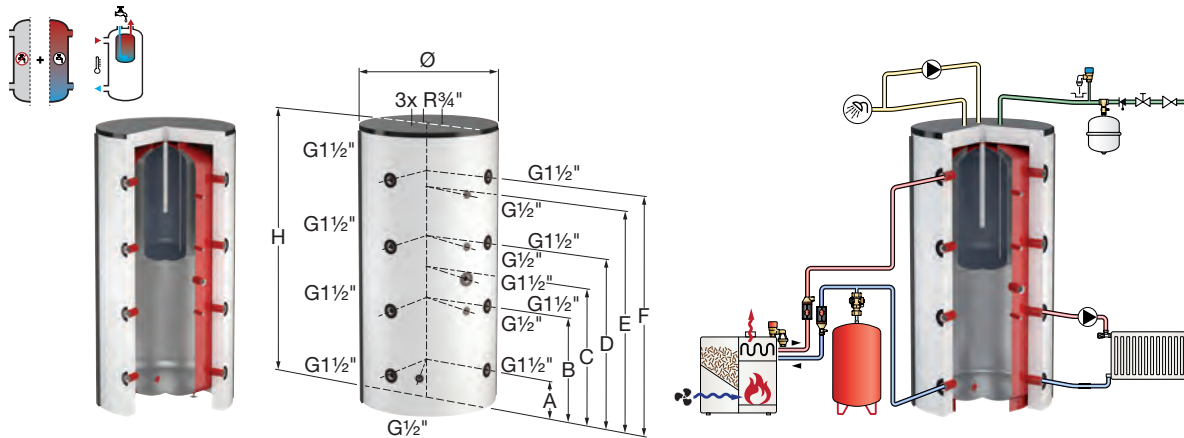
KPB 500 - 1000


Space-saving water heater and buffer vessel in one for combining several heating systems (such as solid fuel, oil and gas boilers) with potable water heating.

- Including adjustable feet for accurate levelling (< 600 litre) or on fixed feet (> 750 litre).
- Equipped with several connections and an immersion pipe for a temperature sensor.
- Cold water supply at the bottom to prevent turbulence and to maintain stratification.
- Including Mg-anode in the potable water vessel.
- Connections under a 90° angle, enabling an angular setting.
- Temperature sensor connections: G½" (4x).
- Maximum working pressure: 3 bar (buffer vessel) / 10 bar (potable water vessel).
- Maximum working temperature: 95 °C.
- Buffer vessel made from steel (S235JR): Outside powder-coated, inside untreated.
- Potable water vessel made from steel (S235JR): Outside untreated, inside with high-quality glass lining according to DIN 4753/part 3 for potable water.

Insulation (Excluded - Can be ordered separately (see Chapter 'Accessories for Water Heaters and Storage Vessels')):

- EPS insulating mantle (fire category B1) with a polypropylene outer shell in white (RAL 9010) / white aluminium (RAL 9006).



Type	Capacity		Dimensions *			Weight [kg]		Order Code
	Total [l]	Potable water [l]	Ø [mm]	H [mm]	Tilting height [mm]			
KPB 500/155	500	155	650	1610	1700	107	1	19361
KPB 600/155	600	155	650	2010	2100	130	1	19362
KPB 750/155	750	155	790	1760	1850	138	1	19363
KPB 850/175	850	175	790	1930	2000	180	1	19364
KPB 1000/215	1000	215	790	2180	2250	220	1	19365

* Dimensions excluding insulation.

KPB 500 - 1000 - Connection diagram



Type	Distance from floor to connection centres [mm]					
	A	B	C	D	E	F
KPB 500/155	180	600	770	1010	1330	1430
KPB 600/155	180	730	980	1280	1730	1830
KPB 750/155	270	690	940	1100	1420	1520
KPB 850/175	270	740	970	1200	1670	1920
KPB 1000/215	270	820	1095	1370	1820	1920

KPB 500 - 1000 - Performance

Technical specifications	KPB 500 - 1000				
	500/155	600/155	750/155	850/175	1000/215
Total heat loss (EN 12897) [W]	92	107	118	127	140
Energy label	C	C	C	C	C

DUO FWS COMBI WATER HEATERS

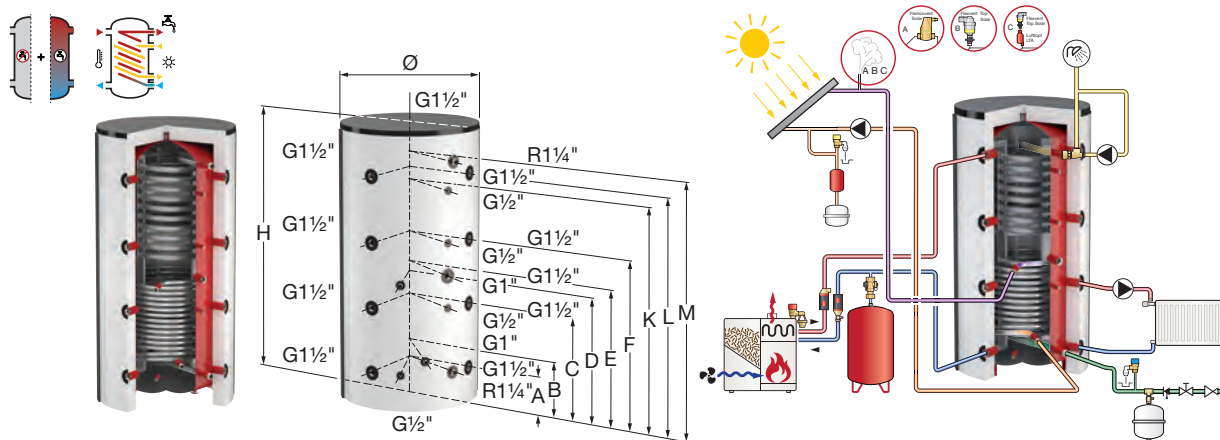
Duo FWS 500 - 1500

Combined buffer and flow-through vessel. For combining several heating systems (such as solid fuel, oil and gas boilers) and a second heating coil for separate additional heating of solar-energy installations in combination with potable water heating. Potable water heating by means of a stainless steel ribbed heating coil. The capacity of the potable water coil is approx. 40 litres to guarantee the convenience of direct hot water supply.

- Maximum working pressure: 3 bar (buffer vessel) / 6 bar (potable water coil) / 10 bar (solar system heating coil).
- Maximum working temperature: 95 °C (buffer vessel/potable water coil) / 110 °C (solar system heating coil).

Insulation (Excluded - Can be ordered separately (see Chapter 'Accessories for Water Heaters and Storage Vessels')):

- EPS insulating mantle (fire category B1) with a polypropylene outer shell in white (RAL 9010) / white aluminium (RAL 9006).



Type	Capacity [l]	Heating surface area		Dimensions *			Weight [kg]		Order Code
		Potable water [m²]	Solar [m²]	Ø [mm]	H [mm]	Tilting height [mm]			
Duo FWS 500	500	3.7	1.6	650	1650	1700	118	1	18162
Duo FWS 750	750	3.7	2.1	790	1800	1850	158	1	18190
Duo FWS 1000	1000	7.2	2.7	790	2200	2250	250	1	18195
Duo FWS 1500	1500	7.4	3.2	1000	2320	2380	309	1	19371

* Dimensions excluding insulation.



Duo FWS - Connection diagram

Type	Distance from floor to connection centres								
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]	L [mm]	M [mm]
Duo FWS 500	180	280	600	720	770	1010	1330	1430	1430
Duo FWS 750	270	370	690	890	940	1100	1420	1520	1620
Duo FWS 1000	270	370	820	1010	1095	1370	1820	1920	2020
Duo FWS 1500	340	440	890	1040	1230	1440	1890	1990	2090

Duo FWS - Performance

Technical specifications	Duo FWS 500 - 1500			
	500	750	1000	1500
Total heat loss (EN 12897) [W]	137	118	140	160
Energy label	D	C	C	C

KPS 500 - 1000 - Connection diagram

Type	Distance from floor to connection centres							
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]	L [mm]
KPS 500/155	180	280	600	770	770	1010	1330	1430
KPS 600/155	180	280	730	880	980	1280	1730	1830
KPS 750/155	270	370	690	890	940	1100	1420	1520
KPS 850/175	270	370	740	920	970	1200	1570	1670
KPS 1000/215	270	370	820	1010	1095	1370	1820	1920

KPS 500 - 1000 - Performance

Technical specifications	KPS 500 - 1000				
	500/155	600/155	750/155	850/175	1000/215
Total heat loss (EN 12897) [W]	136	108	118	126	139
Energy label	D	C	C	C	C

LS STORAGE VESSELS FOR POTABLE HOT WATER

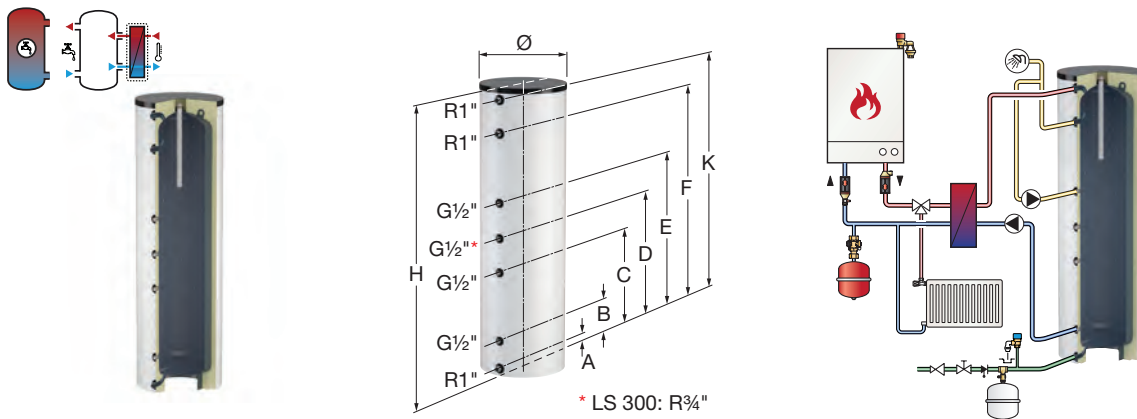
LS 200 - 300


Storage vessel for potable hot water, for use in systems in which heat can be exchanged by external heat exchangers.

- High-quality glass lining according to DIN 4753/part 3 for hygienic hot water production and optimum corrosion protection in combination with a no-maintenance or Mg anode.
- Including adjustable feet for accurate levelling.
- Suitable for connecting external heat exchangers.
- Connections for thermostat - thermometer - circulation.
- Maximum working pressure: 10 bar.
- Maximum working temperature: 95 °C.

Insulation:

- Standard colours: white (RAL 9010) and white aluminium (RAL 9006).
- Including hard foam insulation (direct foam injection) with a polystyrene outer shell.



Type	Capacity [l]	Dimensions *			Insulation colour	Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting height [mm]				
LS 200	200	560	1360	1500	white	55	1	18623
LS 200	200	560	1360	1500	white alu.	55	1	18624
LS 300	300	660	1620	1750	white	95	1	18720
LS 300	300	660	1620	1750	white alu.	95	1	18721

* Dimensions including insulation.



LS 200 - 300 - Connection diagram

Type	Distance from floor to connection centres						
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]
LS 200	65	245	545	710	885	1075	1285
LS 300	65	310	-	850	950	1340	1560

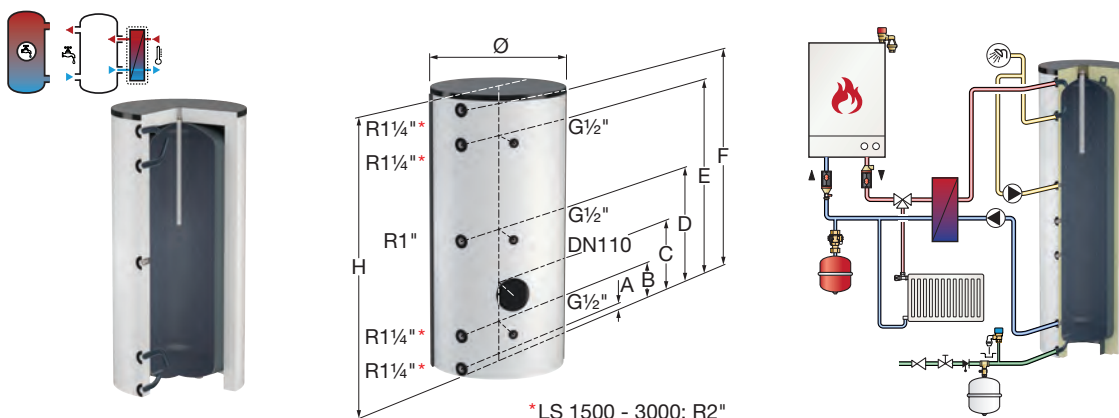
LS 500 - 3000

Storage vessel for potable hot water, for use in systems in which heat can be exchanged by external heat exchangers.

- High-quality glass lining according to DIN 4753/part 3 for hygienic hot water production and optimum corrosion protection in combination with a no-maintenance or Mg anode (standard from 1,500 litres).
- Including adjustable feet for accurate levelling.
- Suitable for connecting external heat exchangers.
- Connections for thermostat - thermometer - circulation.
- Cleaning & inspection flange DN 110 at the side (LS 1500 - 3000 also at the top side).
- Maximum working pressure: 10 bar.
- Maximum working temperature: 95 °C.

Insulation:

- Standard colours: white (RAL 9010) and white aluminium (RAL 9006).
- Including EPS insulating mantle (fire category B1) with a polypropylene outer shell (fire category B2).



Type	Capacity [l]	Dimensions *			Insulation colour	Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting height [mm]				
LS 500	500	650	1640	1800	white	125	1	18630
LS 500	500	650	1640	1800	white alu.	125	1	18635
LS 750	750	750	1970	2070	white	190	1	18637
LS 750	750	750	1970	2070	white alu.	190	1	18638
LS 1000	1000	800	2230	2320	white	232	1	18640
LS 1000	1000	800	2230	2320	white alu.	232	1	18641
LS 1500	1500	1000	2320	2480	white	397	1	18643
LS 1500	1500	1000	2320	2480	white alu.	397	1	18644
LS 2000	2000	1100	2440	2600	white	474	1	18646
LS 2000	2000	1100	2440	2600	white alu.	474	1	18647
LS 3000	3000	1200	2830	3000	white	730	1	18654

* Dimensions excluding insulation.



LS 500 - 3000 - Connection diagram

Type	Distance from floor to connection centres [mm]					
	A	B	C	D	E	F
LS 500	60	285	485	830	1375	1600
LS 750	60	300	637	970	1420	1900
LS 1000	70	310	645	1100	1670	2160
LS 1500	85	385	585	1160	1935	2235
LS 2000	105	405	605	1180	1955	2235
LS 3000	95	420	620	1420	2405	2730

LS - Performance

Technical specifications	LS							
	200	300	500	750	1000	1500	2000	3000
Total heat loss (EN 12897) [W]	83	108	133	119	147	161	183	n/a
Energy label	C	D	D	C	C	C	C	n/a

n/a = not applicable.

Product overview • Edition 1

We reserve the right to change designs and technical specifications of our products.

LS-E STAINLESS STEEL STORAGE VESSELS FOR POTABLE HOT WATER

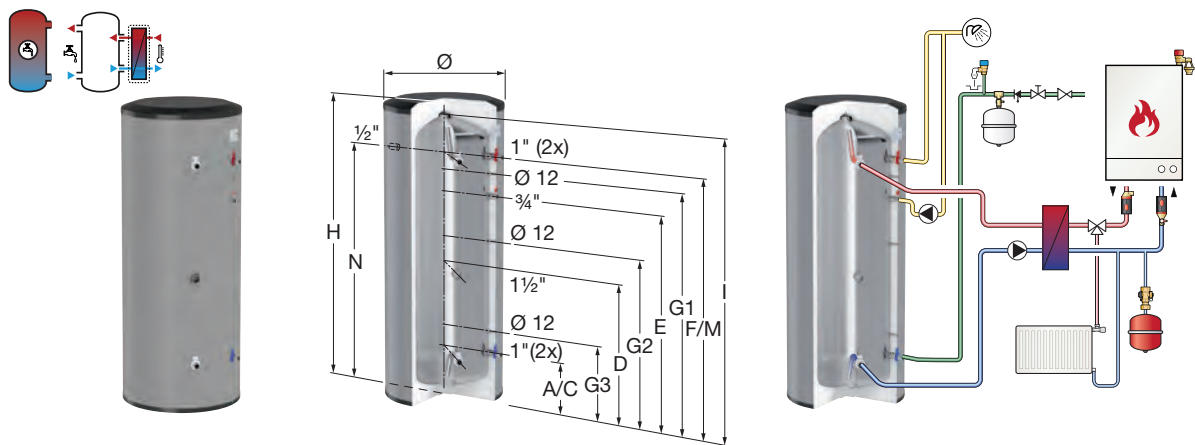
LS-E 300 - 500


Storage vessel for potable hot water, for use in systems in which heat can be exchanged by external heat exchangers.

- Efficient: Minimum heat loss and very fast heating up.
- Requires little maintenance and no anode.
- Light weight.
- Excellent stratification of the water in the vessel.
- High resistance to chloride (up to 250 ppm).
- Including an 1 1/2" connection suitable for connecting an additional electric heating element.
- Maximum working pressure: 10 bar.
- Maximum working temperature: 95 °C.
- Stainless steel type: 1.4521.

Insulation:

- Standard colour: silver.
- Including graphite polystyrene (GPS) insulation (direct foam injection) with a polypropylene outer shell (fire category B2).



Type	Capacity [l]	Dimensions *			Insulation colour	Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting height [mm]				
LS-E 300	304	675	1804	1884	silver	40	1	19950
LS-E 500	491	795	2020	2126	silver	70	1	19951

* Dimensions including insulation.



LS-E 300 - 500 - Connection diagram

Type	Distance from floor to connection centres							
	A/C [mm]	D [mm]	G3 [mm]	G2 [mm]	E [mm]	G1 [mm]	F/M/N [mm]	I [mm]
LS-E 300	258	798	378	798	1131	1418	1543	1728
LS-E 500	283	929	437	1095	1369	1606	1723	1923

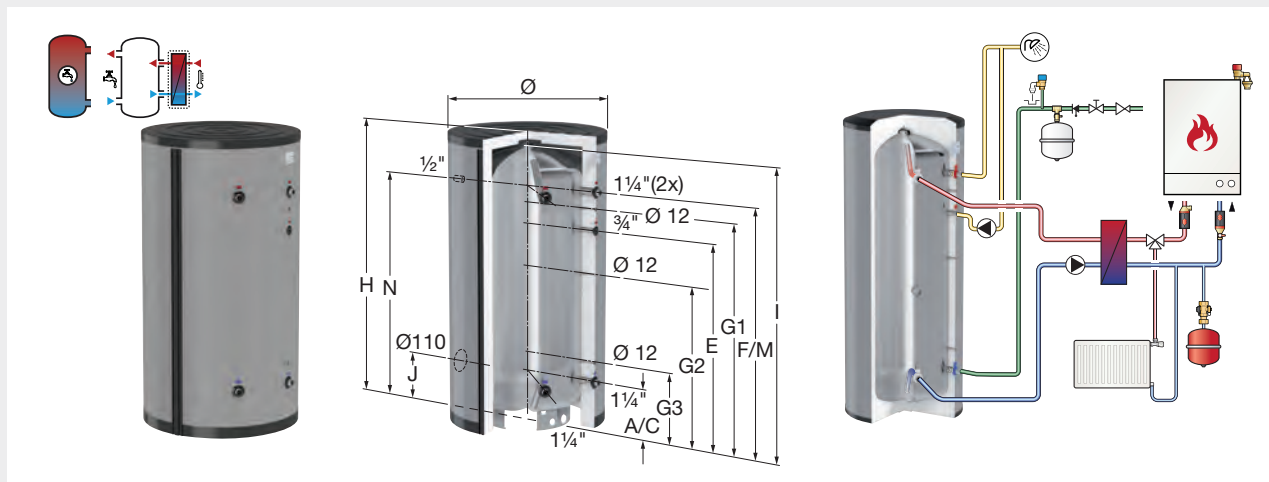
LS-E 750 - 1000


Storage vessel for potable hot water, for use in systems in which heat can be exchanged by external heat exchangers.

- Efficient: Minimum heat loss and very fast heating up.
- Requires little maintenance and no anode.
- Light weight.
- Excellent stratification of the water in the vessel.
- High resistance to chloride (up to 250 ppm).
- Including an inspection flange DN 110 at the side.
- Maximum working pressure: 10 bar.
- Maximum working temperature: 95 °C.
- Stainless steel type: 1.4521.

Insulation:

- Standard colour: silver.
- Including graphite polystyrene (GPS) insulation with a polypropylene outer shell (fire category B1).



Type	Capacity [l]	Dimensions *			Insulation colour	Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting height [mm]				
LS-E 750	765	990	1867	2098	silver	81	1	19442
LS-E 1000	967	990	2292	2481	silver	97	1	19953

* Dimensions including insulation.

**LS-E 750 - 1000 - Connection diagram**

Type	Distance from floor to connection centres							
	A/C [mm]	G3 [mm]	G2 [mm]	E [mm]	G1 [mm]	F/M/N [mm]	I [mm]	J [mm]
LS-E 750	323	448	1003	1278	1413	1518	1753	413
LS-E 1000	323	488	1128	1718	1838	1943	2188	413

LS-E - Performance

Technical specifications	LS-E			
	300	500	750	1000
Total heat loss (EN 12897) [W]	56	71	104	122
Insulation thickness [mm]	85	95	100	100
Energy label	B	B	C	C


LOGOFRESH XL-LINE, ELECTRONIC

LogoFresh XL-line, electronic

Compact, ready-to-fit central fresh water stations with electronically controlled hot water preparation. The Logo-Fresh XL-line fresh water stations are available as compact units with full insulation.

- Max. Heating / sanitary pressure: PN 10 / PN 10
- Max. permissible heating / sanitary temperatures: 90 °C / 90 °C
- Supply voltage: 230 V / 50 Hz



Type		Order Code
LogoFresh XL-line electronic 100	1	M10270.81
LogoFresh XL-line electronic 120	1	M10270.71
LogoFresh L-Line & XL-Line Cascade Set *: 1x zone valve DN 32 (supply voltage 230V, suitable for potable water) 1x safety valve 10bar - drinking water 1x T-piece for connection to the safety valve 1x CAN connection cable	1	M10270.711

* Suitable for direct connection to Logofresh XL-Line.



LogoFresh XL-line 100 performance data: Cold water heating 40 K (10 to 50 °C)

Primary supply temperature [°C]	-	55	60	65	70	75	80	85
Primary return line temperature [°C]	-	30	26	24	21	19	18	17
Domestic hot water draw-off volume ¹⁾ [l/min]	-	68	91	100	100	100	100	100
Domestic hot water output [kW]	-	190	252	278	278	278	278	278
Primary flow rate [l/h]	-	6600	6600	5890	4982	4375	4075	3780
Primary pressure loss [bar]	-	0.61	0.61	0.5	0.36	0.28	0.26	0.26
Primary residual delivery head [bar]	-	0.3	0.3	0.51	0.75	0.86	0.9	0.9
Secondary pressure loss [bar]	-	0.25	0.39	0.46	0.46	0.46	0.46	0.46
Max. mixed water (10 - 38 °C) ²⁾ [l/min]	-	97	130	143	143	143	143	143
Parallel showers ³⁾ []	-	5	7	8	8	8	8	8
Max. residential units ⁴⁾ [-WE]	-	85	128	146	146	146	146	146

¹⁾ Max. draw-off volume (limited capacity)

²⁾ Calculated amount of mixed water

³⁾ Bathtub / shower head with 0.3 l/s of mixed water

⁴⁾ Apartments with a standard bath / shower and diversity factors according to the Technical University of Dresden

LogoFresh XL-line 100 performance data: Cold water heating 50 K (10 to 60 °C)

Primary supply temperature [°C]	-	-	-	65	70	75	80	85
Primary return line temperature [°C]	-	-	-	35	31	28	25	23
Domestic hot water draw-off volume ¹⁾ [l/min]	-	-	-	64	84	100	100	100
Domestic hot water output [kW]	-	-	-	224	291	346	346	346
Primary flow rate [l/h]	-	-	-	6600	6600	6560	5590	4932
Primary pressure loss [bar]	-	-	-	0.61	0.61	0.6	0.45	0.33
Primary residual delivery head [bar]	-	-	-	0.30	0.30	0.3	0.6	0.78
Secondary pressure loss [bar]	-	-	-	0.21	0.34	0.46	0.46	0.46
Max. mixed water (10 - 38 °C) ²⁾ [l/min]	-	-	-	114	150	179	179	179
Parallel showers ³⁾ []	-	-	-	6	8	10	10	10
Max. residential units ⁴⁾ [-WE]	-	-	-	107	157	200	200	200

¹⁾ Max. draw-off volume (limited capacity)

²⁾ Bathtub / shower head with 0.3 l/s of mixed water

⁴⁾ Apartments with a standard bath / shower and diversity factors according to the Technical University of Dresden

LogoFresh XL-line 120 performance data: Cold water heating 40 K (10 to 50 °C)

Primary supply temperature [°C]	-	55	60	65	70	75	80	85
Primary return line temperature [°C]	-	27	24	22	19	17	16	15
Domestic hot water draw-off volume ¹⁾ [l/min]	-	83	110	125	125	125	125	125
Domestic hot water output [kW]	-	231	303	346	346	346	346	346
Primary flow rate [l/h]	-	7400	7400	7050	6013	5320	4760	4450
Primary pressure loss [bar]	-	0.6	0.6	0.51	0.39	0.32	0.3	0.3
Primary residual delivery head [bar]	-	0.21	0.21	0.3	0.62	0.76	0.8	0.8
Secondary pressure loss [bar]	-	0.26	0.43	0.55	0.55	0.55	0.55	0.55
Max. mixed water (10 - 38 °C) ²⁾ [l/min]	-	119	157	179	179	179	179	179
Parallel showers ³⁾ []	-	7	9	10	10	10	10	10
Max. residential units ⁴⁾ [-WE]	-	113	169	200	200	200	200	200

¹⁾ Max. draw-off volume (limited capacity)

²⁾ Bathtub / shower head with 0.3 l/s of mixed water

⁴⁾ Apartments with a standard bath / shower and diversity factors according to the Technical University of Dresden

LogoFresh XL-line 120 performance data: Cold water heating 50 K (10 to 60 °C)

Primary supply temperature [°C]	-	-	-	65	70	75	80	85
Primary return line temperature [°C]	-	-	-	32	28	26	23	20
Domestic hot water draw-off volume ¹⁾ [l/min]	-	-	-	79	101	120	125	125
Domestic hot water output [kW]	-	-	-	273	350	415	432	432
Primary flow rate [l/h]	-	-	-	7400	7400	7400	6710	5970
Primary pressure loss [bar]	-	-	-	0.6	0.6	0.6	0.48	0.38
Primary residual delivery head [bar]	-	-	-	0.21	0.21	0.21	0.44	0.64
Secondary pressure loss [bar]	-	-	-	0.24	0.36	0.5	0.55	0.55
Max. mixed water (10 - 38 °C) ²⁾ [l/min]	-	-	-	141	180	214	223	223
Parallel showers ³⁾ []	-	-	-	8	10	12	12	12
Max. residential units ⁴⁾ [-WE]	-	-	-	143	200	300	300	300

¹⁾ Max. draw-off volume (limited capacity)

²⁾ Bathtub / shower head with 0.3 l/s of mixed water

⁴⁾ Apartments with a standard bath / shower and diversity factors according to the Technical University of Dresden

Design features and technical data – LogoFresh XL-line

Design features	XL-Line 100	XL-Line 120
Station dimensions: Width x height x depth [mm]	500 x 1137 ¹⁾ x 340	600 x 1137 ¹⁾ x 340
Connections for cold water, hot water, flow line & return line buffer / circulation	1 1/2" / 1 1/4"	1 1/2" / 1 1/4"
Surface-mounted installation	✓	✓
Electronic fresh water station with variably mountable control panel for constant hot water temperature regulation depending on the set hot water temperature and draw-off capacity by modulating the heating circuit pump	✓	✓
Stainless-steel plate heat exchanger (copper-soldered), vertical design to reduce the risk of calcification	✓	✓
Achieves lower return line temperatures at full operating performance	✓	✓
Heating side high-efficiency recirculation pump	✓	✓
Bleed valve on the heating side	✓	✓
Backflow preventer	✓	✓
Shut-off valves (except for cold water inlet)	✓	✓
Pipework made from stainless steel fixed piping (smooth)	✓	✓
Mounted entirely mechanically stress-free on base plate, inserted in housing and inspected	✓	✓
Freely programmable domestic water circulation with high-efficiency pump, backflow preventer and piping and screw fitting components installed in the station and connected to the controller	✓	✓
Flow sensor	✓	✓
With integrated disinfection (legionella protection control) ²⁾	✓	✓
With integrated keep warm function (heat exchanger)	✓	✓
Tank reheating function ²⁾	✓	✓
Mixing protection for heating water buffer tank ²⁾	✓	✓
Fault indicator ²⁾	✓	✓
Housing: Full EPP insulation of housing (black)	✓	✓
Number of possible electronically controlled cascades	5	5
Data logging via data logger	Optional	Optional
Intuitive menu navigation and multilingual controller	✓	✓
Display monochrome multifunction graphics on LCD display with background lighting	✓	✓
Animated schematic of the systems and operating states	✓	✓
Statistics and graphical evaluations from data memory	✓	✓
Commissioning wizard, function check and fault memory with date and time	✓	✓
Menu languages: German, English, Spanish, French, Dutch, Italian, Czech, Polish, Russian	✓	✓

1) Including shut off ball valves

2) A choice of individual functions may be selected, but only a limited number may be selected for each system. possible combinations.

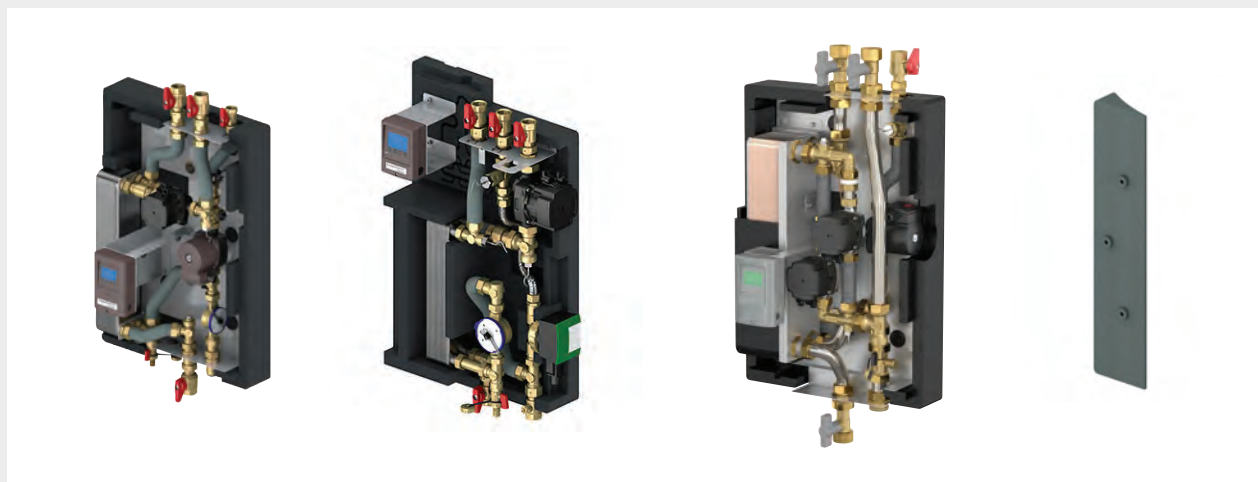
LOGOFRESH S-LINE & M-LINE, ELECTRONIC


LogoFresh S-Line, M-Line & L-Line, electronic

Compact, ready-to-fit central fresh water stations with electronically controlled hot water preparation, available as surface-mounted or tank installation depending on the respective system. The M-line and L-Line version are electronically cascadable and allows even higher outputs to be attained in correlation with the respective application.

- Max. heating / sanitary pressure: PN 10 / PN 10
- Max. permissible heating / sanitary temperatures: 110 °C / 110 °C
- Supply voltage: 230 V / 50 Hz

Additional complimentary and supplementary products available (e.g. measuring equipment for consumption metering, heating water buffer tank, pump groups etc.).



Type		Order Code
Type 1 - LogoFresh S-line electronic	1	M10270.62
Type 2 - LogoFresh S-line electronic with domestic hot water circulation	1	M10270.63
Type 1 - LogoFresh M-line electronic	1	M10270.52
Type 2 - LogoFresh M-line electronic with domestic hot water circulation	1	M10270.53
Type 1 - LogoFresh L-line electronic	1	M10270.91
Type 2 - LogoFresh L-line electronic with domestic hot water circulation	1	M10270.92
S-Line – insulation wedge for tank installation	1	M66306.3673
LogoFresh M-Line cascade set basic set *: 1x zone valve DN25 (supply voltage 230V, suitable for potable water) 1x safety valve 10bar - drinking water 1x T-piece for connection to the safety valve 1x CAN connection cable	1	M10270.521
LogoFresh L-Line & XL-Line Cascade Set *: 1x zone valve DN 32 (supply voltage 230V, suitable for potable water) 1x safety valve 10bar - drinking water 1x T-piece for connection to the safety valve 1x CAN connection cable	1	M10270.711

* Suitable for direct connection to LogoFresh.



S-line electronic performance data: Cold water heating 35 K (10 to 45 °C)

Primary supply temperature [°C]	-	55	60	65	70	75	80	85
Primary return line temperature [°C]	-	33	32	31	30	30	29	29
Domestic hot water draw-off volume [l/min]	-	17	22	27	31	35	40	44
Domestic hot water output [kW]	-	42	54	65	76	86	96	107
Primary flow rate [l/h]	-	1642	1642	1642	1642	1642	1642	1642
Primary pressure loss [bar]	-	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Primary residual delivery head [bar]	-	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Secondary pressure loss [bar]	-	0.31	0.45	0.6	0.81	1.07	1.32	1.58
Max. mixed water (10 - 38 °C) ¹⁾ [Liter]	-	22	28	33	39	44	49	55

¹⁾ calculated mixed water quantity at bathtub / shower head with 0.3 l/s of mixed water

S-line electronic performance data: Cold water heating 40 K (10 to 50 °C)

Primary supply temperature [°C]	-	55	60	65	70	75	80	85
Primary return line temperature [°C]	-	38	36	35	34	33	32	32
Domestic hot water draw-off volume [l/min]	-	11	16	21	25	29	33	36
Domestic hot water output [kW]	-	32	46	58	69	80	91	101
Primary flow rate [l/h]	-	1642	1642	1642	1642	1642	1642	1642
Primary pressure loss [bar]	-	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Primary residual delivery head [bar]	-	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Secondary pressure loss [bar]	-	0.15	0.28	0.41	0.54	0.73	0.9	1.1
Max. mixed water (10 - 38 °C) ¹⁾ [Liter]	-	16	23	30	35	41	47	52

¹⁾ calculated mixed water quantity at bathtub / shower head with 0.3 l/s of mixed water

S-line electronic performance data: Cold water heating 50 K (10 to 60 °C)

Primary supply temperature [°C]	-	-	-	65	70	75	80	85
Primary return line temperature [°C]	-	-	-	46	43	41	39	38
Domestic hot water draw-off volume [l/min]	-	-	-	11	15	19	22	26
Domestic hot water output [kW]	-	-	-	37	52	65	78	89
Primary flow rate [l/h]	-	-	-	1642	1642	1642	1642	1642
Primary pressure loss [bar]	-	-	-	0.3	0.3	0.3	0.3	0.3
Primary residual delivery head [bar]	-	-	-	0.15	0.15	0.15	0.15	0.15
Secondary pressure loss [bar]	-	-	-	0.13	0.25	0.33	0.44	0.57
Max. mixed water (10 - 38 °C) ¹⁾ [Liter]	-	-	-	19	27	34	40	46

¹⁾ calculated mixed water quantity at bathtub / shower head with 0.3 l/s of mixed water

M-line electronic performance data: Cold water heating 35 K (10 to 45 °C)

Primary supply temperature [°C]	50	55	60	65	70	75	80	85
Primary return line temperature [°C]	27	24	22	21	20	19	18	18
Domestic hot water draw-off volume [l/min]	20	27	33	38	43	48	53	58
Domestic hot water output [kW]	48	65	80	93	105	117	129	140
Primary flow rate [l/h]	1862	1862	1862	1862	1862	1862	1862	1862
Primary pressure loss [bar]	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
Primary residual delivery head [bar]	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Secondary pressure loss [bar]	0.18	0.33	0.5	0.68	0.88	1.1	1.33	1.59
Max. mixed water (10 - 38 °C) ¹⁾ [Liter]	25	33	41	48	54	60	66	72

¹⁾ calculated mixed water quantity at bathtub / shower head with 0.3 l/s of mixed water

M-line electronic performance data: Cold water heating 40 K (10 to 50 °C)

Primary supply temperature [°C]	-	55	60	65	70	75	80	85
Primary return line temperature [°C]	-	30	27	24	23	22	21	20
Domestic hot water draw-off volume [l/min]	-	19	25	31	36	40	45	49
Domestic hot water output [kW]	-	53	71	86	99	112	125	136
Primary flow rate [l/h]	-	1862	1862	1862	1862	1862	1862	1862
Primary pressure loss [bar]	-	0.33	0.33	0.33	0.33	0.33	0.33	0.33
Primary residual delivery head [bar]	-	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Secondary pressure loss [bar]	-	0.16	0.3	0.44	0.6	0.76	0.94	1.14
Max. mixed water (10 - 38 °C) ¹⁾ [Liter]	-	27	36	44	51	58	64	70

¹⁾ calculated mixed water quantity at bathtub / shower head with 0.3 l/s of mixed water

M-line electronic performance data: Cold water heating 50 K (10 to 60 °C)

Primary supply temperature [°C]	-	-	-	65	70	75	80	85
Primary return line temperature [°C]	-	-	-	35	31	28	26	25
Domestic hot water draw-off volume [l/min]	-	-	-	18	24	28	32	36
Domestic hot water output [kW]	-	-	-	63	82	98	112	126
Primary flow rate [l/h]	-	-	-	1862	1862	1862	1862	1862
Primary pressure loss [bar]	-	-	-	0.33	0.33	0.33	0.33	0.33
Primary residual delivery head [bar]	-	-	-	0.15	0.15	0.15	0.15	0.15
Secondary pressure loss [bar]	-	-	-	0.15	0.26	0.37	0.49	0.62
Max. mixed water (10 - 38 °C) ¹⁾ [Liter]	-	-	-	32	42	50	58	65

¹⁾ Calculated mixed water quantity.

Design features and technical data – S-line, M-line & L-Line, electronic

Design features	S-Line		M-Line		L-Line	
	Type 1	Type 2	Type 1	Type 2	Type 1	Type 2
Dimensions including housing: Width x height x depth [mm]	455 x 660 ¹⁾ x 215	455 x 660 ¹⁾ x 215	500 x 890 ¹⁾ x 340	500 x 890 ¹⁾ x 340	500 x 965 ¹⁾ x 340	500 x 965 ¹⁾ x 340
Max. heating / sanitary pressure	PN 10 / PN 10	PN 10 / PN 10	PN 10 / PN 10	PN 10 / PN 10	PN 10 / PN 10	PN 10 / PN 10
Max. permissible heating / sanitary temperatures	110 °C	110 °C	110 °C	110 °C	110 °C	110 °C
Supply voltage	230V / 50Hz	230V / 50Hz	230V / 50Hz	230V / 50Hz	230V / 50Hz	230V / 50Hz
Bottom connections (cold water inlet & primary heating return)	3/4"	3/4"	1"	1"	1 1/4"	1 1/4"
Top connections (hot water outlet & primary heating flow)	3/4"	3/4"	1"	1"	1 1/4"	1 1/4"
Top connection (DHW circulation)	-	3/4"	-	3/4"	-	1"
Wall-mounted installation	✓	✓	✓	✓	✓	✓
Tank assembly (only with optional insulating wedges)	✓	✓	-	-	-	-
Electronic controller for constant temperature regulation depending on the set hot water temperature and draw-off capacity by modulating the heating circuit pump	✓	✓	✓	✓	✓	✓
Stainless-steel plate heat exchanger (copper-soldered), vertical design to reduce the risk of calcification	✓	✓	✓	✓	✓	✓
Achieves lower return line temperatures	✓	✓	✓	✓	✓	✓
Bleed valve on the heating side	✓	✓	✓	✓	✓	✓
Backflow preventer	✓	✓	✓	✓	✓	✓
Shut-off valves (except for cold water inlet)	✓	✓	✓	✓	✓	✓
Pipework made from insulated stainless-steel corrugated pipes	✓	✓	✓	✓	✓	✓
Mounted entirely mechanically tension-free on base plate, inserted in housing and inspected	✓	✓	✓	✓	✓	✓
Flow sensor	✓	✓	✓	✓	✓	✓
Full EPP insulation of housing (black)	✓	✓	✓	✓	✓	✓
Heating side high-efficiency recirculation pump	1	1	1	1	2	2
Domestic water circulation with pump, backflow preventer, piping and screw fitting components installed in the station and connected to the controller	-	✓	-	✓	-	✓
With integrated disinfection (legionella protection)	-	-	-	✓	-	✓
With integrated keep warm function (heat exchanger) ²⁾	-	-	✓	✓	✓	✓
Tank reheating function ²⁾	-	-	✓	✓	✓	✓
Mixing protection for heating water buffer tank ²⁾	-	-	✓	✓	✓	✓
Fault indicator ²⁾	-	-	✓	✓	✓	✓
Number of possible electronically controlled cascades ²⁾	-	-	5	5	5	5
Data logging via data logger optional	-	-	✓	✓	✓	✓
Intuitive menu navigation and multilingual controller	✓	✓	✓	✓	✓	✓
Display monochrome multifunction graphics on LCD display with background lighting	✓	✓	✓	✓	✓	✓
Animated schematic of the systems and operating states	✓	✓	✓	✓	✓	✓
Statistics and graphical evaluations from data memory	✓	✓	✓	✓	✓	✓
Menu languages: German, English, Spanish, French, Dutch, Italian, Czech, Polish, Russian	✓	✓	✓	✓	✓	✓
Insulation wedges for tank installation - connectible wedges for pre-formed rear-wall insulation for mounting directly onto a tank (tank ø ≥ 600 mm)	Optional	Optional	-	-	-	-

1) Including shut off ball valves

2) A choice of individual functions may be selected, but only a limited number may be selected for each system. possible combinations.

LOGOFRESH S-LINE & M-LINE, THERMOSTATIC


LogoFresh S-line & M-line, thermostatic

Compact, ready-to-fit central fresh water stations with thermostatically controlled hot water preparation, available as surface mounting or tank installation depending on the respective system.

- Max. Heating / sanitary pressure: 3 bar / 6 bar
- Max. permissible heating / sanitary temperatures: 110 °C / 110 °C
- Supply voltage: 230 V / 50 Hz

Additional complimentary and supplementary products available (e.g. measuring equipment for consumption metering, heating water buffer tank, pump groups etc.).



Type		Order Code
Type 1 - LogoFresh S-line thermostatic	1	M10271.51
Type 2 - LogoFresh S-line thermostatic with domestic hot water circulation	1	M10271.5
Type 1 - LogoFresh M-line thermostatic	1	M10271.41
Type 2 - LogoFresh M-line thermostatic with domestic hot water circulation	1	M10271.4
S-Line - insulation wedge for tank installation	1	M66306.3673



S-line thermostatic performance data: Cold water heating 35 K (10 to 45 °C)

Primary supply temperature [°C]	50	55	60	65	70	75	80	-
Primary return line temperature [°C]	29	26	24	23	22	21	20	-
Domestic hot water draw-off volume [l/min]	10	14	18	21	24	26	29	-
Domestic hot water output [kW]	25	35	43	50	57	64	71	-
Primary flow rate [l/h]	1050	1050	1050	1050	1050	1050	1050	-
Primary pressure loss [bar]	0.28	0.28	0.28	0.28	0.28	0.28	0.28	-
Primary residual delivery head [bar]	0.15	0.15	0.15	0.15	0.15	0.15	0.15	-
Secondary pressure loss [bar]	0.11	0.21	0.34	0.46	0.6	0.7	0.87	-
Max. mixed water (10 - 38 °C) ¹⁾ [Liter]	13	18	23	26	30	33	36	-

¹⁾ calculated mixed water quantity at bathtub / shower head with 0.3 l/s of mixed water

S-line thermostatic performance data: Cold water heating 40 K (10 to 50 °C)

Primary supply temperature [°C]	-	55	60	65	70	75	80	-
Primary return line temperature [°C]	-	29	26	23	21	20	19	-
Domestic hot water draw-off volume [l/min]	-	9	12	15	17	19	21	-
Domestic hot water output [kW]	-	25	35	42	46	52	58	-
Primary flow rate [l/h]	-	1050	1050	1050	1050	1050	1050	-
Primary pressure loss [bar]	-	0.28	0.28	0.28	0.28	0.28	0.28	-
Primary residual delivery head [bar]	-	0.15	0.15	0.15	0.15	0.15	0.15	-
Secondary pressure loss [bar]	-	0.11	0.18	0.27	0.38	0.5	0.65	-
Max. mixed water (10 - 38 °C) ¹⁾ [Liter]	-	13	17	21	24	27	30	-

¹⁾ calculated mixed water quantity at bathtub / shower head with 0.3 l/s of mixed water

S-line thermostatic performance data: Cold water heating 50 K (10 to 60 °C)

Primary supply temperature [°C]	-	-	-	65	70	75	80	-
Primary return line temperature [°C]	-	-	-	34	29	27	25	-
Domestic hot water draw-off volume [l/min]	-	-	-	9	11	13	15	-
Domestic hot water output [kW]	-	-	-	30	39	46	52	-
Primary flow rate [l/h]	-	-	-	1050	1050	1050	1050	-
Primary pressure loss [bar]	-	-	-	0.28	0.28	0.28	0.28	-
Primary residual delivery head [bar]	-	-	-	0.15	0.15	0.15	0.15	-
Secondary pressure loss [bar]	-	-	-	0.11	0.15	0.24	0.3	-
Max. mixed water (10 - 38 °C) ¹⁾ [Liter]	-	-	-	16	20	23	27	-

¹⁾ calculated mixed water quantity at bathtub / shower head with 0.3 l/s of mixed water

M-line thermostatic performance data: Cold water heating 35 K (10 to 45 °C)

Primary supply temperature [°C]	50	55	60	65	70	75	-	-
Primary return line temperature [°C]	26	22	20	19	18	17	-	-
Domestic hot water draw-off volume [l/min]	15	20	24	28	32	35	-	-
Domestic hot water output [kW]	37	49	59	69	77	86	-	-
Primary flow rate [l/h]	1310	1310	1310	1310	1310	1310	-	-
Primary pressure loss [bar]	0.36	0.36	0.36	0.36	0.36	0.36	-	-
Primary residual delivery head [bar]	0.15	0.15	0.15	0.15	0.15	0.15	-	-
Secondary pressure loss [bar]	0.13	0.23	0.35	0.46	0.58	0.71	-	-
Max. mixed water (10 - 38 °C) ¹⁾ [Liter]	19	25	30	35	40	44	-	-

¹⁾ calculated mixed water quantity at bathtub / shower head with 0.3 l/s of mixed water

M-line thermostatic performance data: Cold water heating 40 K (10 to 50 °C)

Primary supply temperature [°C]	-	55	60	65	70	75	-	-
Primary return line temperature [°C]	-	28	24	22	21	19	-	-
Domestic hot water draw-off volume [l/min]	-	15	19	23	26	30	-	-
Domestic hot water output [kW]	-	41	53	64	72	83	-	-
Primary flow rate [l/h]	-	1310	1310	1310	1310	1310	-	-
Primary pressure loss [bar]	-	0.36	0.36	0.36	0.36	0.36	-	-
Primary residual delivery head [bar]	-	0.15	0.15	0.15	0.15	0.15	-	-
Secondary pressure loss [bar]	-	0.13	0.21	0.31	0.39	0.52	-	-
Max. mixed water (10 - 38 °C) ¹⁾ [Liter]	-	21	27	33	37	43	-	-

¹⁾ calculated mixed water quantity at bathtub / shower head with 0.3 l/s of mixed water

M-line thermostatic performance data: Cold water heating 50 K (10 to 60 °C)

Primary supply temperature [°C]	-	-	-	65	70	75	-	-
Primary return line temperature [°C]	-	-	-	33	28	26	-	-
Domestic hot water draw-off volume [l/min]	-	-	-	14	18	21	-	-
Domestic hot water output [kW]	-	-	-	48	62	73	-	-
Primary flow rate [l/h]	-	-	-	1310	1310	1310	-	-
Primary pressure loss [bar]	-	-	-	0,36	0,36	0,36	-	-
Primary residual delivery head [bar]	-	-	-	0,15	0,15	0,15	-	-
Secondary pressure loss [bar]	-	-	-	0,12	0,19	0,26	-	-
Max. mixed water (10 - 38 °C) ¹⁾ [Liter]	-	-	-	25	32	38	-	-

¹⁾ calculated mixed water quantity at bathtub / shower head with 0.3 l/s of mixed water

Design features and technical data - S-line & M-line, thermostatic

Design features	S-Line		M-Line	
	Type 3	Type 4	Type 1	Type 2
Dimensions including housing: Width x height x depth [mm]	460 x 660 x 250	460 x 660 x 250	500 x 890 x 340	500 x 890 x 340
Bottom connections cold water, hot water, FL & RL buffer (DHW circulation)	3/4"	3/4"	1"	1" (3/4")
Surface-mounted installation	✓	✓	✓	✓
Tank assembly (only with optional insulating wedges)	✓	✓	-	-
Stainless-steel plate heat exchanger (copper-soldered), vertical design to reduce the risk of calcification	✓	✓	✓	✓
Achieves lower return line temperatures	✓	✓	✓	✓
Heating side high-efficiency recirculation pump	✓	✓	✓	✓
Bleed valve on the heating side	✓	✓	✓	✓
Backflow preventer	✓	✓	-	-
Shut-off valves (except for cold water inlet)	✓	✓	✓	✓
Pipework made from insulated stainless-steel corrugated pipes	✓	✓	✓	✓
Mounted entirely mechanically tension-free on base plate, inserted in housing and inspected	✓	✓	✓	✓
Domestic hot water circulation with pump, backflow preventer, piping and screw fitting components installed in the station	-	✓	-	✓
Flow switch	✓	✓	✓	✓
Connection option for temperature sensor connector	-	-	✓	✓
Mixing of primary return line water for red. FL temperature	✓	✓	✓	✓
Continuously adjustable heating medium flow rate via therm. domestic water regulator	✓	✓	✓	✓
Scalding protection	-	-	✓	✓
Temperature adjusting range on heating side (flow line temperature limitation measured in heating medium)	-	-	50 - 75 °C	50 - 75 °C
Temperature adjustment range of hot water (measured in hot water)	20 - 65 °C	20 - 65 °C	40 - 65 °C	40 - 65 °C
Temperature display on valve (heating side)	-	-	✓	✓
Housing: Full EPP insulation of housing (black)	✓	✓	✓	✓
Terminal box for electric connection	✓	✓	✓	✓
Number of parallel connections (overflow valve required)	4	4	4	4
Insulation wedges for tank installation - connectible wedges for pre-formed rear-wall insulation for mounting directly onto a tank (tank ø ≥ 600 mm)	optional	optional	-	-


LOGOFRESH ACCESSORIES

Overflow valve for cascade connection

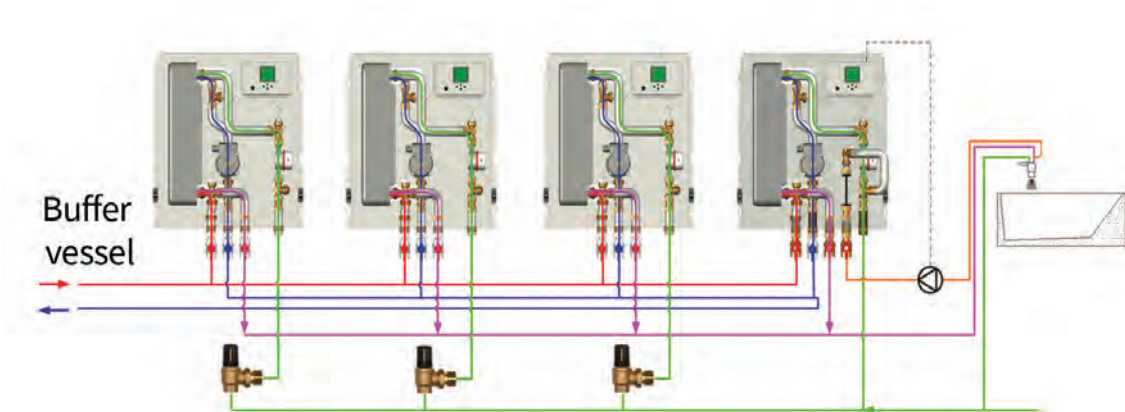


Cascade connection

If a greater draw-off volume is required which exceeds the output of an individual fresh water station, there is the option of a cascade connection. The overflow valve is adjusted so that the downstream station begins to operate from a specified flow of hot domestic water.

Type	Nominal width	Adjustment range [mbar]		Order Code
Cascade overflow valve	DN 25	100 - 500	1	M69072.9

Cascade connection



Return line stratified module with thermostatic distribution valve



Using this module enables a temperature-controlled return flow stratification, thus preventing a mixing of temperatures in the buffer tank in circulation mode. The module is installed in the return line between the fresh water station and the buffer tank.

Type	Connections		Order Code
RL stratified module	1" M	1	M10270.06

BACKFLOW PREVENTERS PRESCOR BFP BA

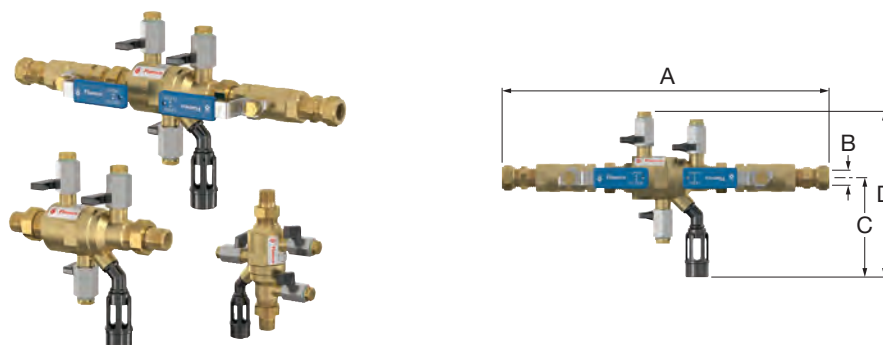
The Flamco Prescor BFP backflow preventers type BA are constructed in accordance with the EN 12729 standard and protect the mains water supply network from backflow of contaminated water up to liquid class 4. The preventer is of extremely compact design enabling it to be used in a wide range of settings in both domestic and commercial use. This type of backflow preventer is used in central heating systems up to 45 kW featuring additives, dentists' chairs, soap dispensing systems with an LD50 < 200 mg/kg and swimming pools. An integrated strainer prevents contamination of the non-return valves. Together with the two required valves, this provides a compact and problem-free fitting.


Prescor BFP BA

Backflow preventer Prescor BFP type BA suitable for installations with liquid class 4.

- Low pressure drop.
- Easy to install both horizontally and vertically.
- Provided with strainer.
- Smallest in its class.
- Complete set.
- Lowest sound class: ≤ 20 dB(A) according to DIN-52 218 Group I.

- Material: brass, SST, plastic and EPDM.
- Working temperature: 1 °C / 65 °C.
- Nominal design pressure: PN 10.



Type	DN (syst.)	Con- nection (B)	Dimensions			Ball valve	Drain valve	Pres- sure gauge	Strai- ner	Weight [kg]		Order Code
			A [mm]	C [mm]	D [mm]							
Prescor BFP BA ½ M	15	G ½" M	171	105	175	-	-	-	•	0.83	1	27400
Prescor BFP BA G ¾" M Unit	15	G ¾" M	288	105	175	•	-	-	•	1.46	1	27402
Prescor BFP BA K15 Unit	15	K 15	351	105	175	•	-	-	•	1.52	1	27406

kiwa




REINFORCED HOSES

Meiflex Reinforced hoses for sanitary / heating / air-conditioning F x M



Meiflex reinforced hoses for sanitary / heating / air-conditioning with stainless steel braid and silicone inliner.

- Universally applicable for sanitary, heating and air-conditioning.
- Highly flexible connection in certified quality.
- Can be used for desalinated or demineralised water.
- Reinforced hoses with stainless steel braid for sanitary, heating and air-conditioning with red / red / blue identification.
- Internal hose made from hygienically safe silicone (odourless, hypo-allergenic, tasteless, not impermeable to oxygen in the air).
- For temperatures up to +110 °C (domestic water up to 90 °C).
- Operating pressures: 16 bar (up to 100 °C), 10 bar (up to 110 °C).
- Specified production tolerances max. +/- 2.5%.
- DVGW sanitary test, TÜV inspection for heating / air-conditioning.
- Article number, technical data and application on label, including seals.
- Further details can be obtained from the current technical information.

Type	Connection ["]	Length [mm]	Inter- nal Ø [mm]	Weight [kg]		Order Code
Meiflex Silicone 1/2 x 1/2 F/M x 300	1/2" F x 1/2" M	300	13	0.14	1	M5715.1104.30
Meiflex Silicone 1/2 x 1/2 F/M x 500	1/2" F x 1/2" M	500	13	0.20	1	M5715.1104.50
Meiflex Silicone 1/2 x 1/2 F/M x 700	1/2" F x 1/2" M	700	13	0.24	1	M5715.1104.70
Meiflex Silicone 1/2 x 1/2 F/M x 1000	1/2" F x 1/2" M	1000	13	0.33	1	M5715.1104.100
Meiflex Silicone 3/4 x 1/2 F/M x 300	3/4" F x 1/2" M	300	13	0.16	1	M5715.1105.30
Meiflex Silicone 3/4 x 1/2 F/M x 500	3/4" F x 1/2" M	500	13	0.22	1	M5715.1105.50
Meiflex Silicone 1/2 x 3/4 F/M x 300	1/2" F x 3/4" M	300	13	0.17	1	M5715.1106.30
Meiflex Silicone 1/2 x 3/4 F/M x 500	1/2" F x 3/4" M	300	13	0.22	1	M5715.1106.50
Meiflex Silicone 3/4 x 3/4 F/M x 300	3/4" F x 3/4" M	300	13	0.17	1	M5715.1107.30
Meiflex Silicone 3/4 x 3/4 F/M x 500	3/4" F x 3/4" M	500	13	0.22	1	M5715.1107.50
Meiflex Silicone 3/4 x 3/4 F/M x 700	3/4" F x 3/4" M	700	13	0.26	1	M5715.1107.70
Meiflex Silicone 3/4 x 3/4 F/M x 1000	3/4" F x 3/4" M	1000	13	0.34	1	M5715.1107.100
Meiflex Silicone 3/4 x 3/4 F/M x 300	3/4" F x 3/4" M	300	18	0.26	1	M5725.1127.30
Meiflex Silicone 3/4 x 3/4 F/M x 500	3/4" F x 3/4" M	500	18	0.34	1	M5725.1127.50
Meiflex Silicone 3/4 x 3/4 F/M x 700	3/4" F x 3/4" M	700	18	0.42	1	M5725.1127.70
Meiflex Silicone 3/4 x 3/4 F/M x 1000	3/4" F x 3/4" M	1000	18	0.56	1	M5725.1127.100
Meiflex Silicone 1 x 1 F/M x 300	1" F x 1" M	300	25	0.44	1	M5725.1134.30
Meiflex Silicone 1 x 1 F/M x 500	1" F x 1" M	500	25	0.54	1	M5725.1134.50
Meiflex Silicone 1 x 1 F/M x 700	1" F x 1" M	700	25	0.68	1	M5725.1134.70
Meiflex Silicone 1 x 1 F/M x 1000	1" F x 1" M	1000	25	0.82	1	M5725.1134.100
Meiflex Silicone 1 1/4 x 1 1/4 F/M x 300	1 1/4" F x 1 1/4" M	300	32	0.74	1	M5725.1142.30
Meiflex Silicone 1 1/4 x 1 1/4 F/M x 500	1 1/4" F x 1 1/4" M	500	32	0.90	1	M5725.1142.50
Meiflex Silicone 1 1/4 x 1 1/4 F/M x 700	1 1/4" F x 1 1/4" M	700	32	1.10	1	M5725.1142.70
Meiflex Silicone 1 1/4 x 1 1/4 F/M x 1000	1 1/4" F x 1 1/4" M	1000	32	1.32	1	M5725.1142.100

Meiflex Reinforced hoses for sanitary / heating / air-conditioning F x F



As with Meiflex reinforced hoses for sanitary / heating /air-conditioning, however, with F x F connection.

Type	Connection ["]	Length [mm]	Internal Ø [mm]	Weight [kg]		Order Code
Meiflex Silicone 1/2 F/F x 300	1/2" F x 1/2" F	300	13	0.13	1	M5715.1204.30
Meiflex Silicone 1/2 F/F x 500	1/2" F x 1/2" F	500	13	0.18	1	M5715.1204.50
Meiflex Silicone 1/2 F/F x 700	1/2" F x 1/2" F	700	13	0.24	1	M5715.1204.70
Meiflex Silicone 1/2 F/F x 1000	1/2" F x 1/2" F	1000	13	0.31	1	M5715.1204.100
Meiflex Silicone 3/4 F/F x 300	3/4" F x 3/4" F	300	13	0.18	1	M5715.1207.30
Meiflex Silicone 3/4 F/F x 500	3/4" F x 3/4" F	500	13	0.22	1	M5715.1207.50
Meiflex Silicone 3/4 F/F x 300	3/4" F x 3/4" F	300	18	0.28	1	M5725.1227.30
Meiflex Silicone 3/4 F/F x 500	3/4" F x 3/4" F	500	18	0.36	1	M5725.1227.50
Meiflex Silicone 3/4 F/F x 700	3/4" F x 3/4" F	700	18	0.44	1	M5725.1227.70
Meiflex Silicone 3/4 F/F x 1000	3/4" F x 3/4" F	1000	18	0.58	1	M5725.1227.100
Meiflex Silicone 1 F/F x 300	1" F x 1" F	300	25	0.46	1	M5725.1234.30
Meiflex Silicone 1 F/F x 500	1" F x 1" F	500	25	0.56	1	M5725.1234.50
Meiflex Silicone 1 F/F x 700	1" F x 1" F	700	25	0.68	1	M5725.1234.70
Meiflex Silicone 1 F/F x 1000	1" F x 1" F	1000	25	0.84	1	M5725.1234.100
Meiflex Silicone 1 1/4 F/F x 300	1 1/4" F x 1 1/4" F	300	32	0.74	1	M5725.1242.30
Meiflex Silicone 1 1/4 F/F x 500	1 1/4" F x 1 1/4" F	500	32	0.90	1	M5725.1242.50
Meiflex Silicone 1 1/4 F/F x 700	1 1/4" F x 1 1/4" F	700	32	1.06	1	M5725.1242.70
Meiflex Silicone 1 1/4 F/F x 1000	1 1/4" F x 1 1/4" F	1000	32	1.34	1	M5725.1242.100

* Other lengths available upon request.

Meiflex Reinforced hoses for sanitary / heating / air-conditioning M x F with elbow



As with Meiflex reinforced hoses for sanitary / heating /air-conditioning, however, with M x F connection and elbow.


Type	Connection ["]	Length [mm]	Internal Ø [mm]	Weight [kg]		Order Code
Meiflex Silicone 1/2 M/F elbow x 300	1/2" M x 1/2" F	300	13	0.16	1	M5715.1604.30
Meiflex Silicone 1/2 M/F elbow x 500	1/2" M x 1/2" F	500	13	0.20	1	M5715.1604.50
Meiflex Silicone 1/2 M/F elbow x 700	1/2" M x 1/2" F	700	13	0.26	1	M5715.1604.70
Meiflex Silicone 1/2 M/F elbow x 1000	1/2" M x 1/2" F	1000	13	0.33	1	M5715.1604.100
Meiflex Silicone 3/4 M/F elbow x 300	3/4" M x 3/4" F	300	18	0.30	1	M5727.1127.30
Meiflex Silicone 3/4 M/F elbow x 500	3/4" M x 3/4" F	500	18	0.40	1	M5727.1127.50
Meiflex Silicone 3/4 M/F elbow x 700	3/4" M x 3/4" F	700	18	0.40	1	M5727.1127.70
Meiflex Silicone 3/4 M/F elbow x 1000	3/4" M x 3/4" F	1000	18	0.60	1	M5727.1127.100
Meiflex Silicone 1 M/F elbow x 300	1" M x 1" F	300	25	0.54	1	M5727.1134.30
Meiflex Silicone 1 M/F elbow x 500	1" M x 1" F	500	25	0.62	1	M5727.1134.50
Meiflex Silicone 1 M/F elbow x 700	1" M x 1" F	700	25	0.76	1	M5727.1134.70
Meiflex Silicone 1 M/F elbow x 1000	1" M x 1" F	1000	25	0.95	1	M5727.1134.100

* Other lengths available upon request.

Meiflex Reinforced hoses for sanitary / heating / air-conditioning F x F with elbow

As with Meiflex reinforced hoses for sanitary / heating / air-conditioning, however, with F x F connection and elbow.



Type	Connection ["]	Length* [mm]	Internal Ø [mm]	Weight [kg]		Order Code
Meiflex Silicone 1/2 F/F elbow x 300	1/2" F x 1/2" F	300	13	0.15	1	M5715.1704.30
Meiflex Silicone 1/2 F/F elbow x 500	1/2" F x 1/2" F	500	13	0.20	1	M5715.1704.50
Meiflex Silicone 1/2 F/F elbow x 700	1/2" F x 1/2" F	700	13	0.24	1	M5715.1704.70
Meiflex Silicone 1/2 F/F elbow x 1000	1/2" F x 1/2" F	1000	13	0.32	1	M5715.1704.100
Meiflex Silicone 3/4 F/F elbow x 300	3/4" F x 3/4" F	300	18	0.28	1	M5727.1227.30
Meiflex Silicone 3/4 F/F elbow x 500	3/4" F x 3/4" F	500	18	0.36	1	M5727.1227.50
Meiflex Silicone 3/4 F/F elbow x 700	3/4" F x 3/4" F	700	18	0.44	1	M5727.1227.70
Meiflex Silicone 3/4 F/F elbow x 1000	3/4" F x 3/4" F	1000	18	0.61	1	M5727.1227.100
Meiflex Silicone 1 F/F elbow x 300	1" F x 1" F	300	25	0.46	1	M5727.1234.30
Meiflex Silicone 1 F/F elbow x 500	1" F x 1" F	500	25	0.56	1	M5727.1234.50
Meiflex Silicone 1 F/F elbow x 700	1" F x 1" F	700	25	0.68	1	M5727.1234.70
Meiflex Silicone 1 F/F elbow x 1000	1" F x 1" F	1000	25	0.84	1	M5727.1234.100


* Other lengths available upon request.

Meiflex Reinforced hoses for dishwashers and washing machines F x F with elbow

Meiflex reinforced hoses for dishwashers and washing machines with silicone inliner.

- Highly flexible connection in certified quality.
- Internal hose made from hygienically safe silicone (odourless, hypo-allergenic, tasteless, not impermeable to oxygen in the air).
- For temperatures up to +110 °C (domestic water up to 90 °C).
- Can be used for desalinated or demineralised water.
- Operating pressures: 16 bar (up to 100 °C), 10 bar (up to 110 °C).
- Specified production tolerances max. +/- 2.5%.
- DVGW sanitary test, TÜV inspection for heating / air-conditioning.
- Article number, technical data and application on label, including seals.
- Further details can be obtained from the current technical information.



Type	Connection ["]	Length* [mm]	Internal Ø [mm]	Weight [kg]		Order Code
Meiflex Silicone 3/4 F/F elbow x 1000	3/4" F x 3/4" F	1000	13	0.35	1	M5715.1707.100
Meiflex Silicone 3/4 F/F elbow x 2000	3/4" F x 3/4" F	2000	13	0.59	1	M5715.1707.200

* Other lengths available upon request.

Meiflex Reinforced hoses for sanitary F x M



Meiflex sanitary reinforced hoses for special domestic water installations with stainless steel braid and silicone inliner.

- Connection hoses for domestic water applications in accordance with DVGW, Group I.
- Stainless steel braid with red / red / blue identification.
- Internal hose made from hygienically safe silicone.
- Can be used for desalinated or demineralised water.
- Models from 3/8" and 8 mm internal diameter.
- For temperatures up to 110 °C for heating and up to 90 °C for water (in accordance with the Drinking Water Ordinance).
- Operating pressures: 16 bar (up to 100 °C), 10 bar (up to 110 °C).
- Specific production tolerances max. +/- 2.5%.
- DVGW sanitary test, TÜV inspection for heating / air-conditioning.

Type	Connection ["]	Length* [mm]	Internal Ø [mm]	Weight [kg]		Order Code
Meiflex Sanitary 1/2 x 3/8 F/M x 300	1/2" F x 3/8" M	300	8	0.10	1	M5715.0102.30
Meiflex Sanitary 1/2 x 3/8 F/M x 500	1/2" F x 3/8" M	500	8	0.12	1	M5715.0102.50
Meiflex Sanitary 1/2 x 1/2 F/M x 300	1/2" F x 1/2" M	300	8	0.10	1	M5715.0104.30
Meiflex Sanitary 1/2 x 1/2 F/M x 500	1/2" F x 1/2" M	500	8	0.13	1	M5715.0104.50

* Other lengths available upon request.

Meiflex Reinforced hoses for sanitary F x F



As with Meiflex reinforced hoses for sanitary, however, with F x F connection.

Type	Connection ["]	Length* [mm]	Internal Ø [mm]	Weight [kg]		Order Code
Meiflex Sanitary 3/8 x 3/8 F/F x 300	3/8" F x 3/8" F	300	8	0.08	1	M5715.0201.30
Meiflex Sanitary 3/8 x 3/8 F/F x 500	3/8" F x 3/8" F	500	8	0.12	1	M5715.0201.50
Meiflex Sanitary 1/2 x 3/8 F/F x 300	1/2" F x 3/8" F	300	8	0.10	1	M5715.0202.30
Meiflex Sanitary 1/2 x 3/8 F/F x 500	1/2" F x 1/2" M	500	8	0.13	1	M5715.0202.50
Meiflex Sanitary 1/2 x 1/2 F/F x 300	1/2" F x 1/2" F	300	8	0.12	1	M5715.0204.30
Meiflex Sanitary 1/2 x 1/2 F/F x 500	1/2" F x 1/2" F	500	8	0.14	1	M5715.0204.50

* Other lengths available upon request.

Meiflex Reinforced hoses for sanitary F x F with elbow



As with Meiflex reinforced hoses for sanitary, however, with F x F connection and elbow.


Type	Connection ["]	Length* [mm]	Internal Ø [mm]	Weight [kg]		Order Code
Meiflex Sanitary 3/8 x 3/8 F/F elbow x 300	3/8" F x 3/8" F	300	8	0.08	1	M5717.0201.30
Meiflex Sanitary 3/8 x 3/8 F/F elbow x 500	3/8" F x 3/8" F	500	8	0.12	1	M5717.0201.50

* Other lengths available upon request.

Meiflex Reinforced hoses for sanitary compression fitting x pipe end

As with Meiflex reinforced hoses for sanitary, however, with compression fitting / pipe end connection.




Type	Connection [mm]	Length* [mm]	Internal Ø [mm]	Weight [kg]		Order Code
Meiflex Sanitary 10 x 10 KVL/Rohr x 300	10 x 10	300	8	0.10	1	M5715.5310.30
Meiflex Sanitary 10 x 10 KVL/Rohr x 500	10 x 10	500	8	0.12	1	M5715.5310.50

* Other lengths available upon request.

Meiflex Reinforced hoses for sanitary F x compression fitting

As with Meiflex reinforced hoses for sanitary, however, with F x compression fitting connection.




Type	Connection ["] [mm]	Length* [mm]	Internal Ø [mm]	Weight [kg]		Order Code
Meiflex Sanitary 3/8" x 10 F/KVL x 300	3/8" F 10	300	8	0.10	1	M5715.2210.30
Meiflex Sanitary 3/8" x 10 F/KVL x 500	3/8" F 10	500	8	0.12	1	M5715.2210.50
Meiflex Sanitary 1/2" x 10 F/KVL x 300	1/2" F 10	300	8	0.12	1	M5715.2212.30
Meiflex Sanitary 1/2" x 10 F/KVL x 500	1/2" F 10	500	8	0.14	1	M5715.2212.50

* Other lengths available upon request.

Meiflex Reinforced hoses for sanitary F x pipe end

As with Meiflex reinforced hoses for sanitary, however, with F x pipe end connection.



Type	Connection ["] [mm]	Length* [mm]	Internal Ø [mm]	Weight [kg]		Order Code
Meiflex Sanitary 3/8" x 10 F/Rohr x 300	3/8" F 10	300	8	0.08	1	M5715.5210.30
Meiflex Sanitary 3/8" x 10 F/Rohr x 500	3/8" F 10	500	8	0.10	1	M5715.5210.50
Meiflex Sanitary 1/2" x 10 F/Rohr x 300	1/2" F 10	300	8	0.08	1	M5715.5212.30
Meiflex Sanitary 1/2" x 10 F/Rohr x 500	1/2" F 10	500	8	0.12	1	M5715.5212.50

* Other lengths available upon request.

PRESCOR B AND SB SAFETY VALVES

For protecting water heaters and potable water systems.

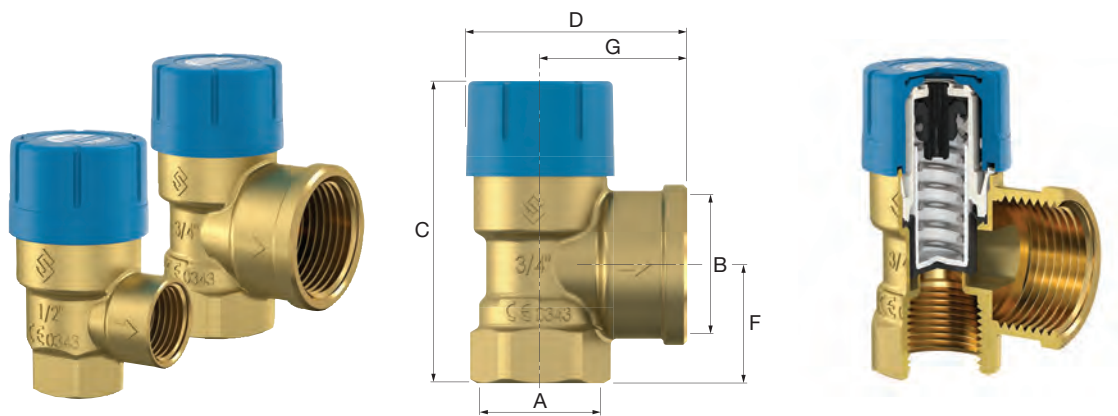
When the system pressure reaches the set pressure, the Prescor B boiler valve begins to vent, whereby the pressure stops rising. If, due to specific circumstances, the pressure rapidly rises over the set pressure, the Prescor B boiler valve will open fully, creating a large blow off capacity. This is a permanent, reliable safeguard against overpressure. Venting can be prevented by installing a suitably sized Airfix expansion vessel for sanitary systems.


The seating of Prescor boiler valves is designed so that it not only makes a perfect seal but can also achieve a large blow-off capacity. The hardness of the rubber is adapted according to the set pressure of the safety valve. Due to this combination of a specifically designed seating and special rubber it is possible to achieve optimum safety.

- Wide range so that the correct valve can be selected appropriate to the application.
 - Can be used in combination with any storage boiler system.
 - Because of the "pop" effect these valves have a high blow-off capacity.
 - Solid brass housing.
 - Valve seat with silicon free rubber seal.
 - Anti-ageing steel spring maintains the set pressure accurately.
 - With silicon free diaphragm that prevents moisture and dirt from getting into the moving parts.
 - Construction and choice of materials are your guarantee of accuracy and safety.
-
- In accordance with PED 2014/68/EU and EN 12516-3.

Prescor B

- Minimum/Maximum working temperature: 0 °C / 95 °C.
- Peak load: 140 °C.

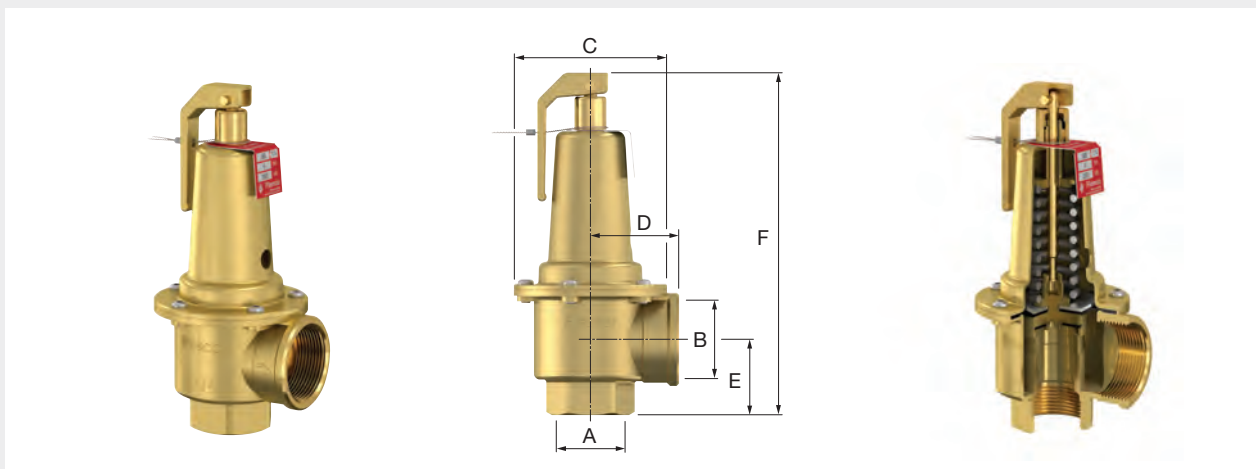



Type	Set pressure [bar]	Connection		Dimensions				Capacity [kW]		Order Code
		A	B	C [mm]	D [mm]	F [mm]	G [mm]			
Prescor B 1/2 - 6.0 bar	6.0	Rp 1/2"	Rp 1/2"	68.7	47.2	21.5	28.5	75	50	27100
Prescor B 1/2 - 7.0 bar	7.0	Rp 1/2"	Rp 1/2"	68.7	47.2	21.5	28.5	75	50	27103
Prescor B 1/2 - 8.0 bar	8.0	Rp 1/2"	Rp 1/2"	68.7	47.2	21.5	28.5	75	50	27101
Prescor B 1/2 - 10.0 bar	10.0	Rp 1/2"	Rp 1/2"	68.7	47.2	21.5	28.5	75	50	27102
Prescor B 3/4 - 6.0 bar	6.0	Rp 3/4"	Rp 1"	76.8	55.2	29.5	36.5	150	40	27110
Prescor B 3/4 M - 6.0 bar	6.0	R 3/4"	Rp 3/4"	85.3	49.1	38	30.5	150	40	27113
Prescor B 3/4 M - 10.0 bar	10.0	R 3/4"	Rp 3/4"	85.3	49.1	38	30.5	150	40	27114
Prescor B 3/4 - 6.0 bar	6.0	Rp 3/4"	Rp 3/4"	70.9	49.2	23.5	30.5	150	50	27115
Prescor B 3/4 - 8.0 bar	8.0	Rp 3/4"	Rp 3/4"	70.9	49.2	23.5	30.5	150	50	27116
Prescor B 3/4 - 10.0 bar	10.0	Rp 3/4"	Rp 3/4"	70.9	49.2	23.5	30.5	150	50	27117
Prescor B 3/4 - 7.0 bar	7.0	Rp 3/4"	Rp 3/4"	70.9	49.2	23.5	30.5	150	40	28233
Prescor B 3/4 - 8.0 bar	8.0	Rp 3/4"	Rp 1"	76.8	55.2	29.5	36.5	150	40	27111
Prescor B 3/4 - 10.0 bar	10.0	Rp 3/4"	Rp 1"	76.8	55.2	29.5	36.5	150	40	27112
Prescor B 1 - 6.0 bar	6.0	Rp 1"	Rp 1 1/4"	100.5	73.2	36.0	47.0	250	16	29005
Prescor B 1 - 7.0 bar	7.0	Rp 1"	Rp 1 1/4"	100.5	73.2	36.0	47.0	250	16	28993
Prescor B 1 - 8.0 bar	8.0	Rp 1"	Rp 1 1/4"	100.5	73.2	36.0	47.0	250	16	29006
Prescor B 1 - 10.0 bar	10.0	Rp 1"	Rp 1 1/4"	100.5	73.2	36.0	47.0	250	16	29007
Prescor B 1/2 M x K 15 - 6.0 bar	6.0	R 1/2"	K 15	81.2	60.5	37.0	42.0	75	40	28283
Prescor B 1/2 M x K 15 - 9.0 bar	9.0	R 1/2"	K 15	81.2	60.5	37.0	42.0	75	40	28281
Prescor B 1/2 M x K 15 - 10.0 bar	10.0	R 1/2"	K 15	81.2	60.5	37.0	42.0	75	40	28282



Prescor SB

- Minimum/Maximum working temperature: 0 °C / 95 °C.
- Peak load: 140 °C.



Type	Set pressure [bar]	Connection		Dimensions				Capacity [kW]		Order Code
		A	B	C [mm]	D [mm]	E [mm]	F [mm]			
Prescor SB 1 1/4 - 6.0 bar	6.0	G 1 1/4" F	G 1 1/2" F	95	55	47	213	350	1	29008
Prescor SB 1 1/4 - 8.0 bar	8.0	G 1 1/4" F	G 1 1/2" F	95	55	47	213	350	1	29009
Prescor SB 1 1/4 - 10.0 bar	10.0	G 1 1/4" F	G 1 1/2" F	95	55	47	213	350	1	29010
Prescor SB 1 1/2 - 6.0 bar	6.0	G 1 1/2" F	G 2" F	95	60	47	220	600	1	29011
Prescor SB 1 1/2 - 8.0 bar	8.0	G 1 1/2" F	G 2" F	95	60	47	220	600	1	29012
Prescor SB 1 1/2 - 10.0 bar	10.0	G 1 1/2" F	G 2" F	95	60	47	220	600	1	29013
Prescor SB 2 - 6.0 bar	6.0	G 2" F	G 2 1/2" F	95	80	61	278	900	1	29015
Prescor SB 2 - 8.0 bar	8.0	G 2" F	G 2 1/2" F	95	80	61	278	900	1	29016
Prescor SB 2 - 10.0 bar	10.0	G 2" F	G 2 1/2" F	95	80	61	278	900	1	29017



PRESCOR T&P VALVE

The Prescor T&P temperature and pressure relief valves control and limit the temperature and pressure of the hot water contained in a domestic water heater or storage vessel and prevent it from being able to reach temperatures that are too high. On reaching the settings, the valve discharges a sufficient amount of water into the atmosphere so that the temperature and pressure return within the system's operating limits.

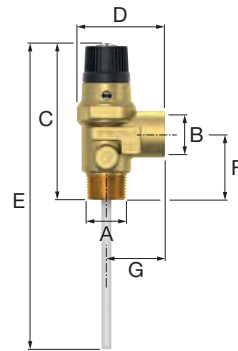
The valve opens the outlet on reaching the settings for:


- **Temperature:** the thermostat compound inside the temperature sensor, submerged in the hot water storage heater, expands as the temperature increases. This expansion causes a thrust pin to move and act on the obturator, opening the valve.
- **Pressure:** The obturator, opposed by a set spring, raises on reaching the pressure setting and opens the outlet completely. The pressure setting is chosen according to the maximum permissible pressure in the system.

As the temperature and pressure decrease, the opposite action occurs with the valve subsequently reclosing within the set tolerances.

Prescor T&P

- Opening temperature: 89 °C / 96 °C.
- Minimum/Maximum working temperature: -10 °C / 120 °C.
- Peak load: 140 °C.

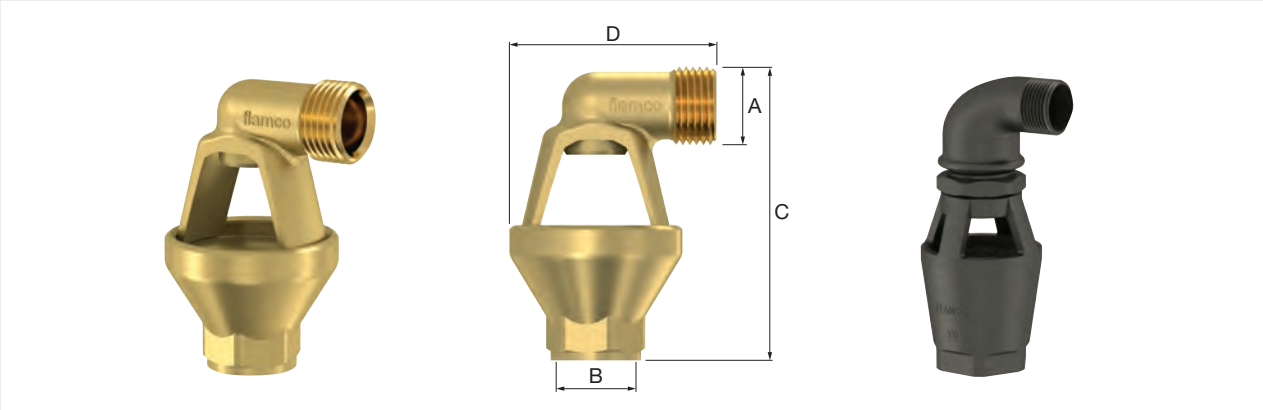



Type	Set pressure [bar]	Connection		Dimensions					Heating capacity [kW]		Order Code
		A	B	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]			
Prescor T&P - 3.5 bar	3.5	22 mm	22 mm	110		198	51	47	23	1	27135
Prescor T&P - 7 bar	7.0	R 3/4"	G 3/4" F	101		198	42	38	23	1	27146

TUNDISH

Tundish

Open 90° tundish, fitted between the Prescor safety valve and the discharge pipe. It enables you to check through the opening whether the safety valve is discharging excess water.



Type	Connection		Application	Dimensions			Order Code
	A	B		C [mm]	D [mm]		
Tundish 1/2 (brass)	R 1/2"	Rp 1/2"	Prescor 1/2", Prescomano 1/2", Prescor B 1/2"	80	58	1	27350
Tundish 3/4 (brass)	R 3/4"	Rp 1"	Prescor B 1/2", Prescor 3/4", Prescomano 3/4", Prescor Solar 1/2"	94	76	1	27360
Tundish 1 (cast iron)	1" M	1 1/2" F	Prescor 3/4" TRD, Prescor Solar 3/4"	185	95	1	27325
Tundish 1 1/4 (cast iron)	1 1/4" M	1 1/2" F	Prescor 1", Prescor Solar 1"	195	100	1	27330
Tundish 1 1/2 (cast iron)	1 1/2" M	1 1/2" F	Prescor 1 1/4", Prescor S 1 1/4"	205	105	1	27340

RED BRASS PISTON VALVES

With the Rossweiner trademark, Meibes offers a comprehensive range of valves and fittings for domestic water installations. The following pages contain the red brass piston valves with female and male thread, and red brass backflow preventers as individual components. All fittings are DIN-DVGW certified. The sealing materials comply with KTW recommendations for domestic water installations. The spindle threads are not directly exposed to the medium flow, thus facilitating actuation and eliminating wear as a result of corrosion and depositions.


Advantages for you

- Cavity-free upper section - no stagnant water which promotes the development of legionella bacteria
 - Parts with direct contact to media made from corrosion-resistant material
 - Optimised use of materials for a favourable price-performance ratio
 - Unobstructed flow guarantees low-noise operation
 - A complete, rounded, smooth passage enabling double the flow rate than that with freeflow valves
 - No pressure shocks produced during opening and closing
 - Backflow preventer with reduced operating pressure ≥ 10 mbar
- Model: Red brass
 - Permissible operating pressure: PB 10 bar
 - Permissible Operating temperature: TB 90 °C
 - Flow medium: Domestic water

Piston valves with female thread, type 180




Upper section with non-rising spindle, DIN-DVGW, noise protection in accordance with DIN 52218: Fitting group 1.

Type	Connection	Nominal width	Overall length [mm]		Order Code
KV 180 DN15	Rp 1/2"	DN 15	65	30	M1204010
KV 180 DN20	Rp 3/4"	DN 20	75	20	M1204020
KV 180 DN25	Rp 1"	DN 25	90	10	M1204030
KV 180 DN32	Rp 1 1/4"	DN 32	110	5	M1204040
KV 180 DN40	Rp 1 1/2"	DN 40	120	5	M1204050
KV 180 DN50	Rp 2"	DN 50	150	1	M1204060

Piston valves with female thread and drainage device, type 181




Upper section with non-rising spindle, DIN-DVGW, noise protection in accordance with DIN 52218: Fitting group 1.

Type	Connection	Nominal width	Overall length [mm]		Order Code
KV 181 DN15	Rp 1/2"	DN 15	65	30	M1204070
KV 181 DN20	Rp 3/4"	DN 20	75	20	M1204080
KV 181 DN25	Rp 1"	DN 25	90	10	M1204090
KV 181 DN32	Rp 1 1/4"	DN 32	110	5	M1204100
KV 181 DN40	Rp 1 1/2"	DN 40	120	5	M1204110
KV 181 DN50	Rp 2"	DN 50	150	1	M1204120

Piston valves with male thread, type 180.1




Male thread for metal pipe threaded joints, basic thread size for the use of solder-joint pressure fittings, male thread screw fittings, press/screw fittings including upper section with non-rising spindle, DIN-DVGW, noise protection in accordance with DIN 52218: Fitting group 1.

Type	Connection	Nominal width	Overall length [mm]		Order Code
KV 180.1 DN15	G 3/4"	DN 15	60	30	M1204130
KV 180.1 DN20	G 1"	DN 20	65	20	M1204140
KV 180.1 DN25	G 1 1/4"	DN 25	70	10	M1204150
KV 180.1 DN32	G 1 1/2"	DN 32	90	5	M1204160
KV 180.1 DN40	G 1 3/4"	DN 40	100	5	M1204170
KV 180.1 DN50	G 2 3/8"	DN 50	120	1	M1204180

Piston valves with male thread and drainage device, type 181.1




Male thread for metal pipe threaded joints, basic thread size for the use of solder-joint pressure fittings, male thread screw fittings, press/screw fittings including upper section with non-rising spindle, DIN-DVGW, noise protection in accordance with DIN 52218: Fitting group 1.

Type	Connection	Nominal width	Overall length [mm]		Order Code
KV 181.1 DN15	G 3/4"	DN 15	60	30	M1204190
KV 181.1 DN20	G 1"	DN 20	65	20	M1204200
KV 181.1 DN25	G 1 1/4"	DN 25	70	10	M1204210
KV 181.1 DN32	G 1 1/2"	DN 32	90	5	M1204220
KV 181.1 DN40	G 1 3/4"	DN 40	100	5	M1204230
KV 181.1 DN50	G 2 3/8"	DN 50	120	1	M1204240

Backflow preventer with female thread, type 190

Union nut - female thread, without drainage device




Type	Connection		Nominal width	Overall length [mm]		Order Code
	(input)	(Output)				
RV 190 DN15	G 3/4"	Rp 1/2"	DN 15	50	10	M1204430
RV 190 DN20	G 1"	Rp 3/4"	DN 20	53	10	M1204440
RV 190 DN25	G 1 1/4"	Rp 1"	DN 25	55	10	M1204450
RV 190 DN32	G 1 1/2"	Rp 1 1/4"	DN 32	65	5	M1204460
RV 190 DN40	G 1 3/4"	Rp 1 1/2"	DN 40	75	5	M1204470
RV 190 DN50	G 2 3/8"	Rp 2"	DN 50	75	5	M1204480

Backflow preventer with female thread and drainage device, type 191

Union nut - female thread




Type	Connection		Nominal width	Overall length [mm]		Order Code
	(input)	(Output)				
RV 191 DN15	G 3/4"	Rp 1/2"	DN 15	50	10	M1204370
RV 191 DN20	G 1"	Rp 3/4"	DN 20	53	10	M1204380
RV 191 DN25	G 1 1/4"	Rp 1"	DN 25	55	10	M1204390
RV 191 DN32	G 1 1/2"	Rp 1 1/4"	DN 32	65	5	M1204400
RV 191 DN40	G 1 3/4"	Rp 1 1/2"	DN 40	75	5	M1204410
RV 191 DN50	G 2 3/8"	Rp 2"	DN 50	75	5	M1204420

Backflow preventer with male thread, type 190.1

Union nut - male thread for metal pipe threaded joints, without drainage device




Type	Connection		Nominal width	Overall length [mm]		Order Code
	(input)	(Output)				
RV 190.1 DN15	G 3/4"	G 3/4"	DN 15	50	10	M1204620
RV 190.1 DN20	G 1"	G 1"	DN 20	53	10	M1204630
RV 190.1 DN25	G 1 1/4"	G 1 1/4"	DN 25	55	10	M1204640
RV 190.1 DN32	G 1 1/2"	G 1 1/2"	DN 32	65	5	M1204650
RV 190.1 DN40	G 1 3/4"	G 1 3/4"	DN 40	75	5	M1204660
RV 190.1 DN50	G 2 3/8"	G 2 3/8"	DN 50	75	5	M1204670

Backflow preventer with male thread and drainage device, type 191.1

Union nut – male thread for metal pipe threaded joints




Type	Connection		Nominal width	Overall length [mm]		Order Code
	(input)	(Output)				
RV 191.1 DN15	G 3/4"	G 3/4"	DN 15	50	10	M1204560
RV 191.1 DN20	G 1"	G 1"	DN 20	53	10	M1204570
RV 191.1 DN25	G 1 1/4"	G 1 1/4"	DN 25	55	10	M1204580
RV 191.1 DN32	G 1 1/2"	G 1 1/2"	DN 32	65	5	M1204590
RV 191.1 DN40	G 1 3/4"	G 1 3/4"	DN 40	75	5	M1204600
RV 191.1 DN50	G 2 3/8"	G 2 3/8"	DN 50	75	5	M1204610

Screw fitting 3/4 x 3/4

Union nut SW 32, moveable with sealing option.




Type	Connection		Nominal width	Overall length [mm]		Order Code
	d1	d2				
Screw fitting 3/4 x 3/4	G 3/4"	R 3/4"	DN 20	39.5	10	M1206140

Connection piece 1 x 3/4

With 2 union nuts, seals and sealing option.




Type	Connection		Nominal width	Overall length [mm]		Order Code
	d1	d2				
Connection socket 1 x 3/4	G 1"	G 3/4"	DN 15	35.5	30	M1206130

Connection piece 3/4 x 3/4


With 2 union nuts, seals and sealing option.



Type	Connection		Nominal width	Overall length [mm]		Order Code
	d1	d2				
Connection socket 3/4 x 3/4	G 3/4"	G 3/4"	DN 15	33	30	M1206120

Extension piece for bleed valve for threads




Type	Connection	Overall length [mm]	Nominal width		Order Code
Extension 30mm	G 1/4"	30	DN 08	10	M1308780
Extension 42mm	G 1/4"	42	DN 08	10	M1308790

Insulation shell for piston valves

For piston valves with and without backflow preventer.




Type	Overall length [mm]	Diameter [mm]	Nominal width		Order Code
Insulation shell DN15	145	82	DN 15	1	M1300700
Insulation shell DN20	158	91	DN 20	1	M1300710
Insulation shell DN25	170	116	DN 25	1	M1300720
Insulation shell DN32	206	129	DN 32	1	M1300730
Insulation shell DN40	228	161	DN 40	1	M1300740
Insulation shell DN50	260	195	DN 50	1	M1300750

Flush-mounted valve, type 170

Rundstrom system, DIN-DVGW, with female thread, coupler - coupler.

Scope of supply for each item: 1 × flush-mounted valve, 1 × insulation shell, 1 × mounting aid.

- Model: Red brass
- Permissible operating pressure: PB 10 bar
- Permissible Operating temperature: TB 90 °C
- Flow medium: Domestic water
- Soundproofing according to DIN 52218

Type	Connection	Nominal width	Installed length of valve [mm]		Order Code
UP valve 170 DN15	Rp 1/2"	DN 15	65	9	M1206000
UP valve 170 DN20	Rp 3/4"	DN 20	75	6	M1206010
UP valve 170 DN25	Rp 1"	DN 25	90	4	M1206020

Sepp Zoom adjustable upper section



For flush-mounted valve, rosette, with thread.

Installation depth pipe centre - lower edge of rosette:

DN 15: 45 - 125 mm

DN 20: 70 - 145 mm

DN 25: 80 - 155 mm

Type	Marking		Order Code
Zoom upper section DN15	blue/red	1	M1300680

Sampling valve, complete



- Permissible operating pressure: PB 10 bar
- Permissible Operating temperature: TB 90 °C

Type	Connection	Nominal width		Order Code
Complete sampling valve	G 1/4"	08	1	M1204000

HOT-PRESSED BRASS FITTINGS

With the Rossweiner trademark, Meibes offers a comprehensive range of valves and fittings for domestic water installations. The following pages include taps, fitting combinations, freeflow valves, shut-off backflow preventers and regular backflow preventers etc.


Advantages for you

- Extensive product range, diverse models
- Housing and upper sections made from high-quality hot-pressed brass
- Sealing materials in accordance with KTW recommendations for the domestic water installation
- Model: Hot-pressed brass, taps and fitting combinations hot-pressed brass, chrome-plated
- Permissible operating pressure: PB 10 bar
- Permissible Operating temperature: TB 90 °C

Tap, type 3312




DIN 3509, with T-handle and hose coupling.

Type	Surface (chrome-plated)	Nominal width		Order Code
ALV 3312 M DN15	Matt	DN 15	20	M1291042
ALV 3312 G DN15	Gloss	DN 15	20	M1291043
ALV 3312 M DN20	Matt	DN 20	20	M1291032
ALV 3312 G DN20	Gloss	DN 20	20	M1291033

Tap, type 3315



DIN 3509, with socket wrench upper section and hose coupling (without socket wrench).

Type	Surface (chrome-plated)	Nominal width		Order Code
ALV 3315 M DN15	Matt	DN 15	20	M1291202
ALV 3315 G DN15	Gloss	DN 15	20	M1291203
ALV 3315 M DN20	Matt	DN 20	20	M1291212
ALV 3315 G DN20	Gloss	DN 20	20	M1291213

Tap, type 3316



DIN 3509, with crown handle and hose coupling.

Type	Surface (chrome-plated)	Nominal width		Order Code
ALV 3316 G DN15	Gloss	DN 15	20	M1291323

Tap, type 3317




DIN 3509, with three-wing handle and hose coupling.

Type	Surface (chrome-plated)	Nominal width		Order Code
ALV 3317 G DN15	Gloss	DN 15	20	M1291353

Tap, type 3492



Valve combination DIN-DVGW, tap with pipe ventilator and backflow preventer. DIN 3509, with T-handle and hose coupling.

Type	Surface (chrome-plated)	Nominal width		Order Code
ALV 3492 M DN15	Matt	DN 15	20	M1291132
ALV 3492 G DN15	Gloss	DN 15	20	M1291133
ALV 3492 M DN20	Matt	DN 20	20	M1291182
ALV 3492 G DN20	Gloss	DN 20	20	M1291183

Tap, type 3496



Valve combination DIN-DVGW, tap with pipe ventilator and backflow preventer. DIN 3509, with crown handle and hose coupling.

Type	Surface (chrome-plated)	Nominal width		Order Code
ALV 3496 G DN15	Gloss	DN 15	20	M1291173
ALV 3496 V DN15	Velour chrome	DN 15	20	M1291174

Tap, type 3497




Valve combination DIN-DVGW, tap with pipe ventilator and backflow preventer. DIN 3509, with three-wing handle and hose coupling.

Type	Surface (chrome-plated)	Nominal width		Order Code
ALV 3497 G DN15	Gloss	DN 15	20	M1291293

Tap, type 3456



Valve combination DIN-DVGW, tap with pipe ventilator and backflow preventer. Short design, with crown handle and hose coupling.

Type	Surface (chrome-plated)	Nominal width		Order Code
ALV 3456 G DN15	Gloss	DN 15	20	M1290213
ALV 3456 V DN15	Velour chrome	DN 15	20	M1290214

Tap, type 3494




Valve combination DIN-DVGW, tap with pipe ventilator and backflow preventer. DIN 3509, with lockable upper section and hose coupling.

Type	Surface (chrome-plated)	Nominal width		Order Code
ALV 3494 M DN15	Matt	DN 15	10	M1290002
ALV 3494 G DN15	Gloss	DN 15	10	M1290003

Freeflow valve, type 250, with non-rising spindle




With female thread, coupler - coupler.
DIN 3502, upper section with double O-ring seal, DIN-DVGW, noise protection in acc. with DIN 52 218: Fitting group 1.

Type	Nominal width	Overall length [mm]		Order Code
FSV 250 DN15	DN 15	65	30	M1243760
FSV 250 DN20	DN 20	75	20	M1243770
FSV 250 DN25	DN 25	90	10	M1243780
FSV 250 DN32	DN 32	110	5	M1446100
FSV 250 DN40	DN 40	120	5	M1446110
FSV 250 DN50	DN 50	150	1	M1446120
FSV 250 DN65	DN 65	180	1	M1243360
FSV 250 DN80	DN 80	210	1	M1243370

Freeflow valve, type 250, with non-rising spindle




With female thread, coupler - coupler with drainage device.
DIN 3502, upper section with double O-ring seal, DIN-DVGW, noise protection in accordance with DIN 52 218: Fitting group 1.

Type	Nominal width	Overall length [mm]		Order Code
FSV 25 DN15	DN 15	65	30	M1243820
FSV 25 DN20	DN 20	75	20	M1243830
FSV 25 DN25	DN 25	90	10	M1243840
FSV 25 DN32	DN 32	110	5	M1446130
FSV 25 DN40	DN 40	120	5	M1446140
FSV 25 DN50	DN 50	150	1	M1446150
FSV 25 DN65	DN 65	180	1	M1243380
FSV 25 DN80	DN 80	210	1	M1243390

Lockable backflow preventer (KFR), type 252, with non-rising spindle




With female thread, coupler - coupler.
Upper section with double O-ring seal, DIN-DVGW, noise protection in accordance with DIN 52 218: Fitting group 1.

Type	Nominal width	Overall length [mm]		Order Code
KFR 252 DN15	DN 15	65	30	M1243880
KFR 252 DN20	DN 20	75	20	M1243890
KFR 252 DN25	DN 25	90	10	M1243900
KFR 252 DN32	DN 32	110	5	M1446160
KFR 252 DN50	DN 50	150	1	M1446180
KFR 252 DN65	DN 65	180	1	M1244000

Lockable backflow preventer (KFR), type 253, with non-rising spindle




With female thread, coupler - coupler with drainage device.
Upper section with double O-ring seal, DIN-DVGW, noise protection in accordance with DIN 52 218: Fitting group 1.

Type	Nominal width	Overall length [mm]		Order Code
KFR 253 DN15	DN 15	65	30	M1243940
KFR 253 DN20	DN 20	75	20	M1243950
KFR 253 DN25	DN 25	90	10	M1243960
KFR 253 DN32	DN 32	110	5	M1446190
KFR 253 DN40	DN 40	120	5	M1446200
KFR 253 DN50	DN 50	150	1	M1446210
KFR 253 DN65	DN 65	180	1	M1244020
KFR 253 DN80	DN 80	210	1	M1244030

Lockable backflow preventer (KFR), type 452.1, with rising spindle




With male thread, for metal pipe threaded joints, basic thread size for the use of solder-joint pressure fittings, male thread screw fittings, press/screw fittings including upper section with double O-ring seal, DIN-DVGW, noise protection in accordance with DIN 52 218: Fitting group 1.

Type	Nominal width	Connection	Overall length [mm]		Order Code
KFR 452.1 DN20	DN 20	G 1" M	85	15	M1448130
KFR 452.1 DN50	DN 50	G 2 3/8" M	160	1	M1448170

Backflow preventer, type 354



With female thread, coupler - coupler.
DIN-DVGW, noise protection in accordance with DIN 52 218: Fitting group 1.

Type	Nominal width	Overall length [mm]		Order Code
KFR 354 DN15	DN 15	65	30	M1243640
KFR 354 DN20	DN 20	75	30	M1243650
KFR 354 DN25	DN 25	90	20	M1243660
KFR 354 DN32	DN 32	110	10	M1243670
KFR 354 DN40	DN 40	120	5	M1243680
KFR 354 DN50	DN 50	150	1	M1243690

REFURBISHMENT SYSTEMS FOR DOMESTIC WATER DISTRIBUTION ("WATER SPIDER")

Meibes offers a complete system for domestic water distribution specifically for refurbishment projects. This comprehensive range comprises products and accessories for the replacement of the water line, e.g. with the Henco multilayer composite pipe system, domestic water valves and wall bushings for hot and cold water for shaft refurbishment up to the mixer tap. Further products available as supplements, e. g. water meters, are listed in the chapter "Consumption metering - Water meters".


Advantages

- Up to 50% less time required for installation
- Space-saving - in particular for retrofits and shaft refurbishment
- Precise water billing with incorporation of water meter
- Flexible with connections such as meiflex reinforced houses (with silicone inliner) for domestic water or inoflex stainless steel corrugated pipe or multilayer composite pipe
- Model: Hot-pressed brass, globe valve type 104.4: Red brass
- Permissible operating pressure: PB 10 bar
- Permissible operating temperature: TB 90 °C

Globe valve - angle body, type 204.4




Angle valve for hot and cold water for shaft refurbishment, DIN-DVGW, with male thread and union nut, with sealing option for water meter, upper section with double O-ring seal, noise protection in accordance with DIN 52 218:Fitting group 1.

Type	Nominal width	Connection		Overall length [mm]		Order Code
GSV 204.4	DN 15	R 3/4"	G 3/4" F	53.5	25	M1241830

Globe valve - angle body, type 104.4




Angle valve for hot and cold water for shaft refurbishment, DIN-DVGW, with male thread and union nut, with sealing option for water meter, model: red brass housing, upper section of dezincification-resistant material and with double O-ring seal, noise protection in accordance with DIN 52 218: Fitting group 1.

Type	Nominal width	Connection		Overall length [mm]		Order Code
GSV 104.4	DN 15	R 3/4"	G 3/4" F	53.5	25	M1203000

Globe valve - angle body, type 204.3




Angle valve for hot and cold water for shaft refurbishment, coupler - socket threaded union for steel pipe connection, upper section with double O-ring seal, noise protection in accordance with DIN 52 218: Fitting group 1.

Type	Nominal width	Connection		Overall length [mm]		Order Code
GSV 204.3	DN 20	Rp 3/4"	R 3/4"	64.5	25	M1246080

Globe valve - angle body, type S204.3



Angle valve for hot and cold water for shaft refurbishment, without socket, without union nut, noise protection in accordance with DIN 52 218: Fitting group 1.


Type	Nominal width	Connection		Overall length [mm]		Order Code
GSV S204.3	DN 20	G 1" M	Rp 3/4"	30.5	40	M1246070

DN 15 5-way manifold



Components for shaft refurbishment, scope of supply:

- 1 x optional manifold with union nut, as connector to water meter or to angle or globe valve (flat gasket included)
- 1 x 1/2" end cap (flat sealing) for capping an outlet piece
- Matching hoses also available.


Type	Nominal width	Connection			Order Code
		(5 x M)	(1 x ÜM)		
5-way manifold 1/2" - 3/4"	DN 15	G 1/2" M	G 3/4" F	20	M1390440
5-way manifold 1/2" - 1"	DN 15	G 1/2" M	G 1" F	20	M1390400

DN 15 3-way manifold



Components for shaft refurbishment, scope of supply:


- 1 x optional manifold with union nut, as connector to water meter or to angle or globe valve (flat gasket included)
- 1 x 1/2" end cap (flat sealing) for capping an outlet piece

Type	Nominal width	Connection			Order Code
		(3 x M)	(1 x ÜM)		
3-way manifold 1/2" - 3/4"	DN 15	G 1/2" M	G 3/4" F	30	M1390450
3-way manifold 1/2" - 1"	DN 15	G 1/2" M	G 1" F	30	M1390410

Wall bushings with male thread

Wall bushings for hot and cold water for shaft refurbishment, with anti-rotation protection.




Type	Wall-thickness [mm]	Con-nection	Overall length [mm]	SW [mm]		Order Code
Wall bushing Male 75mm	5 - 30*	R 1/2"	75	17	40	M1393110
Wall bushing Male 100mm	30 - 55	R 1/2"	100	17	40	M1393120
Wall bushing Male 130mm	55 - 85	R 1/2"	130	17	30	M1393130

* With continuous thread

Wall bushings with female thread

Wall bushings for hot and cold water for shaft refurbishment, with anti-rotation protection.




Type	Wall-thickness [mm]	Con-nection	Overall length [mm]	SW [mm]		Order Code
Wall bushing Female 90mm	30 - 55	G 1/2" F	90	17	40	M1393080
Wall bushing Female 120mm	55 - 85	G 1/2" F	120	17	30	M1393090
Wall bushing Female 175mm	85 - 140	G 1/2" F	175	17	20	M1393100

Wall bushings with female and male thread




Wall bushings for hot and cold water for shaft refurbishment, wall bushing with Ø 50 washers with anti-rotation protection.

Type	Wall-thickness [mm]	Con-nection	Overall length [mm]	SW [mm]		Order Code
Wall bushing Male/Female 65mm	5 - 30	G 3/4" M x G 1/2" F	65	24	40	M1391950
Wall bushing Male/Female 110mm	5 - 75	G 3/4" M x G 1/2" F	110	24	30	M1391958
Wall bushing Male/Female 130mm	5 - 95	G 3/4" M x G 1/2" F	130	24	20	M1391959

Backflow preventer




Screw-in piece, installation between angle valve and water meter.

Type	Nominal width	Connection	Overall-length [mm]		Order Code
Backflow preventer	DN 20	3/4" F x 3/4" M	22	20	M1393220

Male thread connection piece




With screw-fitting flat gasket on G 1/2" M wall bushing, onsite installation (see section 1.1).

Type	Nominal width	Connection	Overall-length [mm]		Order Code
Male thread connection socket	DN 15	1/2" F x 3/4" M	22	50	M1390640

Cap




Without flat gasket.

Type	Dimension		Order Code
Cap 1/2"	1/2"	20	M1390840
Cap 3/4"	3/4"	20	M1390850

Seals - flat




For union nuts and caps, vulcanised fibre seal, certified and approved for use with Meibes reinforced hoses, wall bushings and manifolds.

Type	Dimension		Order Code
Seal - flat	1/2"	100	M1780028

Fibre gasket




Type	Dimension		Order Code
Fibre sealant 3/4"	3/4"	100	M1780029
Fibre sealant 1"	1"	100	M1780033

Zinc plate




Wall plate for hot and cold water for shaft refurbishment, for anti-rotation protection SW 17 or SW 24, with 2 flanged corners.

Type	Mod- el	Dimensions [mm]		SW [mm]		Order Code
		L x B	D			
Sheet metal 1-bore - 17	1-bore	60 x 60	21.5	17	50	M1393010
Sheet metal 1-bore - 24	1-bore	60 x 60	26.5	24	50	M1391940

Zinc plate LA 45 mm




Wall plate for hot and cold water for shaft refurbishment, for anti-rotation protection SW 17 with 2 flanged corners.

Type	Mod- el	Dimensions [mm]		SW [mm]		Order Code
		L x B	D			
Sheet metal 2-bore - 17	2-bore	118 x 60	21.5	17	50	M1393020

Zinc plate LA 150 mm and 45 mm




Wall plate for hot and cold water for shaft refurbishment, for anti-rotation protection SW 17 or SW 24 with 2 flanged corners.

Type	Mod- el	Dimensions [mm]		SW [mm]		Order Code
		L x B	D			
Sheet metal 3-bore - 17	3-bore	218 x 60	21.5	17	30	M1393040
Sheet metal 4-bore - 24	4-bore	218 x 60	26.5	24	30	M1393050

Single disc 100 x 44 x 3 mm - rubberised



Wall plate with valve extension, self-locking, twist-proof and rubber-coated.

Type	Thread	Length [mm]		Order Code
EP GKI	1/2" F	8 - 35	1	M66335.20GKI
EP GMI	1/2" F	8 - 70	1	M66335.20GMI
EP GLI	1/2" F	70 - 130	1	M66335.20GLI
EP GMA	3/4" M	0 - 60	1	M66335.20GMA
EP GLA	3/4" M	40 - 120	1	M66335.20GLA


Explanation of article numbers:

1. Letter stands for: G = Rubberised wall disc, K = Claw wall disc
2. Letter stands for: K = Short (60 mm), M = Medium (100 mm), L = Long (160 mm)
3. Letter stands for: F = Female thread 1/2", M = Male thread 3/4"

Single disc 100 x 44 x 3 mm - as claw plate




Wall plate with valve extension, self-locking, twist-proof, as claw plate for lightweight partition walls.

Type	Thread	Length [mm]		Order Code
EP KKI	1/2" F	10 - 40	1	M66335.20KKI
EP KMI	1/2" F	10 - 75	1	M66335.20KMI
EP KLI	1/2" F	70 - 135	1	M66335.20KLI

Double disc 250 x 44 x 3 mm, AA = 150 mm - rubberised

Wall plate with valve extension, self-locking, twist-proof and rubber-coated.




Type	Thread	Length [mm]		Order Code
DP GKI	1/2" F	8 - 35	1	M66335.22GKI
DP GMI	1/2" F	8 - 70	1	M66335.22GMI
DP GLI	1/2" F	70 - 130	1	M66335.22GLI
DP GLA	3/4" M	40 - 120	1	M66335.22GLA

Double disc 100 x 100 x 3 mm, AA = 45 mm

Wall plate with valve extension, self-locking, twist-proof.




Type	Thread	Length [mm]		Order Code
DP K	1/2" F	20	1	M66335.16K
DP L	1/2" F	45	1	M66335.16L

Single disc 100 x 44 x 3 mm

Wall plate with valve extension, self-locking, twist-proof.



Type	Thread	Length [mm]		Order Code
EP K	1/2" F	20	1	M66335.17K
EP L	1/2" F	45	1	M66335.17L

Inflex stainless steel corrugated pipe with protective insulation



In fixed lengths, connection on both ends with 1/2" union nuts, including seals, flexible on several planes.
 Technical data and installation guidelines in accordance with the technical information brochure.
 Other lengths upon request.
 The entire product range can be viewed in the chapter "Flexible connections".



Type	Connection (F / F)	Length A [mm]	Internal Ø [mm]		Order Code
Stainless steel pipe 12 x 850	1/2" / 1/2"	850	12	1	M46154.85W
Stainless steel pipe 12 x 1000	1/2" / 1/2"	1000	12	1	M46154.100W
Stainless steel pipe 12 x 1500	1/2" / 1/2"	1500	12	1	M46154.150W

Fig. Without "Protective insulation"

Meiflex reinforced hose with female thread



With stainless steel braid and silicon inliner, with red/red/blue identification, DVGW (inspection W 543 with W 270, KTW-A), including seals.
 Other lengths upon request.
 The entire product range can be viewed in the chapter "Flexible connections".

Type	Connection (F / F)	Length A [mm]	Internal Ø [mm]		Order Code
Reinforced hose 8 x 850	1/2" / 1/2"	850	8	1	M5715.0204.85
Reinforced hose 8 x 1000	1/2" / 1/2"	1000	8	1	M5715.0204.100
Reinforced hose 8 x 1350	1/2" / 1/2"	1350	8	1	M5715.0204.135
Reinforced hose 13 x 500	1/2" / 1/2"	500	13	1	M5715.1204.50
Reinforced hose 13 x 850	1/2" / 1/2"	850	13	1	M5715.1204.85
Reinforced hose 13 x 1000	1/2" / 1/2"	1000	13	1	M5715.1204.100
Reinforced hose 13 x 1500	1/2" / 1/2"	1500	13	1	M5715.1204.150


Meiflex reinforced hose with female thread and elbow



With stainless steel braid and silicon inliner, with red/red/blue identification, DVGW (inspection W 543 with W 270, KTW-A), including seals.

Other lengths upon request.


The entire product range can be viewed in the chapter "Flexible connections".

Type	Connection (F / F)	Length A [mm]	Internal Ø [mm]		Order Code
Reinforced hose Elbow 8 x 500	1/2" / 1/2"	500	8	1	M5715.0801.50
Reinforced hose Elbow 8 x 850	1/2" / 1/2"	850	8	1	M5715.0801.85
Reinforced hose Elbow 8 x 1000	1/2" / 1/2"	1000	8	1	M5715.0801.100
Reinforced hose Elbow 8 x 1350	1/2" / 1/2"	1350	8	1	M5715.0801.135
Reinforced hose Elbow 13 x 500	1/2" / 1/2"	500	13	1	M5715.1704.50
Reinforced hose Elbow 13 x 850	1/2" / 1/2"	850	13	1	M5715.1704.85
Reinforced hose Elbow 13 x 1000	1/2" / 1/2"	1000	13	1	M5715.1704.100
Reinforced hose Elbow 13 x 1500	1/2" / 1/2"	1500	13	1	M5715.1704.150

Plug for cube manifold (up to 2007)




Self-sealing

Type	Connection		Order Code
Distributor box plug	1/2"	1	MG15105

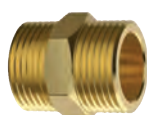
Cap for water manifold




Including seal

Type	Connection		Order Code
Water manifold cap	1/2"	1	M66158

Adapter for Meibes cube manifold (up to 2007)



Self-sealing with O-ring

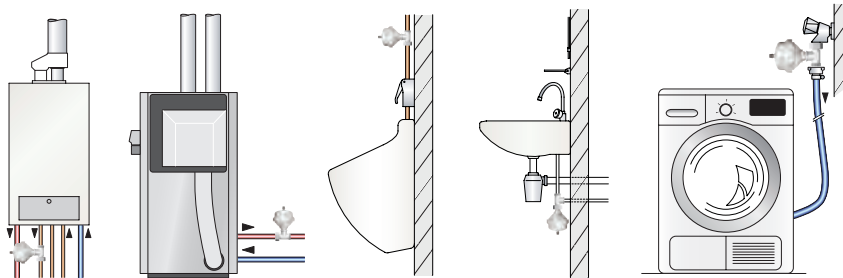
Type	Connection		Order Code
Distributor box adapter	1/2"	1	M43.66123A

FLEXOFIT WATER SHOCK ARRESTOR

Flexofit absorbs water hammer in order to minimize noise and damage to the system.

A water hammer arrestor absorbs the wave of pressure before it can develop into water hammer. The Flexofit does this by having two areas that are separated by a rubber diaphragm. On one side, there is a gas cushion under pressure, while the other side is in connected to the system. The gas cushion compresses and absorbs the wave of pressure.

- Membrane: butyl rubber.
- Maximum working pressure: 10.0 bar (peak load: 40.0 bar).
- Maximum working temperature: 90 °C.



Flexofit - Selection table

Based on a flow rate of 3 m/s.

System pressure [bar]		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7
Ø Pipe	Max. pipe length up to the 1st bend [m]	Number of Flexofit water hammer arrestors to be fitted										
1/2" (15 mm)	15	1	1	1	1	1	1	1	2	2	2	2
	20	1	1	1	1	1	2	2	2	2	-	-
	30	1	1	2	2	2	2	2	2	-	-	-
3/4" (22 mm)	7.5	1	1	1	1	1	1	1	2	2	2	2
	15	1	1	2	2	2	2	2	-	-	-	-
	20	2	2	2	2	2	-	-	-	-	-	-
1" (28 mm)	7.5	1	1	1	1	1	2	2	2	2	-	-
	15	2	2	2	2	2	-	-	-	-	-	-
	20	2	-	-	-	-	-	-	-	-	-	-
1 1/4" (35 mm)	7.5	2	2	2	2	2	2	-	-	-	-	-

Flexofit Super



kiwa

- Capacity: 160 cm³.
- Solid brass, chromium plated housing.

Type	Pre-charge [bar]	Dimensions		Connection		Order Code
		Ø [mm]	H. [mm]			
Flexofit Super 1/2	2	83	102	R 1/2"	20	24980
Flexofit Super 1/2 with T-fitting	2	83	130	G 3/4" F x G 3/4" M	20	24989

Flexofit Super T-fitting



For mounting Flexofit Super water hammer arrestors quickly and easily between the tap and the washing machine or dish-washer.

Type	Connection		Order Code
T-fitting Flexofit Super	G 3/4" F x G 1/2" F x G 3/4" M	1	24985

MIXING VALVES

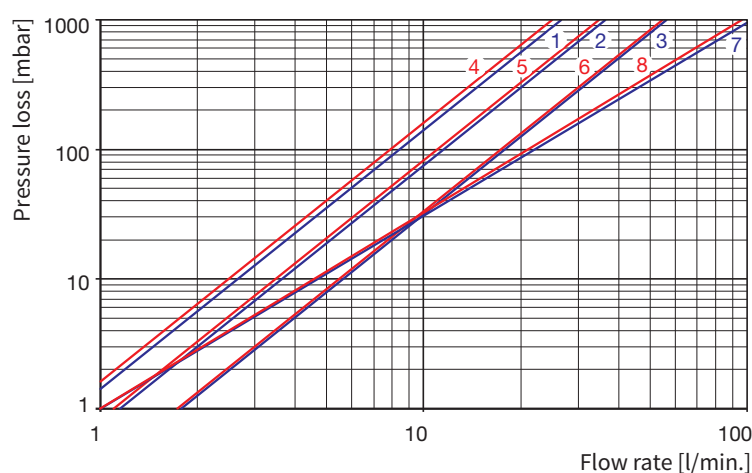
To efficiently store as much heat as possible the water temperature in a boiler or combo-vessel is higher than 60 °C. At this temperature level, there is a risk of scalding within a few seconds. To prevent this, a thermostatic mixing valve is used between the vessel and the draw-off point or several draw-off points. The Flamcomix limits the maximum output temperature of the draw-off points. This permits the input temperature to be maintained at a high level thus preventing the growth of Legionella bacteria. The output temperature can be set to a safe and comfortable level. Inclusion of a Flamcomix valve will improve safety in the hot water system. In addition, the comfort of the system is increased by the constant output temperature. Furthermore, you avoid wasting water by an immediate supply of water at the correct temperature.



Flamcomix main advantages

- **Stable output**
The output temperature is maximum ± 3 °C of the set temperature. This way the Flamcomix is very capable of absorbing sudden temperature fluctuations.
- **No calcification**
Lime cannot attach to the synthetic internal parts and the PTFE coating. This way calcification is prevented (only in the standard series).
- **Setting accuracy**
The multi-turn setting control permits fine adjustment of output temperature.
- **Locking cap**
The locking cap prevents accidental adjustment of the output temperature.
- **Little pressure resistance**
Minimal pressure drop is achieved by the optimised design of the internal parts and the back-flow preventor that was developed especially for this purpose.

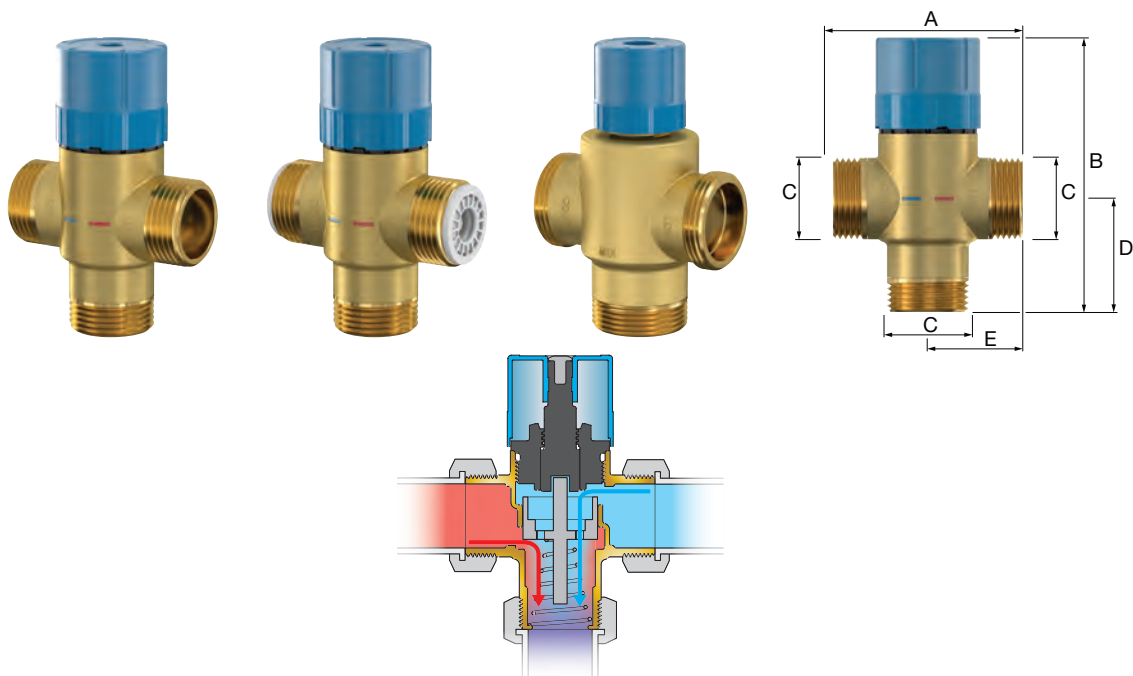
Flamcomix - Pressure loss diagram




Reference	DN	K _{vs} [m³/h]	V [l/min]	Back-flow safeguard
1	15	1.6	26	-
2	20	2.2	36	-
3	25	3.4	56	-
4	15	1.5	25	✓
5	20	2.1	35	✓
6	25	3.3	55	✓
7 (HC)	25	6.1	102	-
8 (HC)	25	5.9	102	✓

Flamcomix Mixing Valve

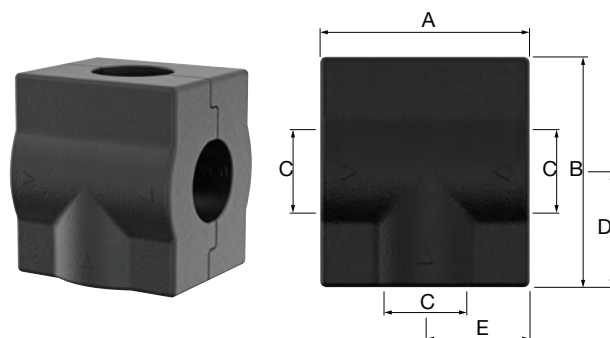
- Adjustable temperature range: 45 – 65 °C, 35 – 70 °C (especially suitable for legionella flushing and low temperatures) or 20 °C - 70 °C (high capacity).
- Maximum working temperature: 100 °C (including back-flow safeguard 90 °C).
- Pressure range (static): 0.5 - 10 bar.
- Working pressure (dynamic): 0.5 - 5 bar.
- Maximum constant pressure differential of hot / cold supply: 2 bar.
- Stable output temperature: 3 °C at 15 °C hot water change.
- Noise category: 2.
- Installation position: any position.
- Housing: dezincification resistance brass.
- Internal parts: high quality synthetics.
- Seals: EPDM.
- Spring: stainless steel.
- Brass housing with anti-lime coating (PTFE).
- For application with potable water according to Guideline 98/83/EG.




Type	DN (syst.)	Con- nec- tion (C)	Adjustable temperature range [°C]	Back flow preventer	Dimensions					Order Code
					A [mm]	B [mm]	D [mm]	E [mm]		
Flamcomix 45-65 FS DN15	DN15	3/4"	45 - 65	no	76.0	max. 122	46	38.00	1	28770
Flamcomix 45-65 FS DN20	DN20	1"	45 - 65	no	77.0	max. 122	46	38.50	1	28771
Flamcomix 45-65 FS DN25	DN25	1 1/4"	45 - 65	no	77.0	max. 122	46	38.50	1	28772



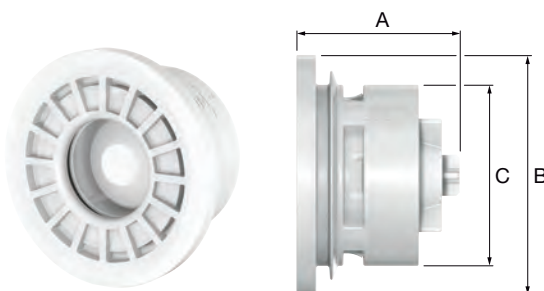
Flamcomix Insulation box




Type	Dimensions						Order Code
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]		
Flamcomix insulation box DN15	98	109	35	59	50	1	28790
Flamcomix insulation box DN20	98	109	43	59	50	1	28791
Flamcomix insulation box DN25	98	109	50	59	50	1	28792
Flamcomix HC insulation box DN25	98	109	50	59	50	1	28789

Flamcomix Backflow Preventer set

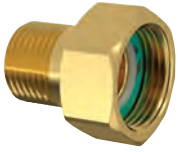
Available as Flamcomix with integrated check valve or Flamcomix and check valve as separate components. The check valves are specifically designed for use in a Flamcomix thermostatic mixing valve. This results in a very low pressure drop.




Type	Dimensions				Order Code
	A [mm]	B [mm]	C [mm]		
Flamcomix Backflow preventer set DN15	18.10	24.1	20.65	2	28793
Flamcomix Backflow preventer set DN20	20.55	30.1	26.15	2	28794
Flamcomix HC Backflow preventer set DN25	20.55	38.6	32.65	2	28787




Flamcomix Connections set



Type		Order Code
Flamcomix Connections set 3/4" x 1/2" (3x)	1	28796
Flamcomix Connections set 1" x 1/2" (3x)	1	28797
Flamcomix Connections set 1" x 3/4" (3x)	1	28798
Flamcomix Connections set 1 1/4" x 1" (3x)	1	28799

Flamcomix Precision Thermometer



Type		Order Code
Precision Thermometer	1	28788

Mixing valve

PG = 6040



Thermostatic water mixer with an adjustment range of 35 - 60 °C, for hot water or temperature limiter in the heater.

Type	Connection	Max. pressure [bar]		Order Code
Mixing valve	G 3/4" M	10	1	M69050.9

Mixing valve with threaded joints

PG = 6040



Continuously adjustable from 35 °C - 65 °C for hot water, with 3 clamping ring screw unions.

Type	Connection [mm]	Max. pressure [bar]		Order Code
Mixing valve threaded joint	22	10	1	M69050

REDUFLEX


Reduflex



The Reduflex pressure reducing valve is a pressure protection device which protects a single device like water heaters, washing machines.

It reduces the flow of water at the level of a safety group, to limit water hammers at the level of washing machines, and by their design, ensures a non-return. The Reduflex is equipped with a diaphragm and admit up to 16 bar upstream and can be pre-set from factory for 8 bar upstream to 4 bar downstream. A set screw makes adjustment quite easy according to the needs, an axial mano plug is available for verification of downstream pressure. With the swiffle nut it can, for example, easily be connected to a security group.

- Suitable for hot water, cold water and compressed air.
- With captive nut.
- Maximum working pressure: 16 bar.
- Maximum working temperature: 80 °C.

Type	Connection		Order Code
Reduflex adjustable 3/4	3/4" M x 3/4" F	1	28279

PRESOR PRV

The Prescor pressure reducing valve stabilizes the fluid pressure in a water distribution systems to a preset value. It is used on potable water installations for water supply within buildings according to EN 806-2.

Working principle

The Prescor PRV can be adjusted to the required working pressure by turning the regulation knob, this then adjusts the calibration spring pressing against the membrane which in this case then acts against the valve cartridge. The water pressure downstream of the pressure reducing valve maintains a pressure in the opposite direction, balancing the valve closed. When the valve is closed, the two forces are balanced, while there is a flow, the downstream pressure decreases and the spring overcomes the pressure, thus opening the valve and allowing the water to pass through.

Comfort and efficiency without noise and vibrations

The special internal construction of the valve body with perfect finished surface has been designed to create a minimum flow resistance, limiting vibrations and pressure loss.

Fast and simple pressure setting and commissioning

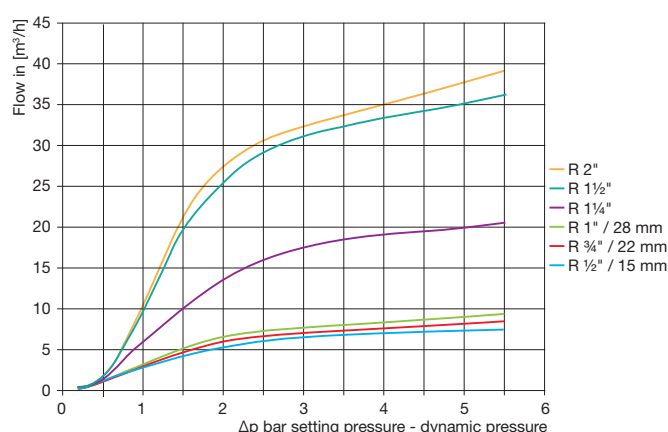
The regulation knob with indicator allows the PRV to be adjusted easily to the set pressure to simply and quickly set the pressure (1-6 bar). The graduating scale of the PRV gives clear indications of the set pressure.

Pressure under control in every situation

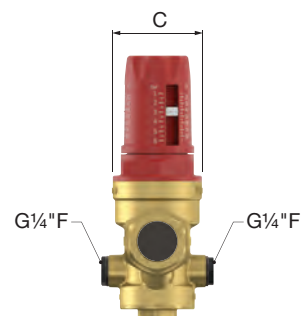
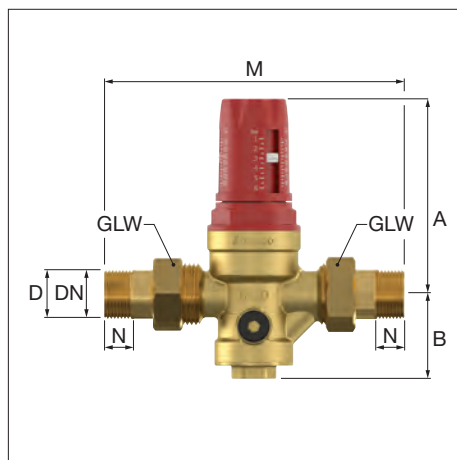
The enhanced mechanical strength of the valve body and its internal parts allows to use the valve in water supply systems, where the pressure may reach values up to 25 bar.


- Outlet settings (Ps) from 1 to 6 bar.
- Ps value set during testing: 3 bar.
- Outlet Ps set tolerance on varying inlet pressure: pressure according to EN 1567.
- Maximum working pressure: 25 bar.
- Min./Max. working temperature: 0 °C (excluding ice) / 80 °C.
- Suitable for addition of glycol-based anti-freeze up to 50%.

Prescor PRV - Selection graph



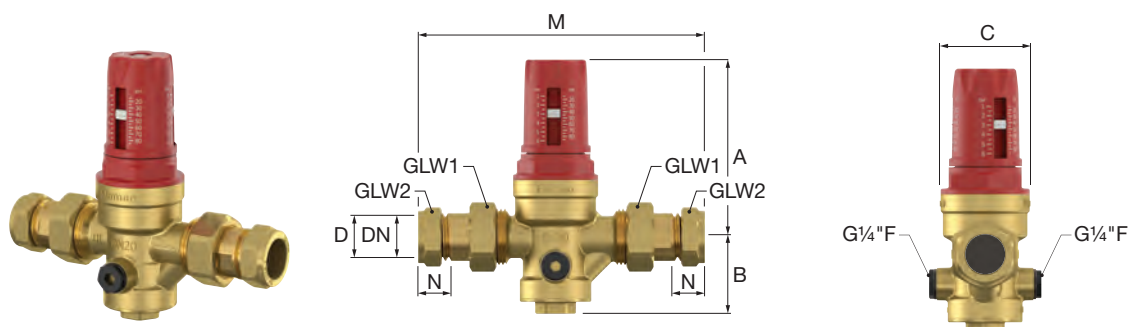
Prescor PRV




Type	Connection		Dimensions							Order Code
	(D)	[DN]	A [mm]	B [mm]	C [mm]	M [mm]	N [mm]	GLW [mm]		
Prescor PRV PN25 1.0-6.0 bar	R 1/2"	15	104	45	50	140	13	30	1	27460
Prescor PRV PN25 1.0-6.0 bar	R 3/4"	20	104	45	50	160	15	37	1	27461
Prescor PRV PN25 1.0-6.0 bar	R 1"	20	104	45	50	170	17	46	1	27462
Prescor PRV PN25 1.0-6.0 bar	R 1 1/4"	32	130	59	61	200	19	52	1	27463
Prescor PRV PN25 1.0-6.0 bar	R 1 1/2"	40	167	73	81	225	19	64	1	27464
Prescor PRV PN25 1.0-6.0 bar	R 2"	50	164	82	81	255	24	83	1	27465



Prescor PRV with compression



Type	Connection		Dimensions								Order Code
	(D)	[DN]	A [mm]	B [mm]	C [mm]	M [mm]	N [mm]	GLW 1 [mm]	GLW 2 [mm]		
Prescor PRV PN25 1.0-6.0 bar	15 mm	15	104	45	50	149	23	30	24	1	27466
Prescor PRV PN25 1.0-6.0 bar	22 mm	20	104	45	50	168	24	37	32	1	27467
Prescor PRV PN25 1.0-6.0 bar	28 mm	20	104	45	50	182	25	46	38	1	27468



Prescor PRV - Spare parts



The stainless steel filter cartridge is designed to filter particles such as sand, rust flakes etc.

The cartridge of the Prescor PRV has a diaphragm made of EPDM reinforced rubber with high mechanical strength textile allows precise and long term pressure regulation without sticking.

Type	Dimensions		Order Code
Prescor PRV Filter	R 1/2" - R 1" (15 mm - 28 mm)	1	STA13029
Prescor PRV Filter	R 1 1/4"	1	STA13030
Prescor PRV Filter	R 1 1/4" - R 2"	1	STA13031
Prescor PRV Cartridge	R 1/2" - R 1" (15 mm - 28 mm)	1	STA13032
Prescor PRV Cartridge	R 1 1/4"	1	STA13033
Prescor PRV Cartridge	R 1 1/4" - R 2"	1	STA13034



Flamco Services
Flamconnect
Flamco Acadamy

MAINTENANCE

Maintenance



Flamco recommends a regular maintenance on their products as it maintains performance, increases the service life of the equipment and can prevent faults. Flamco offers a range of maintenance agreements which ensure that your equipment is regularly and expertly maintained so you don't have to worry about anything.

We offer three different maintenance contracts:

- Basic
- Comfort
- Premium

These agreements are designed to offer you peace of mind and make sure your equipment is running at its full potential but do not include equipment failure. If you have to call one of our engineers on site to deal with a failure you will get a discounted call out charge if you have a contract. Of course we also offer maintenance without a contract.

Interested in one of these contracts? Please contact us so we can make a specific offer for your situation.

Type		Order Code
FlamcoService - Maintenance - No contract	–	On request
FlamcoService - Maintenance - Contract Basic	–	On request
FlamcoService - Maintenance - Contract Comfort	–	On request
FlamcoService - Maintenance - Contract Premium	–	On request

Maintenance Agreement

Maintenance Agreement	Basic	Standard	Premium
Maintenance period	3 years	5 years	5 years
Annual service	✓	✓	✓
6 monthly service	-	-	✓
Spare parts up to £50	✓	✓	✓
Discount on spares	10%	20%	20%
Discount on call-out costs	10%	20%	20%
Maintenance report	✓	✓	✓

COMMISIONING

Commisioning




To achieve best system performance and ensure you get the highest quality experience, it is important to get your equipment correctly commissioned. By choosing us, an industry expert, you have the assurance that your system will operate effectively and efficiently. Any damage or loss incurred through incorrect commissioning by an unapproved engineer will not be covered by the warranty.

During commissioning we will check the equipment, installation, control equipment, and the total system performance. Our highly skilled service technicians combine thorough product knowledge with an understanding of a wide variety of applications, and an in-depth experience of working with them. We will ensure that your new equipment is perfectly integrated into your system and will function optimally. Having your system up and running efficiently and in a timely manner is not just important to ensuring the continuity of delivery/supply as well as the ongoing reliability, but can also prevent unnecessary breakdowns due to faulty installation and help ensure you get the best long term performance. At Flamco we want our customers to receive the best quality experience with their product post purchase and having the unit professionally commissioned helps to ensure this. Our technicians will provide a full start up report including full operational data.

During commissioning we will check the system for any leakage, test all pumps, sensors, valves and alarms. To get the best value for your money, we base our prices on commissioning being undertaken in one uninterrupted visit.

Interested? Please contact us so we can make a specific offer for your situation.

Type		Order Code
FlamcoService - Commisioning	–	On request


REPAIR

Repair



Although our products are of the highest quality it might need, due to wear and tear, reparation in its system life. By letting us do the reparation you are ensured that it is done correctly and the system will operate effectively and efficiently again. Any damage or loss incurred through incorrect reparation by an unapproved engineer will not be covered by the warranty.

During reparation not only the failed component will be replaced, we will inspect the complete product.

Type		Order Code
FlamcoService - Repair	–	On request

SOLUTIONS

Solutions



System solutions

During the planning's phase of a building we can together design an energy efficient climate system and optimise the comfort in the building. You will receive information about different technological solutions, the right product selection and the necessary calculations. Besides that, we also offer all the information necessary in this phase of a project, like drawings and BIM models.

During the implementation phase you will want to have everything delivered at the right location, day and time, preferably prepared as much as possible in the form of pre-assembly or prefab, so that it can be installed as quickly as possible and the project will not get delayed.

At the end of the economic life cycle of the building or the installation, we will make sure that the system will be entirely ready for a next cycle. Circularity is an important principle for that. Besides that, we will revisit the demands and wishes in order to continually guarantee the energy efficiency and comfort.

Product Solutions

Having difficulties with finding selecting the right product? Flamco can help. We have different calculations tools online available, ready for use:

- Vessel sizing.
- Rail calculation.
- Balancing valve selection.
- Air and Dirt selection.
- PV pannel (Falx) calculation.
- Kooltherm insulation selection tool.
- Heatpump product selection tool.


If this is not sufficient for your need, we are always available to help you. Please reach out, so we can seek for a suitable solution.

Flamco also understands that there are occasions when even our extensive standard product portfolio will not be suitable for your system. On occasions like these our Engineers pride themselves to tackle the challenge head on and provide you with bespoke solutions that are perfect for your system.

Since the day we developed the first Expansion Vessel which revolutionised the central heating market, our engineers have carried on innovating and inventing new accessories for the sealed systems. This helped us to develop a network and contacts within the industry, soon becoming world-renowned for products of the highest quality and excellent service. So whatever the challenge is, our engineers use their knowledge and past experiences to provide you with a solution which doesn't just do the job but actually make your system run better.

Flamco's main focus is on your requirements and provide a service that exceeds expectations, with price, delivery and aftercare. We provide you with an enhanced level of personal service and pride ourselves on paying careful attention to your individual requirement. We are committed to producing systems that are energy efficient and we are fully conversant with current and developing technologies in this field. Our practical and pragmatic approach is founded on a sound understanding of the market.

So whatever is your requirement, Flamco has a solution for you.

Type		Order Code
FlamcoService - Solutions	–	On request


PREFABRICATION

Prefabrication



During the implementation phase you will want to have everything delivered at the right location, day and time. Preferably prepared as much as possible in the form of pre-assembly or prefab. This to make sure it can be installed as quickly and efficient as possible and the project will not get delayed. We can help with this.

Interested? Please contact us so we can make a specific offer for your situation.

Type		Order Code
FlamcoService - Prefabrication	-	On request

REMOTE SERVICE


Remote service



Servicing your customer is made easy with a portal that gives an overview of all your connected devices. Any maintenance coming up? Our smart devices will inform you. Any disruptions? You will be notified instantly.

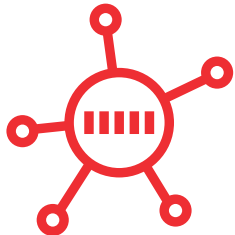
By purchasing Flamconnect – Remote Service your product will be connected to an online portal. This online portal will show the real time product performance. You can also top-up your system with one press on the bottom online. With the product data we can also predict when maintenance is needed. An error notification will automatically be send to a selected email address or phone number. It makes a visit to an installation valuable.

We help you plan your visits by creating insights in the usage of the installations you are servicing. Predict replacement or be notified instantly when an installation or product is down. You will arrive at the right time with a lot of information. The cost of servicing will drop significantly.

Type		Order Code
Flamconnect - Remote Service	-	On request

METERING

Metering



Our metering service provides you with all relevant data for heating and water. Have easy access to your meters and get data for your billing services.

It's crucial to have the right information for heating and water usage to bill your renters. Information that's available with our metering service. We connect your billing system with our portal. Billing is made effortless and with extensive insight of usage with our service contract.

With metering it's possible to measure the success of adjustments and see the result in energy usages. Help renters by advising on their energy usage. You are even able to measure the energy usage per room.

Type		Order Code
Flamconnect - Metering - Basic	-	On request
Flamconnect - Metering - Comfort	-	On request
Flamconnect - Metering - Premium	-	On request

ACADEMY

Academy



Flamco Academy online

Increase your knowledge about Flamco products and services with the easy to follow online training courses. Register for a webinar and immediately ask all your questions live. Or follow a E-learning training when it suits you best. Also explainer, product and installation videos are available here.


Visit the online Flamco Academy on: <https://flamcogroup.com/academy> or scan the QR-code.

Flamco Academy offline

Whether you are a wholesaler interested in learning about our products or an installer who wants to learn about the operation of the equipment we have a training course that will fit your needs. We want to make sure your training experience is hassle free so we offer you flexibility. You can choose to have the training course at your site or if you prefer training can be provided at one of our state of the art training facility. All training courses are provided by our Engineers who have been involved with this equipment; this will ensure that you are learning from the best.

You can choose to have a level 1 training which will cover the theory and application of Expansion Vessels, Air and Dirt Separators and standard Pressurisation Equipment. This hands on training will give you an in depth knowledge of the equipment and will also focus on controllers and their programming. You can also choose to have a level 2 training, which is spread over 2 days. The first day covers the same topics in the level 1 training. The second day focuses on Vacuum Degassing and balanced Pressurisation Equipment (Flamcomat) focusing on detailed how to, work arounds, installation issues and solutions.

Any other learning request, don't hesitate to contact us so we can find a suitable solution. Offers are made on specific customer requests.

Type		Order Code
Flamconnect Remote Academy	1	On request

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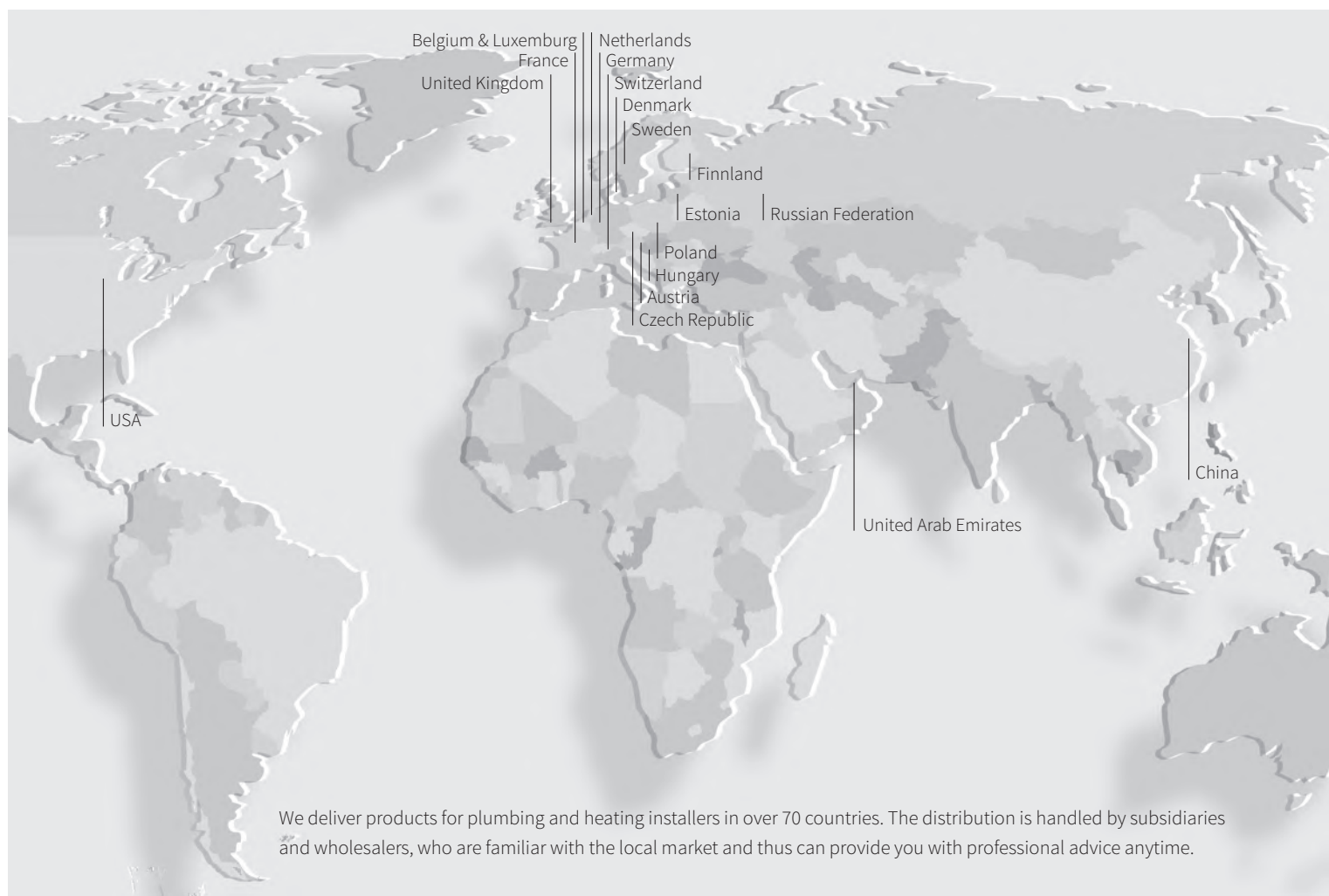
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OMS wireless 868 MHz	555
WMS Low Water Level Protection Device	538
WPS-E	235, 967
WPS-E Solar	248, 979

Z

Zinc plate	1025
Zinc plate LA 45 mm	1025
Zinc plate LA 150 mm and 45 mm	1025



We deliver products for plumbing and heating installers in over 70 countries. The distribution is handled by subsidiaries and wholesalers, who are familiar with the local market and thus can provide you with professional advice anytime.



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