

Flexcon Expansion Vessels

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Flamco produces a comprehensive range of diaphragm expansion vessels. Both the steel vessel and the diaphragm are of the highest quality. They are compliant with all prevailing European standards and carry the CE mark of conformity. Flamco vessels are available for both potable, chilled and heated water systems in sizes ranging from 2 litres up to 8,000 litres.

Flexcon 2 - 80



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Flexcon Top 110 - 1000



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Flexcon Solar 110 - 1000



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Contra-Flex 2 - 80



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Contra-Flex 100 - 1000



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Cubex 8 - 80



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Flexcon P 18 - 50



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Cubex R 12 - 18



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Flexcon M



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Flexcon VSV - 6.0 bar



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Flexcon VSV - 10.0 bar



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Flexcon V-B - 10.0 bar



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SELECTION FLEXCON EXPANSION VESSELS ACCORDING TO EN12828

Specified values have been calculated for a flow temperature of 80 °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) [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

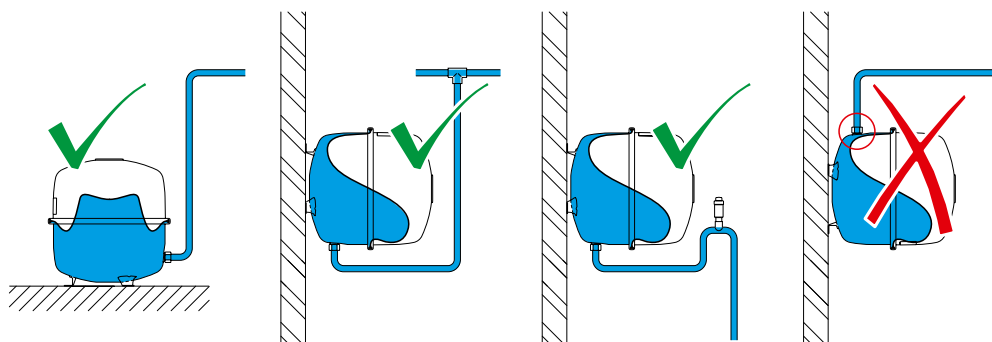
For sealed heating installations (acc. to EN12828) and chilled water (cooling) installations.

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.

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Flexcon advantages

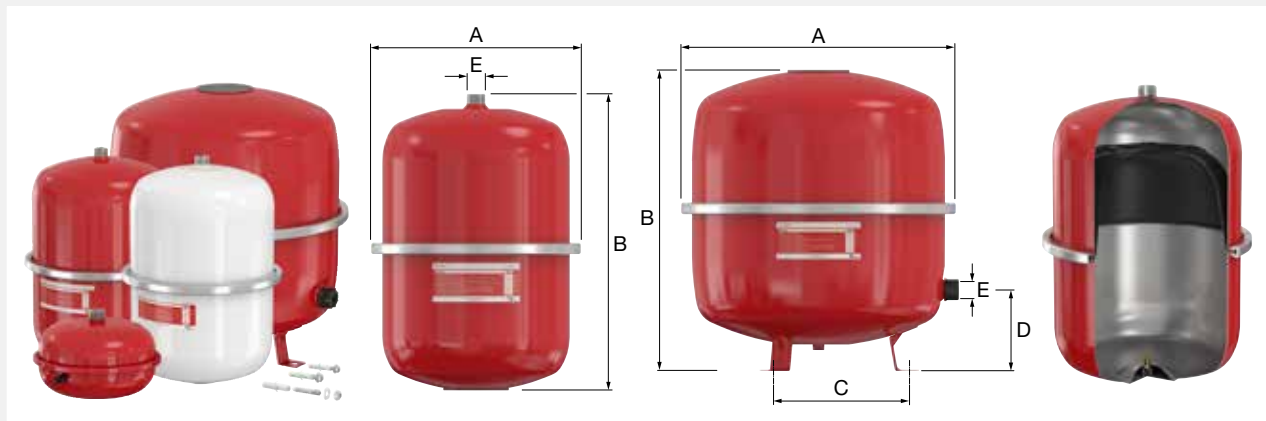
- The best expansion vessels thanks to our groundbreaking technology.
- Extremely low permeability of the diaphragm ensures that pre-charge pressure is maintained for a long time.
- The flexible diaphragms with rolling action are preformed and, in contrast to a bag type bladder, prevent stretching so that their properties are preserved over the long term.
- The unique clench ring construction clamps the diaphragm between the two 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 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 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 and diaphragms.
- Finished with a gleaming epoxy-powder coating.
- Each vessel is factory tested.
- Expansion vessels 8 - 80 litres:
 - The two halves of the vessel are coated prior to assembly, not afterwards. Therefore there is no risk of corrosion on the clamp ring.
 - The nitrogen air valve is countersunk on the vessel to protect it from damage, it is in turn further protected by a plastic cover plate.



Flexcon 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 flow temperature of 120 °C.
- Maximum temperature diaphragm: 70 °C.
- In accordance with Pressure Equipment Directive 2014/68/EU.
- Red (RAL 3002) epoxy powder coating (18 litre also available in white).
- Flexcon 35 - 80: With feet and including mounting kit.

Not available on stock in the U.K.

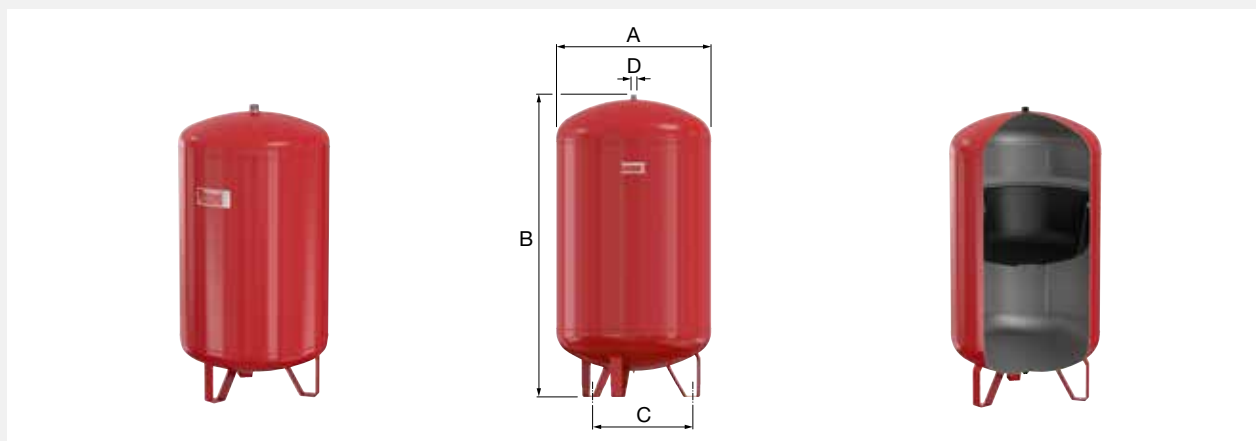


Type	Capacity [l]	Pre-charge [bar]	Max. working pressure [bar]	A [mm]	B [mm]	Ø C [mm]	D [mm]	Syst. conn. (E)	Weight [kg]		Order Code
Flexcon 2	2	0.5	3.0	216	144	-	-	G 3/4" M	1.5	120	13221
Flexcon 2	2	1.0	3.0	216	144	-	-	G 3/4" M	1.5	120	13223
Flexcon 4	4	0.5	3.0	216	192	-	-	G 3/4" M	1.8	90	13421
Flexcon 4	4	1.0	3.0	216	192	-	-	G 3/4" M	1.8	90	13423
Flexcon 8	8	0.5	3.0	245	277	-	-	R 3/4"	2.2	77	26085
Flexcon 12	12	0.5	3.0	286	309	-	-	R 3/4"	2.7	60	26125
Flexcon 12	12	1.0	3.0	286	309	-	-	R 3/4"	2.7	60	26126
Flexcon 18	18	0.5	3.0	286	405	-	-	R 3/4"	3.7	48	26185
Flexcon 18 white	18	0.5	3.0	286	405	-	-	R 3/4"	3.7	48	26181
Flexcon 18	18	1.0	3.0	286	405	-	-	R 3/4"	3.7	48	26186
Flexcon 18 white	18	1.0	3.0	286	405	-	-	R 3/4"	3.7	48	26182
Flexcon 18	18	1.5	3.0	286	405	-	-	R 3/4"	3.7	48	26188
Flexcon 25	25	0.5	3.0	328	421	-	-	R 3/4"	4.5	25	26255
Flexcon 25	25	1.0	3.0	328	421	-	-	R 3/4"	4.5	25	26256
Flexcon 25	25	1.5	3.0	328	421	-	-	R 3/4"	4.5	25	26258
Flexcon 35	35	0.5	3.0	396	435	263	118	R 3/4"	5.6	24	26355
Flexcon 35	35	1.0	3.0	396	435	263	118	R 3/4"	5.6	24	26356
Flexcon 35	35	1.5	3.0	396	435	263	118	R 3/4"	5.6	24	26357
Flexcon 50	50	0.5	6.0	437	493	263	134	R 3/4"	11.4	12	26505
Flexcon 50	50	1.0	6.0	437	493	263	134	R 3/4"	11.4	12	26506
Flexcon 50	50	1.5	6.0	437	493	263	134	R 3/4"	11.4	12	26507
Flexcon 80	80	0.5	6.0	519	534	360	140	R 1"	15.0	12	26805
Flexcon 80	80	1.0	6.0	519	534	360	140	R 1"	15.0	12	26806
Flexcon 80	80	1.5	6.0	519	534	360	140	R 1"	15.0	12	26807
Flexcon 80	80	2.0	6.0	519	534	360	140	R 1"	15.2	12	26804



Flexcon 110 - 300

- 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 flow temperature of 120 °C.
- Maximum temperature diaphragm: 70 °C.
- In accordance with Pressure Equipment Directive 2014/68/EU.
- Red (RAL 3002) epoxy powder coating.
- Including mounting kit.



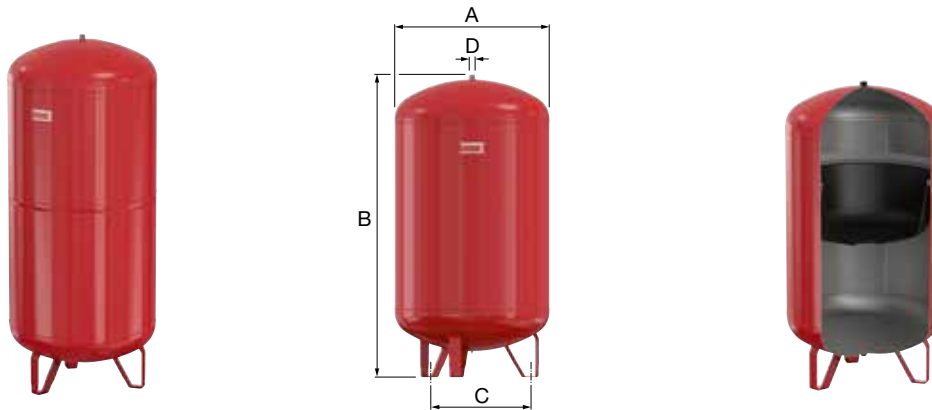
Type	Capacity [l]	Pre-charge [bar]	Dimensions			Syst. conn. (D)	Weight [kg]		Order Code
			A [mm]	B [mm]	Ø C [mm]				
Flexcon 110	110	0.5	484	784	360	R 1"	19.1	8	16115
Flexcon 110	110	1.0	484	784	360	R 1"	19.1	8	16116
Flexcon 110	110	1.5	484	784	360	R 1"	19.1	8	16117
Flexcon 110	110	2.0	484	784	360	R 1"	19.1	8	16119
Flexcon 110	110	2.5	484	784	360	R 1"	19.1	8	16120
Flexcon 110	110	3.0	484	784	360	R 1"	19.1	8	16110
Flexcon 110	110	*	484	784	360	R 1"	19.1	8	16111
Flexcon 140	140	0.5	484	950	360	R 1"	20.1	8	16145
Flexcon 140	140	1.0	484	950	360	R 1"	20.1	8	16146
Flexcon 140	140	1.5	484	950	360	R 1"	20.1	8	16147
Flexcon 140	140	2.0	484	950	360	R 1"	20.1	8	16141
Flexcon 140	140	2.5	484	950	360	R 1"	20.1	8	16142
Flexcon 140	140	3.0	484	950	360	R 1"	20.1	8	16143
Flexcon 140	140	*	484	950	360	R 1"	20.1	8	16140
Flexcon 200	200	0.5	484	1300	450	R 1"	27.6	8	16205
Flexcon 200	200	1.0	484	1300	450	R 1"	27.6	8	16206
Flexcon 200	200	1.5	484	1300	450	R 1"	27.6	8	16207
Flexcon 200	200	2.0	484	1300	450	R 1"	27.6	8	16208
Flexcon 200	200	2.5	484	1300	450	R 1"	27.6	8	16209
Flexcon 200	200	3.0	484	1300	450	R 1"	27.6	8	16210
Flexcon 200	200	*	484	1300	450	R 1"	27.6	8	16200
Flexcon 300	300	0.5	600	1330	450	R 1"	44.1	6	16301
Flexcon 300	300	1.0	600	1330	450	R 1"	44.1	6	16302
Flexcon 300	300	1.5	600	1330	450	R 1"	44.1	6	16303
Flexcon 300	300	2.0	600	1330	450	R 1"	44.1	6	16304
Flexcon 300	300	2.5	600	1330	450	R 1"	44.1	6	16305
Flexcon 300	300	3.0	600	1330	450	R 1"	44.1	6	16306
Flexcon 300	300	*	600	1330	450	R 1"	44.1	6	16300

* Specify pre-charge pressure when ordering.



Flexcon 425 - 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 flow temperature of 120 °C.
- Maximum temperature diaphragm: 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]				
Flexcon 425	425	0.5	790	1180	610	R 1"	57.4	1	16421
Flexcon 425	425	1.0	790	1180	610	R 1"	57.4	1	16422
Flexcon 425	425	1.5	790	1180	610	R 1"	57.4	1	16423
Flexcon 425	425	2.0	790	1180	610	R 1"	57.4	1	16424
Flexcon 425	425	2.5	790	1180	610	R 1"	57.4	1	16425
Flexcon 425	425	3.0	790	1180	610	R 1"	57.4	1	16426
Flexcon 425	425	*	790	1180	610	R 1"	57.4	1	16420
Flexcon 600	600	0.5	790	1540	610	R 1"	70.1	1	16601
Flexcon 600	600	1.0	790	1540	610	R 1"	70.1	1	16602
Flexcon 600	600	1.5	790	1540	610	R 1"	70.1	1	16603
Flexcon 600	600	2.0	790	1540	610	R 1"	70.1	1	16604
Flexcon 600	600	2.5	790	1540	610	R 1"	70.1	1	16605
Flexcon 600	600	3.0	790	1540	610	R 1"	70.1	1	16606
Flexcon 600	600	*	790	1540	610	R 1"	70.1	1	16600
Flexcon 800	800	0.5	790	1888	610	R 1"	88.0	1	16801
Flexcon 800	800	1.0	790	1888	610	R 1"	88.0	1	16802
Flexcon 800	800	1.5	790	1888	610	R 1"	88.0	1	16803
Flexcon 800	800	2.0	790	1888	610	R 1"	88.0	1	16804
Flexcon 800	800	2.5	790	1888	610	R 1"	88.0	1	16805
Flexcon 800	800	3.0	790	1888	610	R 1"	88.0	1	16806
Flexcon 800	800	*	790	1888	610	R 1"	88.0	1	16800
Flexcon 1000	1000	0.5	790	2268	610	R 1"	101.4	1	16901
Flexcon 1000	1000	1.0	790	2268	610	R 1"	101.4	1	16902
Flexcon 1000	1000	1.5	790	2268	610	R 1"	101.4	1	16903
Flexcon 1000	1000	2.0	790	2268	610	R 1"	101.4	1	16904
Flexcon 1000	1000	2.5	790	2268	610	R 1"	101.4	1	16905
Flexcon 1000	1000	3.0	790	2268	610	R 1"	101.4	1	16906
Flexcon 1000	1000	*	790	2268	610	R 1"	101.4	1	16900

* Specify pre-charge pressure when ordering.



Flexcon Top and Flexcon Solar: Now with butyl diaphragm

The well-known Flexcon Top and Flexcon Solar 2 - 1000 liter expansion vessels now have a high quality butyl rubber diaphragm. One major advantage of butyl is its very low gas permeability, which helps to maintain the vessels pre-charge longer.



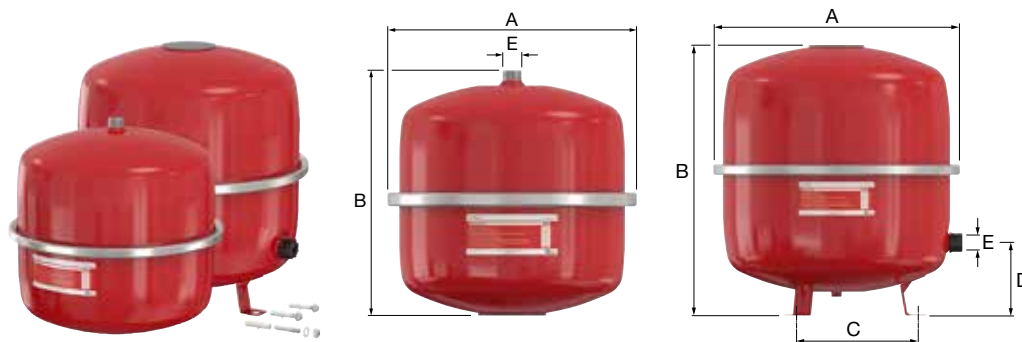
FLEXCON TOP

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

- Diaphragm: butyl rubber.

Flexcon Top 2 - 80

- Deep drawn steel vessel halves with zinc plated steel clench ring.
- 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 flow temperature of 120 °C.
- Maximum temperature diaphragm: 90 °C.
- In accordance with Pressure Equipment Directive 2014/68/EU.
- Red (RAL 3002) epoxy powder coating.
- Flexcon Top 35 - 80: With feet and including mounting kit.



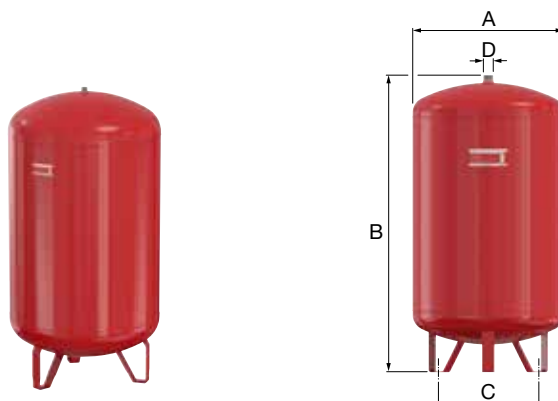
Type	Capacity [l]	Pre-charge [bar]	Dimensions				Syst. conn. (E)	Weight [kg]		Order Code
			A [mm]	B [mm]	Ø C [mm]	D [mm]				
Flexcon Top 2	2	0.5	216	144	-	-	R 3/4"	1.7	120	13202
Flexcon Top 2	2	2.5	216	144	-	-	R 3/4"	1.7	120	13203
Flexcon Top 2	2	*	216	144	-	-	R 3/4"	1.7	120	13204
Flexcon Top 4	4	0.5	216	192	-	-	R 3/4"	2.1	90	13404
Flexcon Top 4	4	2.5	216	192	-	-	R 3/4"	2.1	90	13405
Flexcon Top 4	4	*	216	192	-	-	R 3/4"	2.1	90	13406
Flexcon Top 8	8	0.5	245	277	-	-	R 3/4"	3.2	50	16008
Flexcon Top 8	8	2.5	245	277	-	-	R 3/4"	3.2	50	16010
Flexcon Top 8	8	*	245	277	-	-	R 3/4"	3.2	50	16011
Flexcon Top 12	12	0.5	286	309	-	-	R 3/4"	4.5	36	16012
Flexcon Top 12	12	2.5	286	309	-	-	R 3/4"	4.5	36	16014
Flexcon Top 12	12	*	286	309	-	-	R 3/4"	4.5	36	16015
Flexcon Top 18	18	0.5	328	323	-	-	R 3/4"	5.7	24	16018
Flexcon Top 18	18	2.5	328	323	-	-	R 3/4"	5.7	24	16020
Flexcon Top 18	18	*	328	323	-	-	R 3/4"	5.7	24	16017
Flexcon Top 25	25	0.5	358	356	-	-	R 3/4"	7.3	24	16025
Flexcon Top 25	25	1.0	358	356	-	-	R 3/4"	7.3	18	16026
Flexcon Top 25	25	1.5	358	356	-	-	R 3/4"	7.3	18	16029
Flexcon Top 25	25	2.5	358	356	-	-	R 3/4"	7.3	18	16027
Flexcon Top 25	25	*	358	356	-	-	R 3/4"	7.3	18	16030
Flexcon Top 35	35	0.5	396	435	263	118	R 3/4"	8.1	18	16035
Flexcon Top 35	35	1.5	396	435	263	118	R 3/4"	8.1	18	16039
Flexcon Top 35	35	2.5	396	435	263	118	R 3/4"	8.1	18	16037
Flexcon Top 35	35	*	396	435	263	118	R 3/4"	8.1	18	16038
Flexcon Top 50	50	0.5	437	493	263	134	R 3/4"	11.4	12	16051
Flexcon Top 50	50	1.5	437	493	263	134	R 3/4"	11.4	12	16050
Flexcon Top 50	50	2.5	437	493	263	134	R 3/4"	11.4	12	16053
Flexcon Top 50	50	*	437	493	263	134	R 3/4"	11.4	12	16054
Flexcon Top 80	80	0.5	519	534	360	140	R 1"	15.0	12	16081
Flexcon Top 80	80	2.5	519	534	360	140	R 1"	15.0	12	16083
Flexcon Top 80	80	*	519	534	360	140	R 1"	15.0	12	16084
Flexcon Top 80	80	1.5	519	534	360	140	R 1"	15.0	12	16085

* Specify pre-charge pressure when ordering.



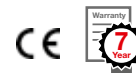
Flexcon Top 110 - 1000

- 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 flow temperature of 120 °C.
- Maximum temperature diaphragm: 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	110	1.5	484	784	360	R 1"	27.3	8	16103
Flexcon Top 110	110	3.0	484	784	360	R 1"	27.3	8	16106
Flexcon Top 110	110	3.5	484	784	360	R 1"	27.3	8	16090
Flexcon Top 110	110	*	484	784	360	R 1"	27.3	8	16100
Flexcon Top 140	140	1.5	484	950	360	R 1"	31.6	8	16133
Flexcon Top 140	140	3.0	484	950	360	R 1"	31.6	8	16136
Flexcon Top 140	140	3.5	484	950	360	R 1"	31.6	8	16091
Flexcon Top 140	140	*	484	950	360	R 1"	31.6	8	16130
Flexcon Top 200	200	1.5	600	960	450	R 1"	35.4	8	16193
Flexcon Top 200	200	3.0	600	960	450	R 1"	35.4	8	16196
Flexcon Top 200	200	3.5	600	960	450	R 1"	35.4	8	16092
Flexcon Top 200	200	*	600	960	450	R 1"	35.4	8	16190
Flexcon Top 300	300	1.5	600	1330	450	R 1"	57.1	6	16293
Flexcon Top 300	300	3.0	600	1330	450	R 1"	57.1	6	16296
Flexcon Top 300	300	3.5	600	1330	450	R 1"	57.1	6	16093
Flexcon Top 300	300	*	600	1330	450	R 1"	57.1	6	16290
Flexcon Top 425	425	1.5	790	1180	610	R 1"	84.9	1	16413
Flexcon Top 425	425	3.0	790	1180	610	R 1"	84.9	1	16416
Flexcon Top 425	425	3.5	790	1180	610	R 1"	84.9	1	16094
Flexcon Top 425	425	*	790	1180	610	R 1"	84.9	1	16410
Flexcon Top 600	600	1.5	790	1540	610	R 1"	105.8	1	16593
Flexcon Top 600	600	3.0	790	1540	610	R 1"	105.8	1	16596
Flexcon Top 600	600	3.5	790	1540	610	R 1"	105.8	1	16096
Flexcon Top 600	600	*	790	1540	610	R 1"	105.8	1	16590
Flexcon Top 800	800	1.5	790	1888	610	R 1"	133.7	1	16793
Flexcon Top 800	800	3.0	790	1888	610	R 1"	133.7	1	16796
Flexcon Top 800	800	3.5	790	1888	610	R 1"	133.7	1	16098
Flexcon Top 800	800	*	790	1888	610	R 1"	133.7	1	16790
Flexcon Top 1000	1000	1.5	790	2268	610	R 1"	155.1	1	16893
Flexcon Top 1000	1000	3.0	790	2268	610	R 1"	155.1	1	16896
Flexcon Top 1000	1000	3.5	790	2268	610	R 1"	155.1	1	16099
Flexcon Top 1000	1000	*	790	2268	610	R 1"	155.1	1	17294

* Specify pre-charge pressure when ordering.



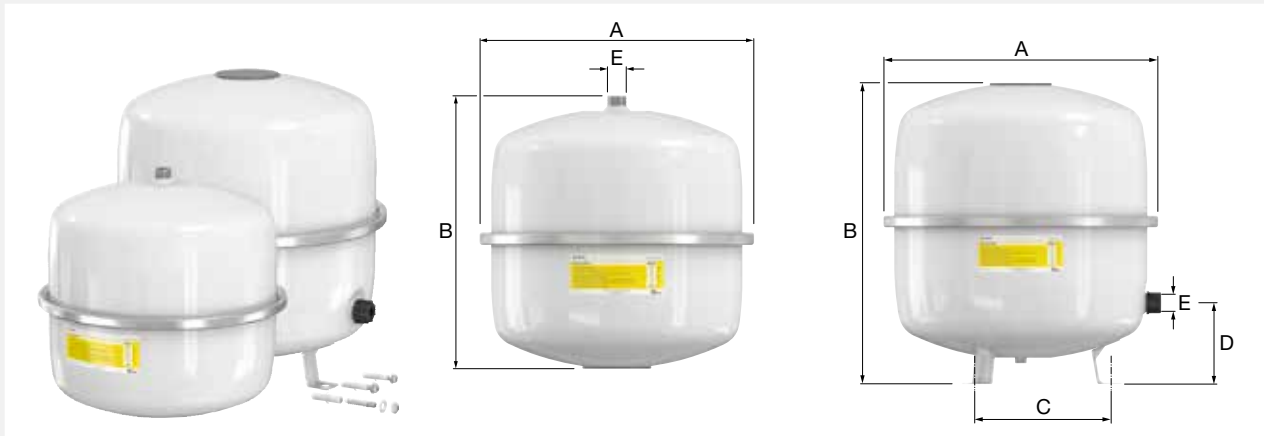
FLEXCON SOLAR

Expansion vessels specially designed for solar powered 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 flow 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.

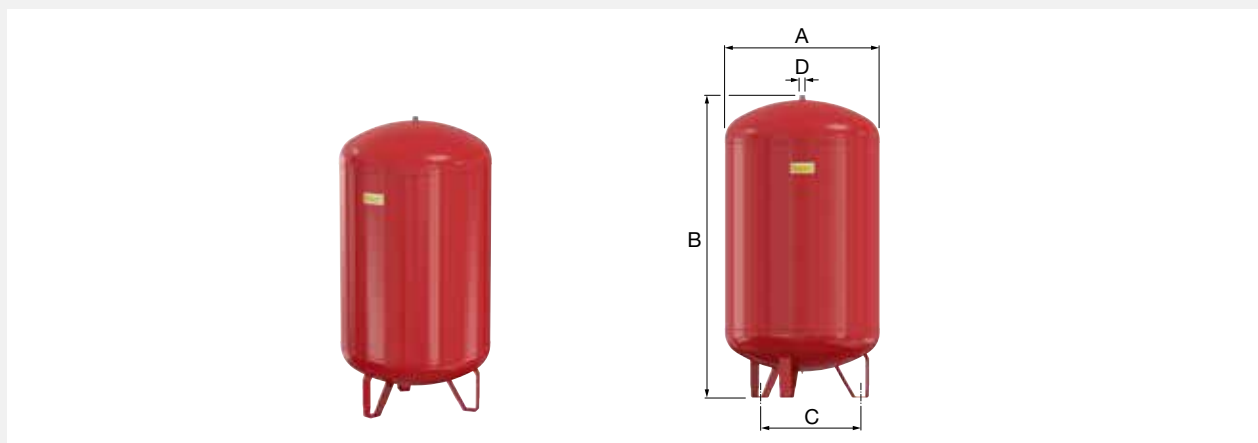


Type	Capacity [l]	Pre-charge [bar]	Dimensions				Syst. conn. (E)	Weight [kg]		Order Code
			A [mm]	B [mm]	Ø C [mm]	D [mm]				
Flexcon Solar 8	8	2.5	245	277	-	-	R 3/4"	3.2	50	16060
Flexcon Solar 12	12	2.5	286	309	-	-	R 3/4"	4.5	36	16061
Flexcon Solar 18	18	2.5	328	323	-	-	R 3/4"	5.7	24	16062
Flexcon Solar 25	25	2.5	358	356	-	-	R 3/4"	7.3	18	16063
Flexcon Solar 35	35	2.5	396	435	263	118	R 3/4"	8.1	18	16064
Flexcon Solar 50	50	2.5	437	493	263	134	R 3/4"	11.4	12	16065
Flexcon Solar 80	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 flow 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	110	3.0	484	784	360	R 1"	27.3	8	16067
Flexcon Solar 140	140	3.0	484	950	360	R 1"	31.6	8	16068
Flexcon Solar 200	200	3.0	600	960	450	R 1"	35.4	8	16069
Flexcon Solar 300	300	3.0	600	1330	450	R 1"	57.1	6	16070
Flexcon Solar 425	425	3.0	790	1180	610	R 1"	84.9	1	16071
Flexcon Solar 600	600	3.0	790	1540	610	R 1"	105.8	1	16072
Flexcon Solar 800	800	3.0	790	1888	610	R 1"	133.7	1	16073
Flexcon Solar 1000	1000	3.0	790	2268	610	R 1"	155.1	1	16074

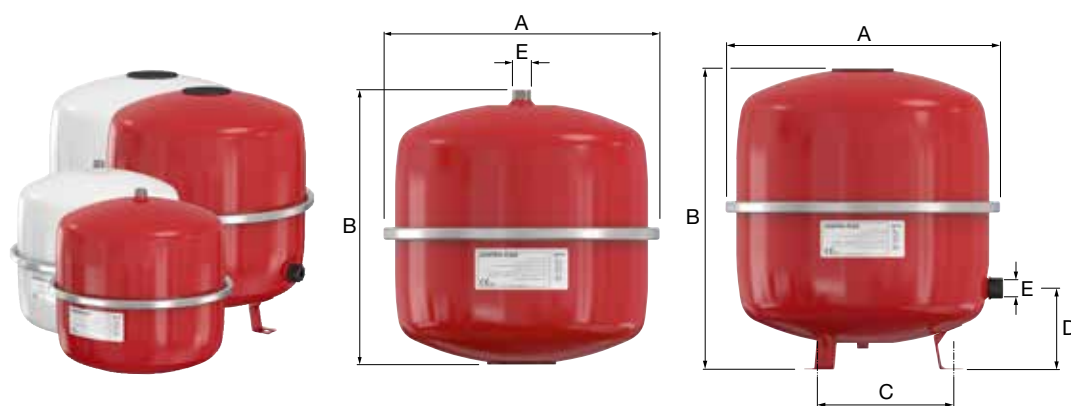


CONTRA-FLEX

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

Contra-Flex 2 - 80

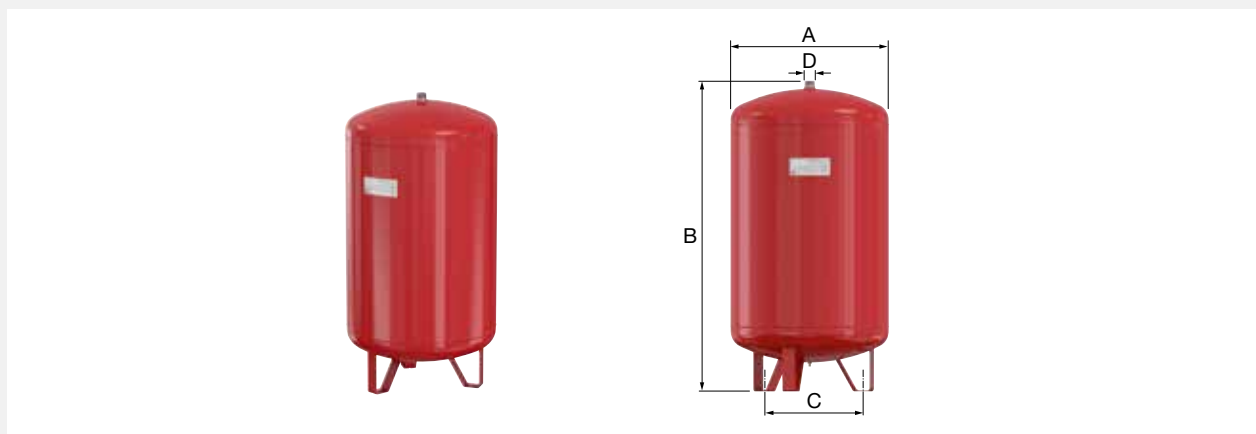
- Deep drawn steel vessel halves with zinc plated steel clench ring.
- Maximum working pressure: 3.0 or 6.0 bar.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Vessels in accordance with EN13831.
- Suitable for systems with a maximum flow temperature of 120 °C.
- Maximum temperature 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]	A [mm]	B [mm]	Ø C [mm]	D [mm]	Syst. conn. (E)	Weight [kg]		Order Code
Contra-Flex 2	2	0.5	3.0	216	144	-	-	G 3/4" M	1.5	120	13211
Contra-Flex 2	2	1.5	3.0	216	144	-	-	G 3/4" M	1.5	120	13213
Contra-Flex 4	4	0.5	3.0	216	192	-	-	G 3/4" M	1.8	90	13411
Contra-Flex 4	4	1.5	3.0	216	192	-	-	G 3/4" M	1.8	90	13413
Contra-Flex 8	8	0.5	3.0	245	277	-	-	R 3/4"	2.2	50	26074
Contra-Flex 8	8	1.5	3.0	245	277	-	-	R 3/4"	2.2	50	26073
Contra-Flex 8 white	8	1.5	3.0	245	277	-	-	R 3/4"	2.2	50	26063
Contra-Flex 12	12	0.5	3.0	286	309	-	-	R 3/4"	2.7	36	26136
Contra-Flex 12	12	1.5	3.0	286	309	-	-	R 3/4"	2.7	36	26133
Contra-Flex 12 white	12	1.5	3.0	286	309	-	-	R 3/4"	2.7	36	26153
Contra-Flex 18	18	0.5	3.0	328	323	-	-	R 3/4"	3.7	24	26171
Contra-Flex 18	18	1.0	3.0	328	323	-	-	R 3/4"	3.7	24	26172
Contra-Flex 18	18	1.5	3.0	328	323	-	-	R 3/4"	3.7	24	26173
Contra-Flex 18 white	18	1.0	3.0	328	323	-	-	R 3/4"	3.7	24	26162
Contra-Flex 18 white	18	1.5	3.0	328	323	-	-	R 3/4"	3.7	24	26163
Contra-Flex 25	25	0.5	3.0	358	356	-	-	R 3/4"	4.5	18	26241
Contra-Flex 25	25	1.5	3.0	358	356	-	-	R 3/4"	4.5	18	26243
Contra-Flex 25 white	25	1.5	3.0	358	356	-	-	R 3/4"	4.5	18	26233
Contra-Flex 35	35	0.5	3.0	396	435	263	118	R 3/4"	5.6	18	26341
Contra-Flex 35	35	1.5	3.0	396	435	263	118	R 3/4"	5.6	18	26343
Contra-Flex 35 white	35	1.5	3.0	396	435	263	118	R 3/4"	5.6	18	26333
Contra-Flex 50	50	0.5	6.0	437	493	263	134	R 3/4"	11.4	12	26491
Contra-Flex 50	50	1.5	6.0	437	493	263	134	R 3/4"	11.4	12	26493
Contra-Flex 50 white	50	1.5	6.0	437	493	263	134	R 3/4"	11.4	12	26483
Contra-Flex 80	80	0.5	6.0	519	534	360	140	R 1"	15.0	12	26791
Contra-Flex 80	80	1.5	6.0	519	534	360	140	R 1"	15.0	12	26793
Contra-Flex 80 white	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 flow temperature of 120 °C.
- Maximum temperature diaphragm: 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	100	1.5	484	774	360	R 1"	19.0	8	26103
Contra-Flex 100	100	2.5	484	774	360	R 1"	19.0	8	26105
Contra-Flex 100	100	3.0	484	774	360	R 1"	19.0	8	17114
Contra-Flex 150	150	1.5	484	1014	360	R 1"	23.6	8	16153
Contra-Flex 150	150	2.5	484	1014	360	R 1"	23.6	8	26155
Contra-Flex 150	150	3.0	484	1014	360	R 1"	23.6	8	17119
Contra-Flex 200	200	1.5	484	1290	360	R 1"	27.5	8	26213
Contra-Flex 200	200	2.5	484	1290	360	R 1"	27.5	8	26215
Contra-Flex 200	200	3.0	484	1290	360	R 1"	27.5	8	17124
Contra-Flex 250	250	1.5	600	1138	450	R 1"	39.9	6	16253
Contra-Flex 250	250	2.5	600	1138	450	R 1"	39.9	6	26225
Contra-Flex 300	300	1.5	600	1315	450	R 1"	43.9	6	26303
Contra-Flex 300	300	2.5	600	1315	450	R 1"	43.9	6	26305
Contra-Flex 300	300	3.0	600	1315	450	R 1"	43.9	6	17134
Contra-Flex 400	400	1.5	790	1160	610	R 1"	57.1	1	26413
Contra-Flex 400	400	2.5	790	1160	610	R 1"	57.1	1	26415
Contra-Flex 400	400	3.0	790	1160	610	R 1"	57.1	1	17144
Contra-Flex 500	500	1.5	790	1310	610	R 1"	62.9	1	26523
Contra-Flex 500	500	2.5	790	1310	610	R 1"	62.9	1	26525
Contra-Flex 600	600	1.5	790	1518	610	R 1"	69.7	1	17162
Contra-Flex 600	600	2.5	790	1518	610	R 1"	69.7	1	26625
Contra-Flex 600	600	3.0	790	1518	610	R 1"	69.7	1	17164
Contra-Flex 800	800	1.5	790	1868	610	R 1"	87.5	1	17181
Contra-Flex 800	800	2.5	790	1868	610	R 1"	87.5	1	26825
Contra-Flex 800	800	3.0	790	1868	610	R 1"	87.5	1	17184
Contra-Flex 1000	1000	1.5	790	2248	610	R 1"	100.9	1	17190
Contra-Flex 1000	1000	2.5	790	2248	610	R 1"	100.9	1	26925
Contra-Flex 1000	1000	3.0	790	2248	610	R 1"	100.9	1	17194



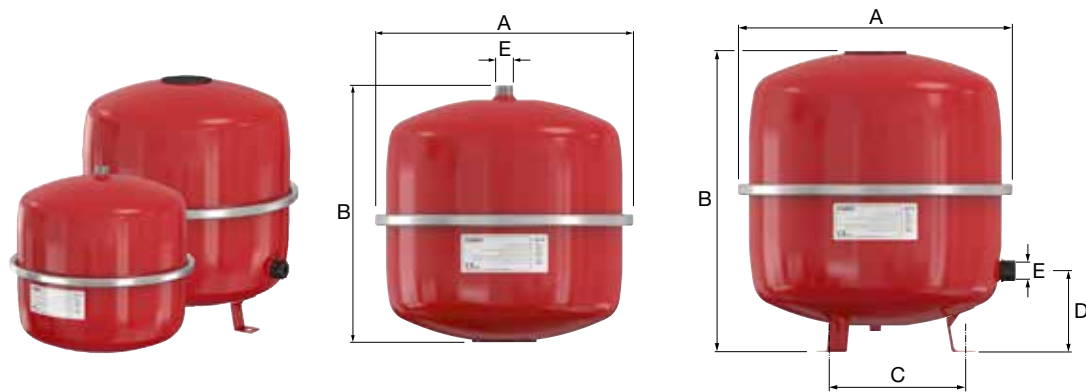
CUBEX

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

- Deep drawn steel vessel halves with zinc plated steel clench ring.

Cubex 8 - 80

- 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 flow temperature of 120 °C.
- Maximum temperature diaphragm: 70 °C.
- In accordance with Pressure Equipment Directive 2014/68/EU.
- Red (RAL 3002) epoxy powder coating.
- Cubex 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]				
Cubex 8	8	0.5	3.0	245	277	-	-	R 3/4"	2.2	60	26075
Cubex 12	12	0.5	3.0	286	309	-	-	R 3/4"	2.7	30	26135
Cubex 18	18	0.5	3.0	328	323	-	-	R 3/4"	3.7	30	26175
Cubex 18	18	1.0	3.0	328	323	-	-	R 3/4"	3.7	30	26176
Cubex 25	25	0.5	3.0	358	356	-	-	R 3/4"	4.5	24	26245
Cubex 25	25	1.0	3.0	358	356	-	-	R 3/4"	4.5	24	26246
Cubex 35	35	0.5	3.0	396	435	263	118	R 3/4"	5.4	24	26345
Cubex 35	35	1.0	3.0	396	435	263	118	R 3/4"	5.4	24	26346
Cubex 50	50	1.0	6.0	437	493	263	134	R 3/4"	11.4	12	26515
Cubex 50	50	1.5	6.0	437	493	263	134	R 3/4"	11.4	12	26516
Cubex 80	80	1.0	6.0	519	534	360	140	R 1"	15.0	12	26815
Cubex 80	80	1.5	6.0	519	534	360	140	R 1"	15.0	12	26816



FLEXCON P

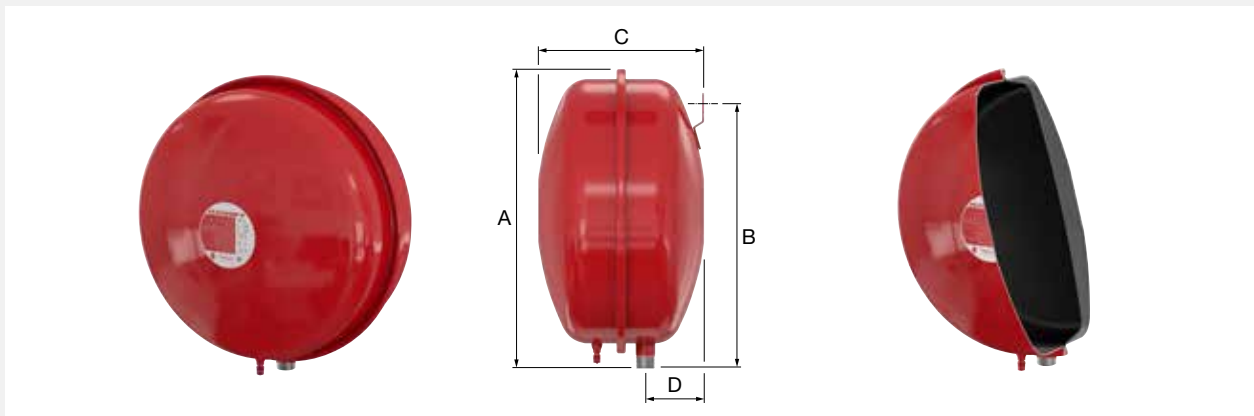
Oval shaped expansion vessels with reduced height and suspension eye. For use in sealed heating installations (acc. to EN12828) and chilled water (cooling) installations.

- 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.
- Diaphragm: butyl rubber.
- Deep drawn steel vessel halves with zinc plated steel clench ring (with red epoxy powder coating).

Not available on stock in the U.K.

Flexcon P 18 - 50

- 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 flow temperature of 120 °C.
- Maximum temperature diaphragm: 90 °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.	Weight [kg]		Order Code
			A [mm]	B [mm]	C [mm]	D [mm]				
Flexcon P 18	18	1.0	387	365	226	80	G 3/4" M	5.7	30	13316
Flexcon P 25	25	1.0	435	415	256	90	G 3/4" M	7.7	20	13326
Flexcon P 35	35	1.0	435	450	333	110	G 3/4" M	8.9	20	13336
Flexcon P 50	50	1.5	515	505	344	125	G 3/4" M	11.8	12	13357



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 flow 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	12	0.5	387	133	G 3/4" M	5.1	48	13212
Cubex R 14	14	0.5	387	153	G 3/4" M	5.3	48	13214
Cubex R 18	18	0.5	387	183	G 3/4" M	6.4	48	13218



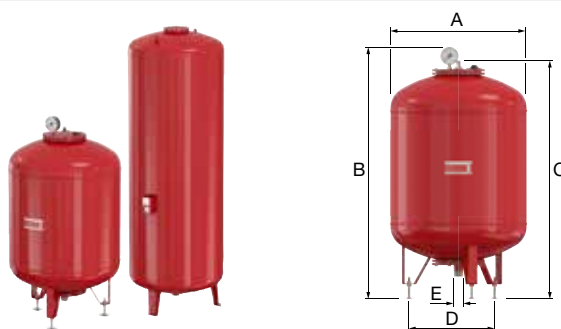
FLEXCON M

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 butyl bladder.
- Delivered with pressure gauge, inspection cover and height adjustable feet (except 1200 - 2000 litres).
- The Flexcon M 1200 - 8000 can be fitted with a Flexvent Super.

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 (other pre-charge pressures available on request).
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Vessels 100 - 1000 litres: in accordance with EN13831 / 1200 - 8000 litres: in accordance with AD2000.
- Suitable for systems with a flow temperature of 120 °C.
- Maximum temperature bladder: 70 °C.
- In accordance with Pressure Equipment Directive 2014/68/EU.
- Red (RAL 3002) epoxy powder coating.



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	100	3.0	6.0	484	958	928	360	G 1 1/4" M	23	1	22000
Flexcon M 100	100	6.0	10.0	484	958	928	360	G 1 1/4" M	33	1	22010
Flexcon M 200	200	3.0	6.0	484	1500	1470	360	G 1 1/4" M	30	1	22001
Flexcon M 200	200	6.0	10.0	600	1132	1106	360	G 1 1/4" M	46	1	22011
Flexcon M 300	300	3.0	6.0	600	1505	1475	450	G 1 1/4" M	41	1	22002
Flexcon M 300	300	6.0	10.0	600	1505	1475	450	G 1 1/4" M	60	1	22012
Flexcon M 400	400	3.0	6.0	790	1348	1318	610	G 1 1/4" M	55	1	22003
Flexcon M 400	400	6.0	10.0	790	1348	1318	610	G 1 1/4" M	84	1	22013
Flexcon M 500	500	3.0	6.0	790	1498	1468	610	G 1 1/4" M	61	1	22004
Flexcon M 600	600	3.0	6.0	790	1708	1678	610	G 1 1/4" M	68	1	22005
Flexcon M 600	600	6.0	10.0	790	1708	1678	610	G 1 1/4" M	106	1	22014
Flexcon M 800	800	3.0	6.0	790	2055	2025	610	G 1 1/4" M	93	1	22006
Flexcon M 800	800	6.0	10.0	790	2055	2025	610	G 1 1/4" M	145	1	22015
Flexcon M 1000	1000	3.0	6.0	790	2404	2374	610	G 1 1/4" M	105	1	22007
Flexcon M 1000	1000	6.0	10.0	790	2404	2374	610	G 1 1/4" M	167	1	22016
Flexcon M 1200	1200	4.0	6.0	1000	-	1940	850	Rp 1 1/2" *	285	1	22108
Flexcon M 1200	1200	6.0	10.0	1000	-	1940	850	Rp 1 1/2" *	410	1	22148
Flexcon M 1600	1600	4.0	6.0	1000	-	2440	850	Rp 1 1/2" *	340	1	22109
Flexcon M 1600	1600	6.0	10.0	1000	-	2440	850	Rp 1 1/2" *	485	1	22149
Flexcon M 2000	2000	4.0	6.0	1200	-	2180	1050	Rp 2" *	425	1	22110
Flexcon M 2000	2000	6.0	10.0	1200	-	2180	1050	Rp 2" *	600	1	22150
Flexcon M 2800	2800	4.0	6.0	1200	-	2780	1050	Rp 2 1/2" *	510	1	22118
Flexcon M 2800	2800	6.0	10.0	1200	-	2780	1050	Rp 2 1/2" *	725	1	22158
Flexcon M 3500	3500	4.0	6.0	1200	-	3580	1050	Rp 2 1/2" *	620	1	22111
Flexcon M 3500	3500	6.0	10.0	1200	-	3580	1050	Rp 2 1/2" *	900	1	22151
Flexcon M 5200	5200	6.0	10.0	1500	-	3600	1142	Rp 2 1/2" *	1330	1	22152
Flexcon M 6700	6700	6.0	10.0	1500	-	4480	1142	DN 100 **	1690	1	22153
Flexcon M 8000	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 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	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"	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

Expansion Automats and Pressurisation Equipment

2

2



For sealed systems with large volumes or static height traditional expansion vessels are not the most efficient solution in terms of operational pressure or physical footprint. Flamco Expansion Automats balance the system pressure using a highly efficient vessel design and control equipment.

We produce a comprehensive range of models that offer high-quality performance and versatility which may be further enhanced by the addition of numerous optional accessories. This makes the Flamco expansion automats suitable for use in a variety of situations.

As demands and preferences differ worldwide, Flamco has opted for an adaptable, modular range to suit every client's requirements.

Flexcon M-K/U - internal coating



P. 44

Flexcon M-K/U



P. 45

Flexcon M-K - internal coating



P. 46

Flexcon M-K Connecting Kit (pneumatic)



P. 47

Flange Connection



P. 47

Second Compressor Unit



P. 47

Flexcon M-K/C



P. 48

Single Pump Control



P. 50

Double Pump Control



P. 51

Flamcomat FG Main Vessels



P. 54

Flamcomat FB Auxiliary Vessels



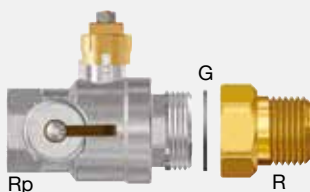
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Flamcomat drain sets



P. 55

Ball Valve



P. 56

Flexible Connecting Kit (set of 2)



P. 56

Gas Sensor Connecting Group



P. 56

Auxiliary vessel connection Flamcomat



P. 57

T-piece



P. 57

Rotating Connection, Face Sealed



P. 57

Prescor BFP BA



P. 58

Backflow preventer BA



P. 58

Pressure Safety Switch



P. 58

Bimetallic Temperature Switch



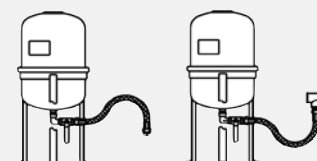
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Impulse Output Water Meter



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Surge Vessel (PN 6)



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Easycontact



P. 59

Diaphragm Rupture Sensor



P. 59

Analogue Signalling



P. 60

SD Card Module



P. 60

SPC Extension module



P. 60

MVE 1 Direct Pressurisation Control



P. 61

MVE 2 Solenoid Valve Unit



P. 61

NFE 1 Top-up Unit



P. 61

NFE 2 Top-up Unit



P. 61

NFE 3 Top-up Unit



P. 62

Flamco-Fill PE Top-up Unit (pressurisation)



P. 62

Flamco-Fill P



P. 63

Feet for Flamco-Fill PE / P



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Flexfiller



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Flexfiller Mini Digital



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Flexfiller Midi



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Digifiller



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Flexfiller Twin System



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PressDS



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Flexfiller Plus & Midifill Plus



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PressDS Plus



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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.
- 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 =>

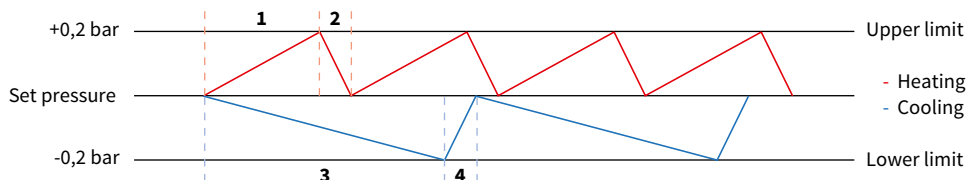
Pressure drops to the set pressure (2).

• When the temperature drops:

Pressure drops and reaches the lower limit (3):

The compressor pumps in air =>

Pressure rises to the set pressure (4).



* Graph concerns a heating system.

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

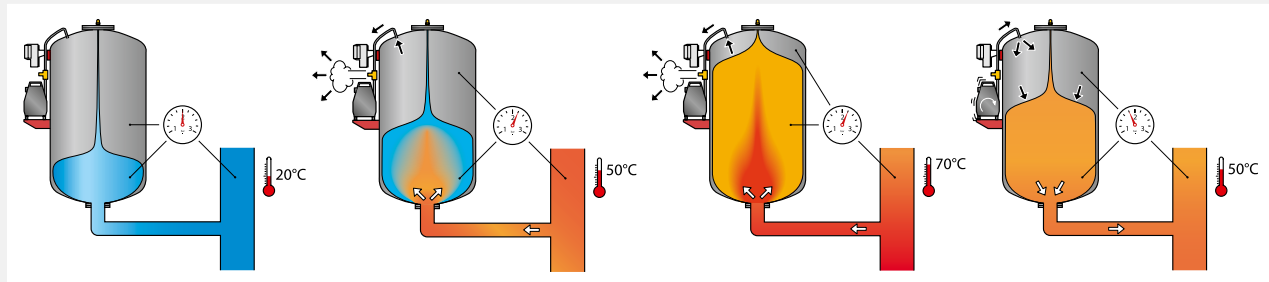
The volume of water, and thus the system pressure, increases. The controller responds to this by discharging air from the vessel and, as a result, the expansion water flows into the bladder.

(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.

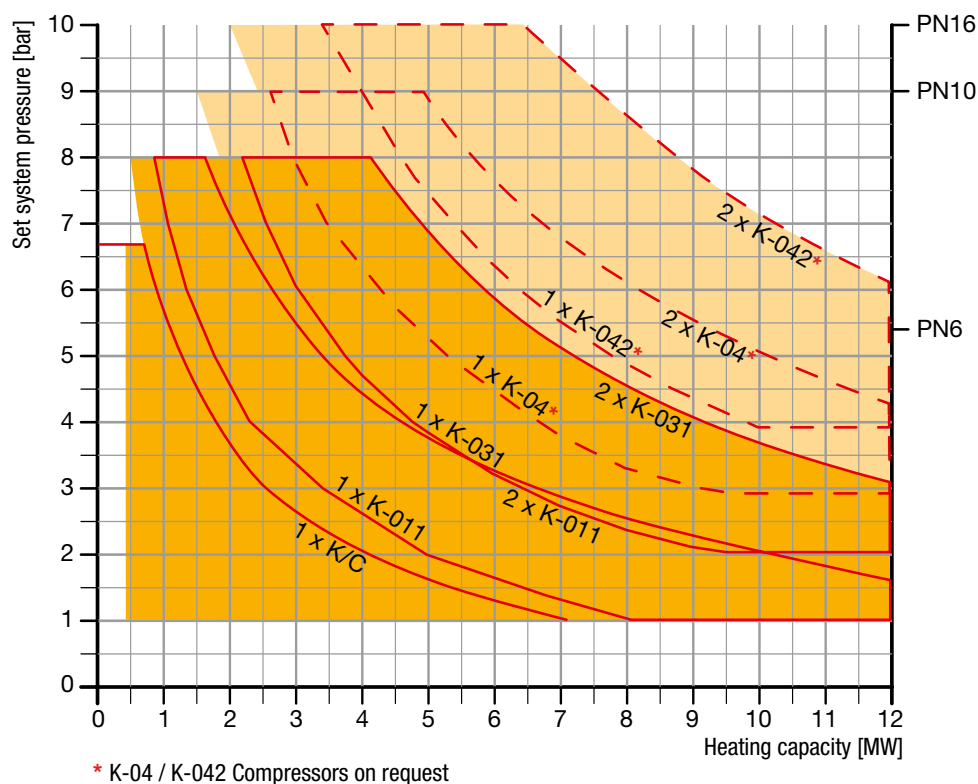
(4) Cooling down

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.



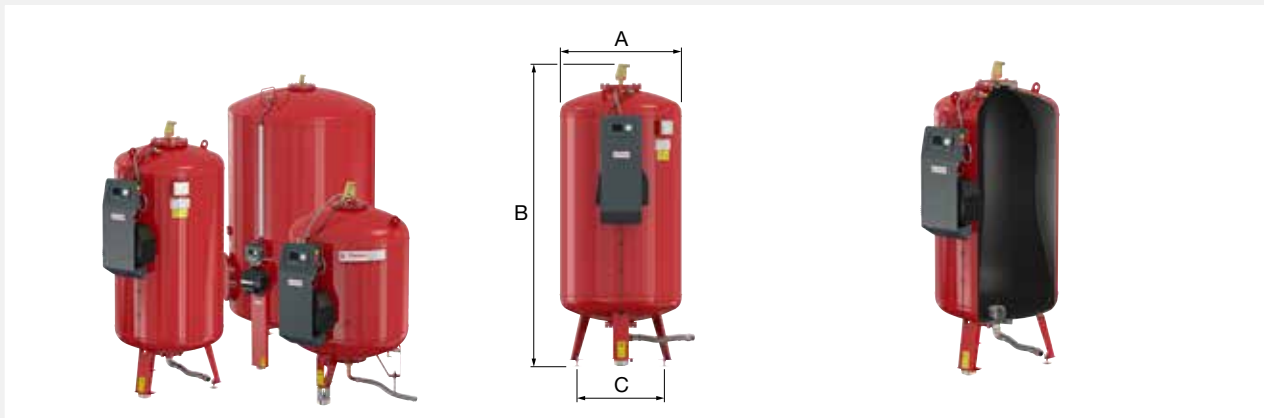
Flexcon M-K compressor curves

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



Flexcon M-K/U - internal coating

- With internal coating.

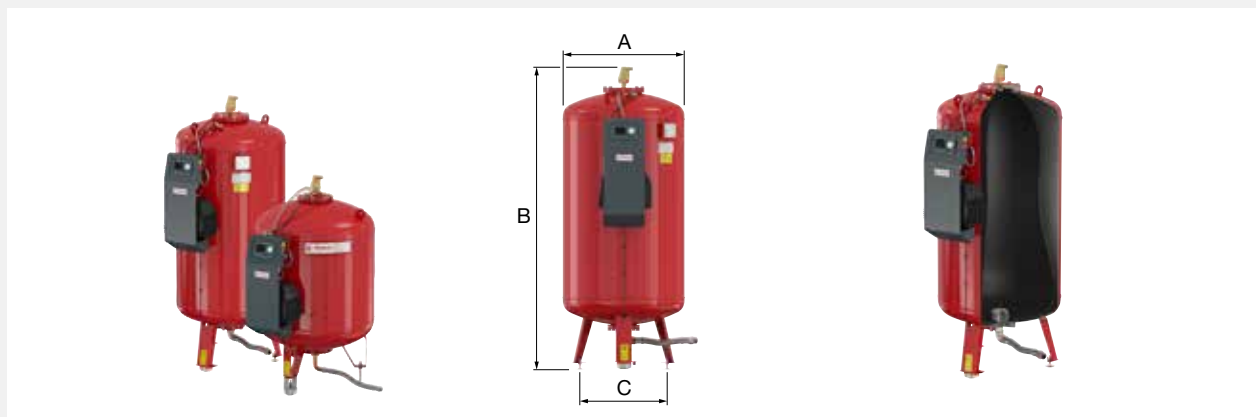


Type	Capacity [l]	Max. working pressure (Compressor) [bar]	Design pressure [PN]	Dimensions			Com- pressor	Syst. conn.	Weight [kg]		Order Code
				A [mm]	B [mm]	C [mm]					
Flexcon M-K/U 400	400	5.4	6.0	790	1437	610	K-011	G 1 1/4" M	90	1	23450
Flexcon M-K/U 400	400	8.0	10.0	790	1437	610	K-011	G 1 1/4" 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

CE

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



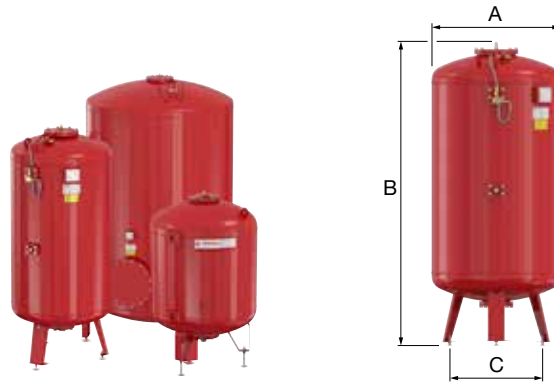
FLEXCON M-K AUXILIARY VESSELS

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	G 1 1/4" M	DN 32	350	Flexcon M-K / M-K/U	1	23795
1200 - 1600	G 1 1/2" M	DN 40	470	Flexcon M / M-K / M-K/U	1	23796
2000	G 2" M	DN 50	560	Flexcon M / M-K / M-K/U	1	23797
2800 - 5200	G 2 1/2" M	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 17 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.
 - Maximum temperature diaphragm: 70 °C.
 - Minimum temperature at (heating) outlet: -10 °C.
 - Electricity supply: 230 v ~ 50 Hz.
 - 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.

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	1215	G 1" F	37	1	23225
Flexcon M-K/C 200	200	5.4	6.0	600	1391	G 1" F	71	1	23226
Flexcon M-K/C 350	350	5.4	6.0	790	1459	G 1" F	81	1	23227
Flexcon M-K/C 425	425	5.4	6.0	790	1612	G 1" F	91	1	23228



FLAMCOMAT - PUMP UNITS

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

Flamcomats with pump units are used for storage of expansion water, deaeration and topping up your installation automatically as an integrated controlled unit carried out with state of the art micro-electronics. The Flamcomat balanced pressure expansion equipment is sized according to the total system volume and the boiler or chiller load. The Flamcomat vessel is 80% efficient irrespective of the static height of the system. It is the ideal solution for large installations or high installations where standard diaphragm expansion equipment is limited.



- 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.
- The user-friendly control unit displays all operating and error conditions in a comprehensible and convenient way.
- Advanced technology ensures low 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 and RS 485 interface.
- 20 languages can be selected in the menu of the SPC controller (eg: D, GB, NL and F).
- Due to the hydraulic design of the Flamcomat G3 and the connection sets the vessel can be positioned anywhere around the Flamcomat.
- Beams are fitted to the Flamcomat G3 for protection of components and easy transport into hard to reach places.
- The position of the second pump on a double pump Flamcomat G3 can be positioned on either side of the Flamcomat.
- The Flamcomat G3 pump units require approximately 50% less surface area compared to the previous model.
- Deaeration modes: fast, normal or off.
- 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.

Flamcomat pump units - Technical specifications

Type	Nominal voltage	Rated current [A]	Rated power [kW]	Protection class of pump unit *
MM / G3	230 V ~1 N PE 50 Hz	0.43	0.09	IP44
M02 / G3	230 V ~1 N PE 50 Hz	2.77	0.62	IP54
M10 / G3	230 V ~1 N PE 50 Hz	4.4	0.75	IP54
M20 / G3	230 V ~1 N PE 50 Hz	7.2	1.1	IP54
M60 / G3	230 V ~1 N PE 50 Hz	7.4	1.1	IP54
M80 / G3	400 V ~3 N PE 50 Hz	3.4	1.5	IP54
M100	400 V ~3 N PE 50 Hz	4.75	2.2	IP54
M130	400 V ~3 N PE 50 Hz	6.4	3.0	IP54
DM / G3	230 V ~1 N PE 50 Hz	0.86	0.18	IP44
D02 / G3	230 V ~1 N PE 50 Hz	5.54	1.24	IP54
D10 / G3	230 V ~1 N PE 50 Hz	8.8	1.5	IP54
D20 / G3	230 V ~1 N PE 50 Hz	14.4	2.2	IP54
D60 / G3	230 V ~1 N PE 50 Hz	14.8	2.2	IP54
D80 / G3	400 V ~3 N PE 50 Hz	6.8	3.0	IP54
D100	400 V ~3 N PE 50 Hz	9.5	4.4	IP54
D130	400 V ~3 N PE 50 Hz	12.8	6.0	IP54

* Protection, Control unit SPCx-lw / hw: IP54.

Single Pump Control

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



Type*	Design pressure [PN]	Pump orientation	For boiler output [kW]	Working pressure [bar]	Dimensions L. x W. x H. [mm]	Connection to				Order Code
						Vessel	System conn.	Water supply		
MM / G3	PN 6	hor.	100 - 200	1.2 - 3.0	506 x 227 x 922	G 1" M	G 1 1/4" F	Rp 1/2"	1	17940
M02 / G3	PN 10	hor.	500 - 2300	1.2 - 3.5	540 x 227 x 922	G 1" M	G 1 1/4" F	Rp 1/2"	1	17943
M10 / G3	PN 10	hor.	900 - 4700	2.0 - 5.0	513 x 227 x 922	G 1" M	G 1 1/4" F	Rp 1/2"	1	17944
M20 / G3	PN 10	hor.	1600 - 8400	2.0 - 5.0	553 x 227 x 922	G 1" M	G 1 1/4" F	Rp 1/2"	1	17945
M60 / G3	PN 10	vert.	1400 - 4700	3.5 - 8.5	561 x 227 x 922	G 1" M	G 1 1/4" F	Rp 1/2"	1	17946
M80 / G3	PN 16	vert.	1400 - 4900	4.7 - 10.0	593 x 299 x 937	G 1" M	G 1 1/4" F	Rp 1/2"	1	17947
M100	PN 16	vert.	1300 - 5200	5.9 - 14.1	540 x 605 x 1030	G 1 1/2" F	G 1 1/2" F	Rp 1/2"	1	17884
M130	PN 16	vert.	3300 - 5300	8.0 - 14.4	540 x 605 x 1190	G 1 1/2" F	G 1 1/2" 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 Pump Selection Graphs').
- Maximum system pressure: 6, 10 and 16 bar.



Type*	Design pressure [PN]	Pump orientation	For boiler output [kW]	Working pressure [bar]	Dimensions L. x W. x H. [mm]	Connection to				Order Code
						Vessel	System conn.	Water supply		
DM / G3	PN 6	hor.	100 - 400	1.2 - 3.0	506 x 267 x 942	G 1" M	G 1 1/4" F	Rp 1/2"	1	17948
D02 / G3	PN 10	hor.	500 - 4400	1.2 - 3.5	603 x 452 x 974	G 1" M	G 1 1/4" F	Rp 1/2"	1	17949
D10 / G3	PN 10	hor.	900 - 9200	2.0 - 5.0	583 x 452 x 974	G 1" M	G 1 1/4" F	Rp 1/2"	1	17950
D20 / G3	PN 10	hor.	1600 - 10000	2.0 - 5.0	620 x 446 x 974	G 1" M	G 1 1/4" F	Rp 1/2"	1	17951
D60 / G3	PN 10	vert.	1400 - 9400	3.5 - 8.5	594 x 444 x 974	G 1" M	G 1 1/4" F	Rp 1/2"	1	17952
D80 / G3	PN 16	vert.	1400 - 9400	4.7 - 10.0	594 x 515 x 975	G 1" M	G 1 1/4" F	Rp 1/2"	1	17953
D100	PN 16	vert.	1300 - 10000	5.9 - 14.1	930 x 530 x 1030	G 1 1/2" F	G 1 1/2" F	Rp 1/2"	1	17885
D130	PN 16	vert.	3300 - 10000	8.0 - 14.4	930 x 530 x 1190	G 1 1/2" F	G 1 1/2" F	Rp 1/2"	1	17887

* For larger, more powerful systems please contact Flamco.

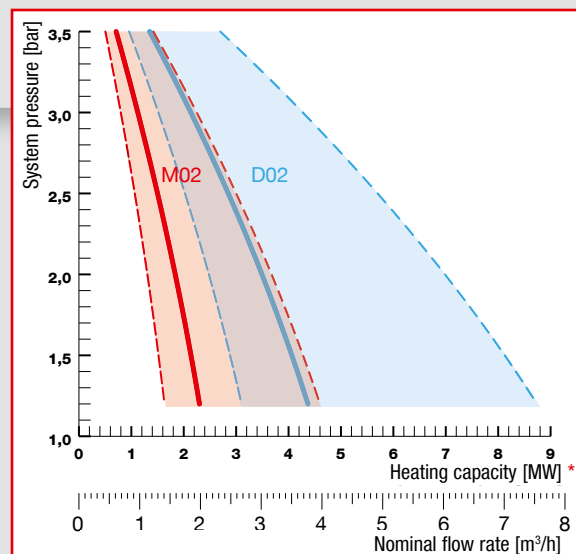
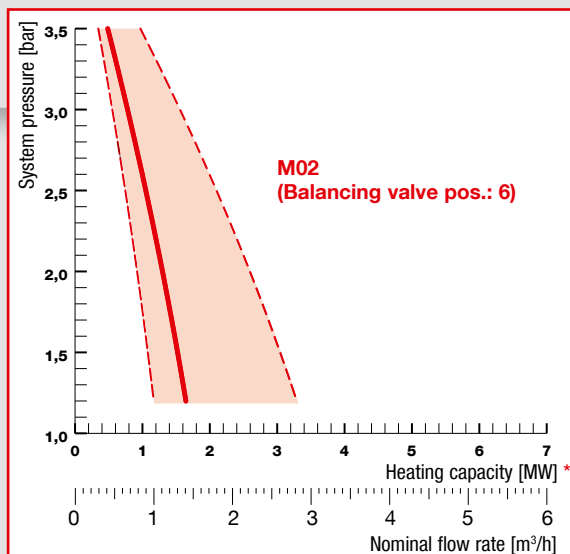
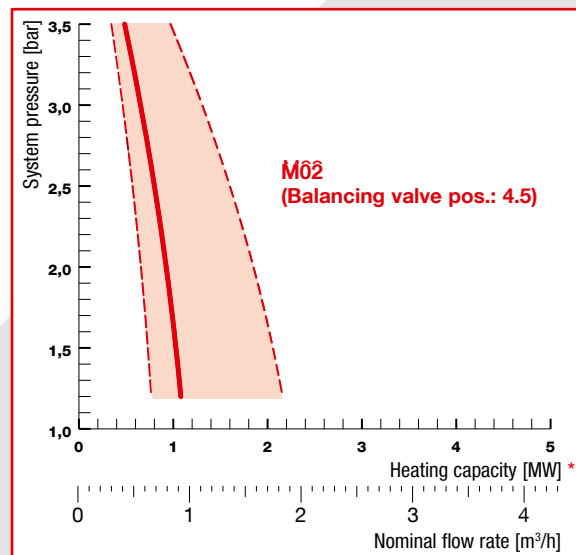
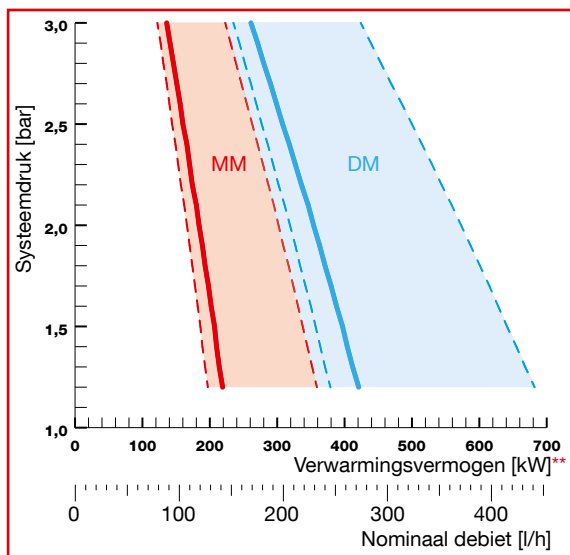
Flamcomat Pump Selection Graphs

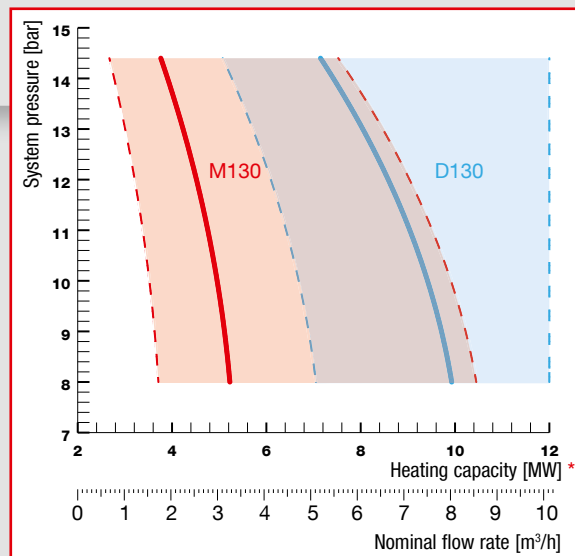
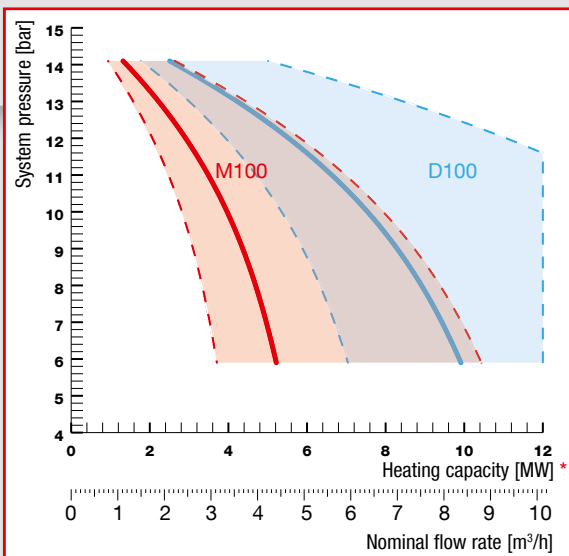
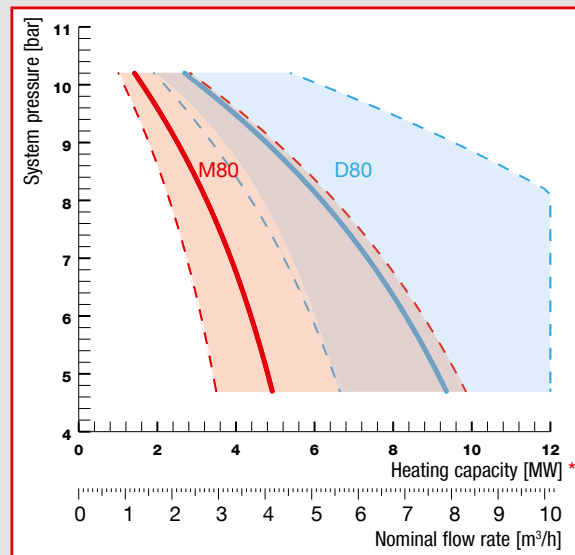
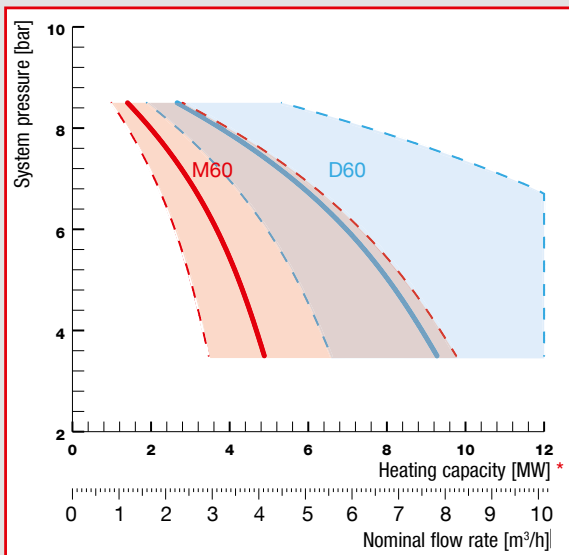
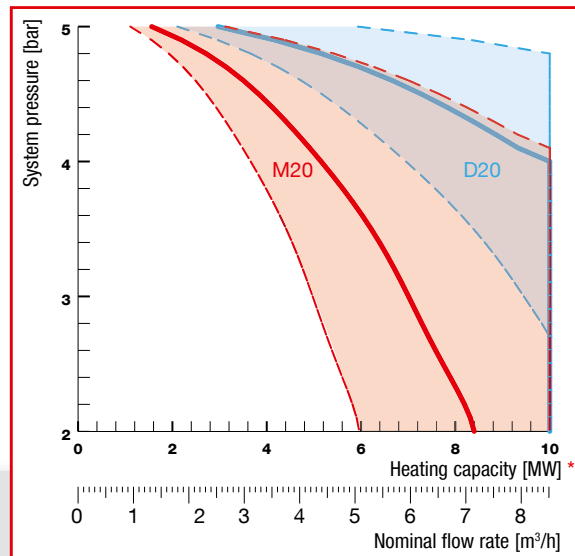
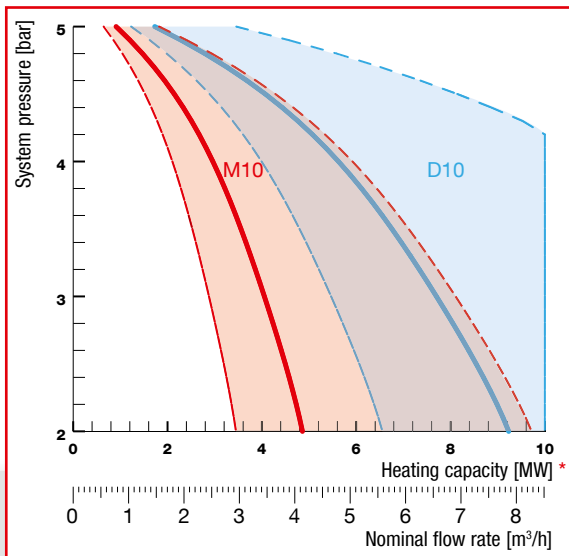
The Flamco calculation program for expansion automats determines the flow according to the exact contraction flow factor (VDI4708-2). You can find the calculation program for expansion automats at www.flamcogroup.com.



* based on 0.85 l/(kW*h)

** based on 0.65 l/(kW*h)





FLAMCOMAT VESSELS

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

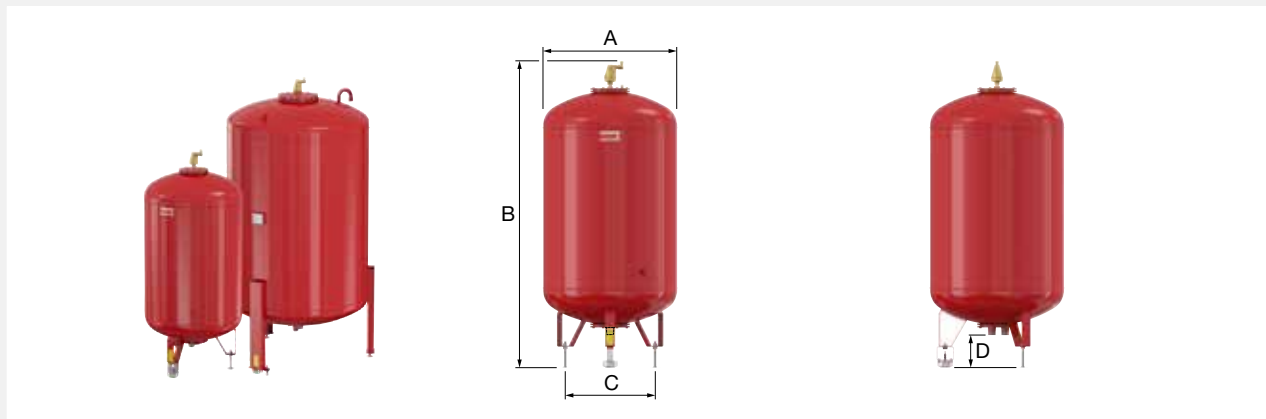
A multi function product which provides all the essential requirements for a sealed chilled or heated water system i.e. automatic expansion control, pressurisation, deaeration and make-up.

- 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.
- Expansion fluid is stored at atmospheric pressure in the bladder.
- 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.
- 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.

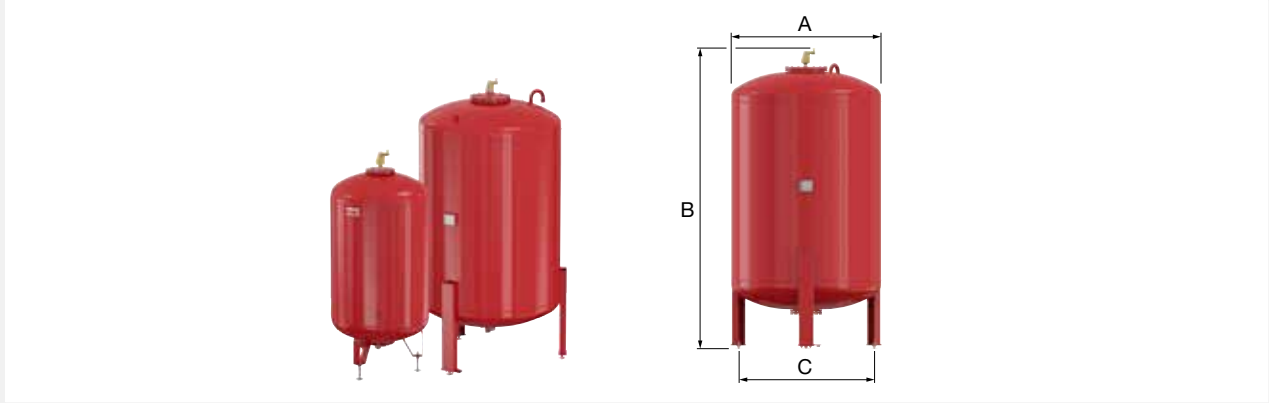


Type	Capacity [l]	Design pressure [PN]	Dimensions				Syst. conn.	Weight [kg]		Order Code
			A [mm]	B [mm]	C [mm]	D [mm]				
FG 100	100	PN 6	484	1050	360	150	G 1 1/2" M	35	1	17828
FG 200	200	PN 6	484	1560	360	150	G 1 1/2" M	31	1	17820
FG 300	300	PN 6	600	1596	450	185	G 1 1/2" M	41	1	17821
FG 400	400	PN 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



ACCESSORIES FOR FLAMCOMAT

Flamcomat drain sets



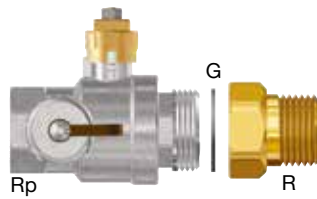
Drain off module for Flamcomat with SPC controller. Prevents against overfilling of main vessel when the expansion volume is temporarily larger than the volume of the vessel. Available with water meter or pulse water meter for a flow (Kvs) of 16 or 20 m³/h. The versions with a pulse water meter allow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

Ball Valve

With drain connection, PN 16, 120 °C.



Type	Connection			Drain connection	Application			Order Code
	Rp	G	R		Pump	Vessel		
Ball valve DN 32 with adapter	1 1/4"	1 1/2"	1 1/4"	G 3/4"	-	Flamcomat FB	1	17738
Ball valve DN 25 without adapter (set)	1"	1 1/4"	-	G 3/4"	MM - M80 (G3), DM - D80 (G3)	Flamcomat FG	2	17660
Ball valve DN 32 without adapter (set)	1 1/4"	1 1/2"	-	G 3/4"	M100 - M130 D100 - D130	Flamcomat FG	2	17661

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	Suitable for		Connection		Length [mm]	Weight [kg]		Order Code
	Pump-unit	Vessel sizes [l]	Vessel	Pump-unit				
Flexible connection 1 / G3	MM - M80, DM - D80	100 - 1600	G 1 1/2" F	G 1" F	940	1.4	1	17610
Flexible connection 2 / G3	MM - M80, DM - D80	2000 - 5000	G 1 1/2" F	G 1" F	1240	1.5	1	17611
Flexible connection 3 / G3	MM - M80, DM - D80	6500 - 10000	G 1 1/2" F	G 1" F	1440	1.6	1	17612
Flexible connection 5	M100 - M130, D100 - D130	200 - 1000	G 1 1/2" F	G 1 1/2" M	500	5.0	1	17755
Flexible connection 6	M100 - M130, D100 - D130	1200 - 5000	G 1 1/2" F	G 1 1/2" M	750	5.5	1	17756
Flexible connection 7	M100 - M130, D100 - D130	6500 - 10000	G 1 1/2" F	G 1 1/2" M	1000	6.5	1	17757

Gas Sensor Connecting Group

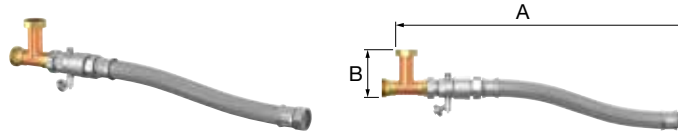
For connecting the Flamcomat main vessel to the pump unit, face sealed female, with ball valve and drainage valve. Includes a deaeration sensor for signalling the control unit to continue or stop active deaeration.



Type	Optional for		Connection to			Order Code
	Pump-unit	Vessel sizes [l]	Vessel	Pump-unit		
Sensor connecting group 1 / G3	MM - M80, DM - D80	100 - 1600	G 1 1/2" F	G 1" F	1	17615
Sensor connecting group 2 / G3	MM - M80, DM - D80	2000 - 5000	G 1 1/2" F	G 1" F	1	17616
Sensor connecting group 3 / G3	MM - M80, DM - D80	6500 - 10000	G 1 1/2" F	G 1" F	1	17617
Sensor connecting group 5	M100 - M130, D100 - D130	200 - 1000	G 1 1/2" F	G 1 1/2" M	1	17814
Sensor connecting group 6	M100 - M130, D100 - D130	1200 - 5000	G 1 1/2" F	G 1 1/2" M	1	17815
Sensor connecting group 7	M100 - M130, D100 - D130	6500 - 10000	G 1 1/2" F	G 1 1/2" M	1	17816

Auxiliary vessel connection Flamcomat

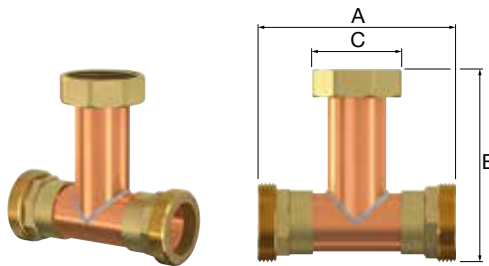
Connection set including T-piece PN10, hose and a block & bleed valve for easy installation of a Flamcomat FB auxiliary vessel. Use the pump connection from the FG main vessel for installing a FB auxiliary vessel with the connection set.



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

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

Rotating Connection, Face Sealed

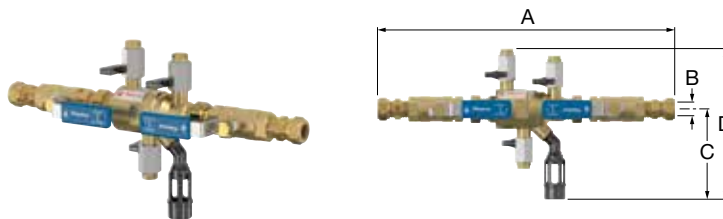


Type	Suitable for		Connection to		Weight [kg]		Order Code
	Pump	Nom.	Vessel	Pump			
Vessel connection type 4	MM - M80 (G3), DM - D80 (G3)	DN 25	G 1 1/2" F	R 1"	0.4	1	17730
Vessel connection type 5	M100 - M130, D100 - D130	DN 32	G 1 1/2" F	R 1 1/4"	0.5	1	17731

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.)	Connec- tion (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

kiwa

RELIGIONA



Backflow preventer BA



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

- Including strainer and shut-off valves.
- Maximum working pressure: 10 bar.
- Maximum working temperature: 65 °C.

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

Pressure Safety Switch



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

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

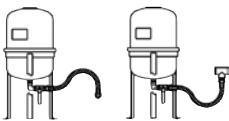
Impulse Output Water Meter



- PN 10, 90 °C.
- 50 Hz.

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

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

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		
Easycontact	✓	✓	✓	✓	✓	1	23649

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	Flamco-mat		
Diaphragm rupture sensor	-	✓	-	✓	✓	1	22386

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		
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		
SD card module	-	✓	-	✓	✓	1	17803

SPC Extension module



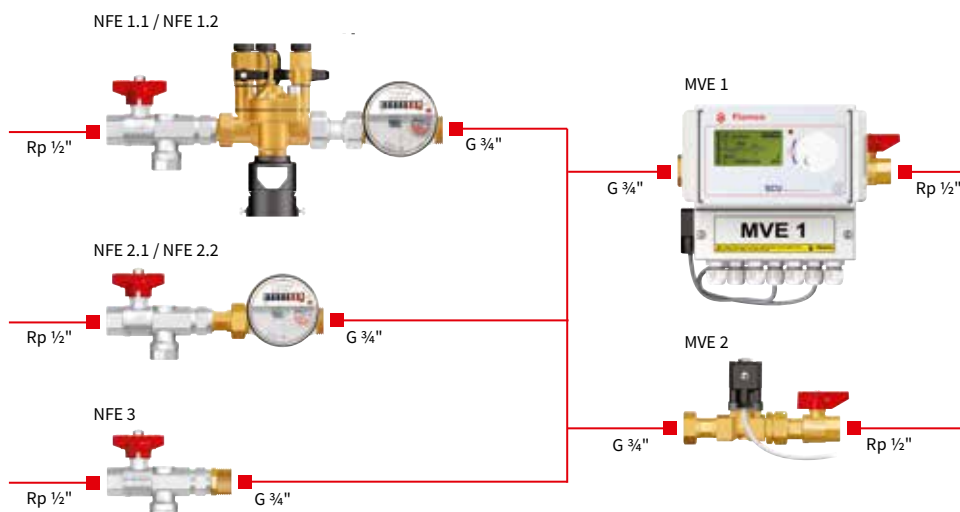
Connection module for communication between two controls.

- 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		
SPC Extension modules Master + Slave	-	✓	-	✓	✓	1	17500
Extra Slave Module	-	✓	-	✓	✓	1	17501

ACCESSORIES FOR FILLING

For heating and chilled water (cooling) installations.



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	300	G 3/4"	Rp 1/2"	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	175	G 3/4"	Rp 1/2"	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 operating pressure: 10 bar.
- Maximum operating temperature: 65 °C.

Type	L. [mm]	Connection to		K _{vs} (Backflow- preventer) [m³/h]	Weight [kg]		Order Code
		Potable water	System				
NFE 1.1	355	Rp 1/2"	G 3/4"	2	3	1	23780
NFE 1.2 *	355	Rp 1/2"	G 3/4"	2	3	1	23781

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

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 operating pressure: 10 bar.
- Maximum operating temperature: 90 °C.

Type	L. [mm]	Connection to		Weight [kg]		Order Code
		Potable water	System			
NFE 2.1	200	Rp 1/2"	G 3/4"	2	1	23782
NFE 2.2 *	200	Rp 1/2"	G 3/4"	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 preventor is not needed.

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

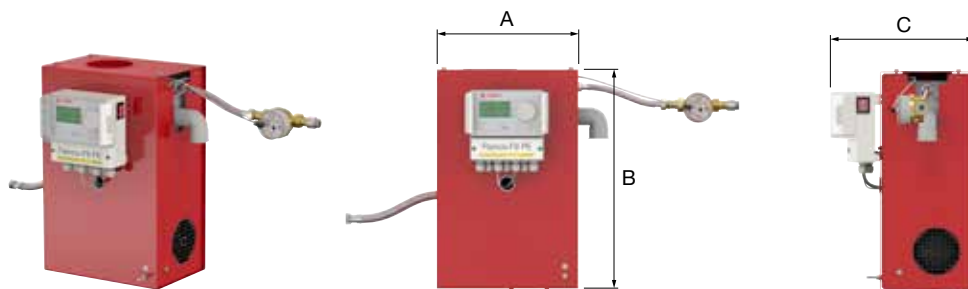
Type	L. [mm]	Connection to		Weight [kg]		Order Code
		Potable water	System			
NFE 3 *	130	Rp 1/2"	G 3/4"	0.5	1	23784

* 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).

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.



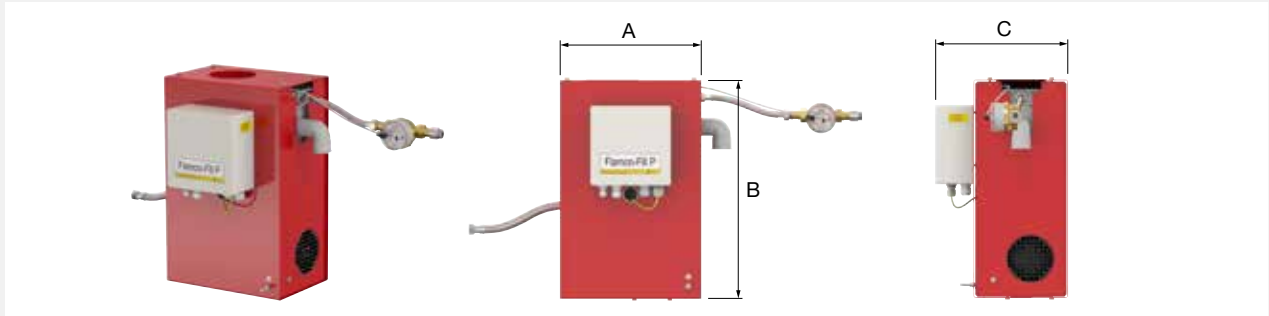
Type	Dimensions			Connection to		Weight [kg]		Order Code
	A [mm]	B [mm]	C [mm]	Potable water	System			
Flamco-Fill PE	400	495	320	G 1/2"	G 1/2"	25	1	23757

kiwa

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

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

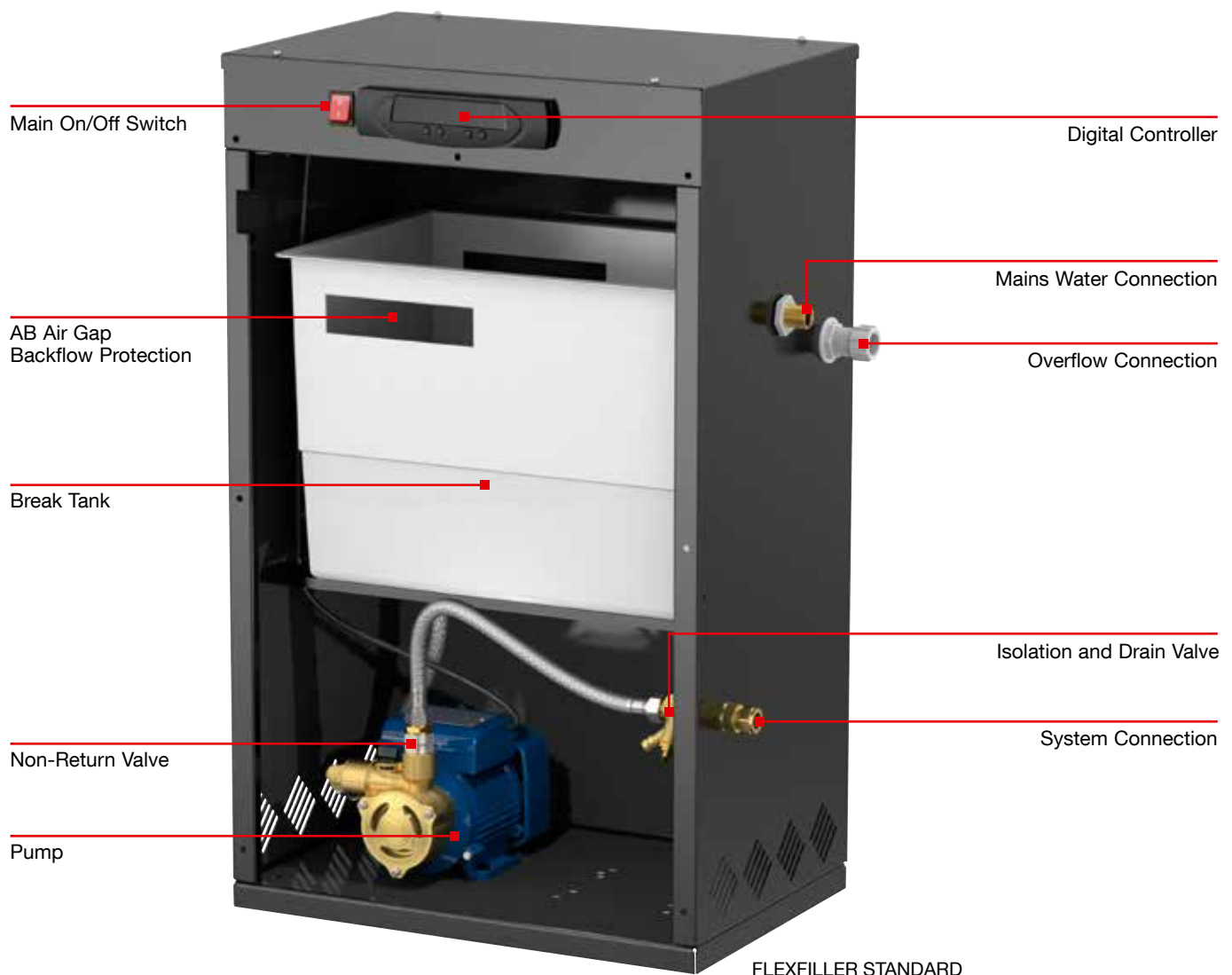
- Floor standing, high flow rate (<18 l/min) top-up glycol mixing pressurisation unit.
- 4 litre break tank.
- 18 litre tank for glycol top-up.
- The correct fluid mix is blended on demand at the time of system top-up.



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	< 60000
	225D	•			2	10	2.5	18	floor	18	< 60000
	150D	•			1	10	5.0	18	floor	18	< 60000
	250D	•			2	10	5.0	18	floor	18	< 60000
	180D	•			1	16	8.0	18	floor	18	< 60000
	280D	•			2	16	8.0	18	floor	18	< 60000
	2160D	•			2	16	16.0	18	floor	18	< 60000
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	< 60000
	2x225D	•			4 **	10	2.5	18	floor	18	< 60000
	2x250D	•			4 **	10	5.0	18	floor	18	< 60000
PressDS	225	•			2	10	2.5	18	floor	4	< 60000
	250	•			2	10	5.0	18	floor	4	< 60000
	280	•			2	16	8.0	18	floor	4	< 60000
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.

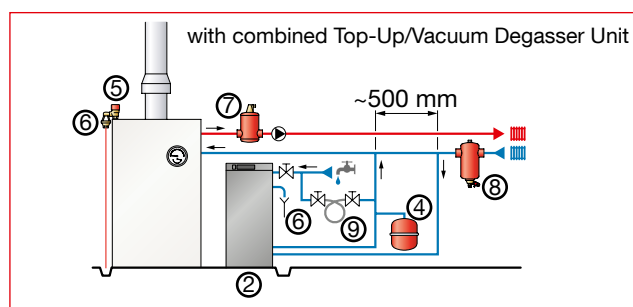
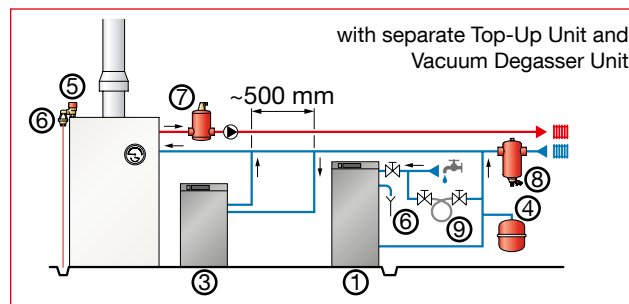
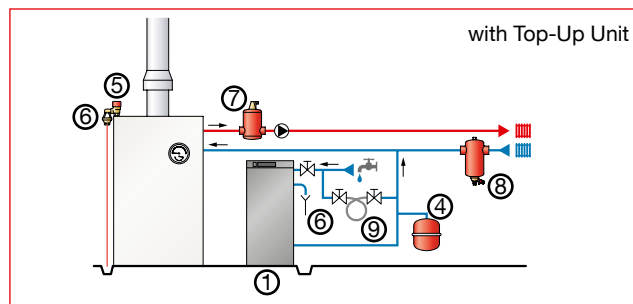
Installation and Schematic Layouts

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.

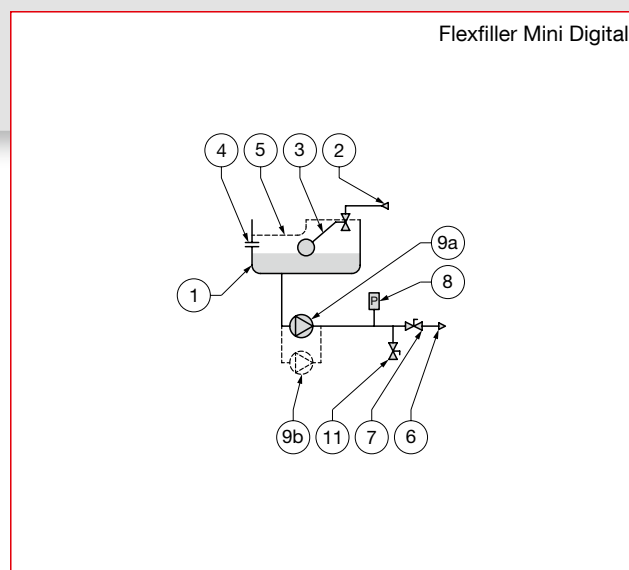
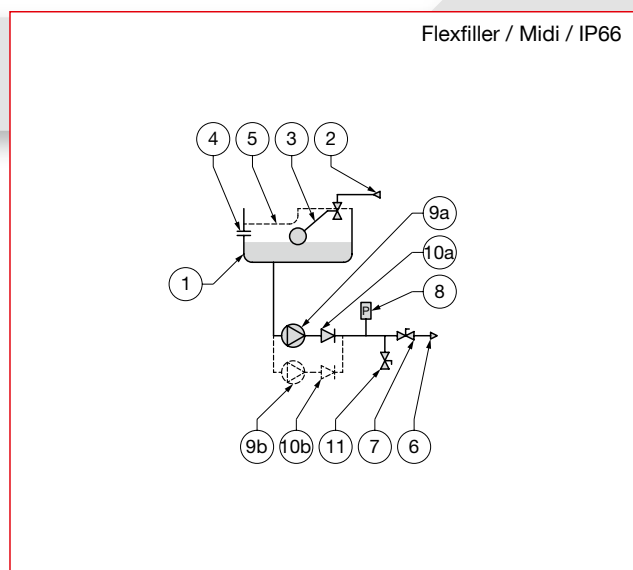
Connected to the system return pipe, to provide a neutral pressure reading. With combined units the two system connections must be installed on the return pipe approximately 0.5 metre apart.

System Schematics

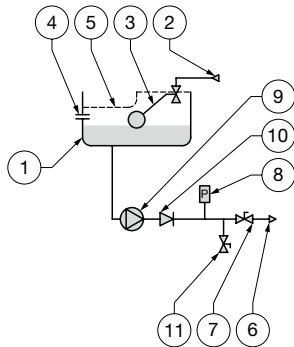


Nr	Description
1	Flexfiller Top-Up Unit
2	Flexfiller Plus / PressDS Plus Combined Unit
3	PSD Pressure Step Degasser
4	Flexcon Expansion Vessel
5	Prescor Safety Valve
6	Tundish
7	Flamcovent Smart Deaerator
8	Flamco Clean Smart Dirt Separator
9	Filling Loop (Optional)

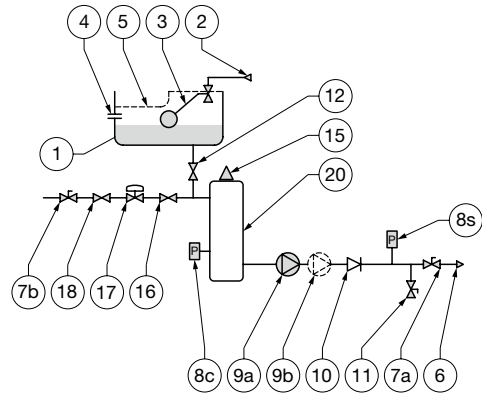
Product Schematics



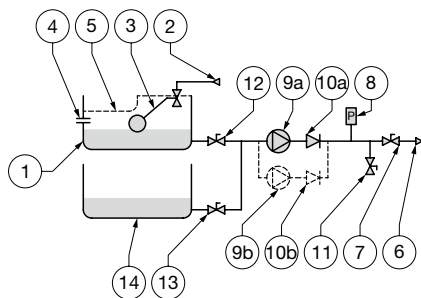
Digifiller



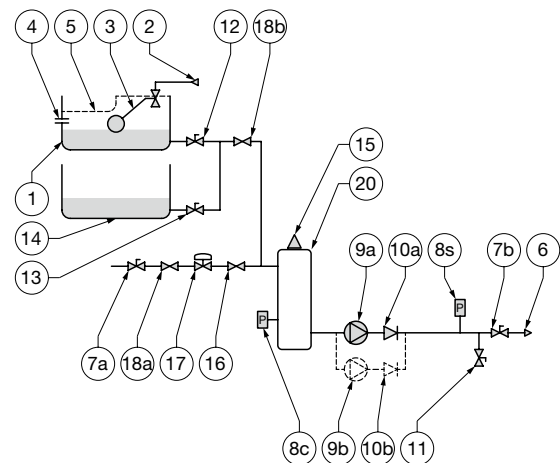
Flexfiller Plus



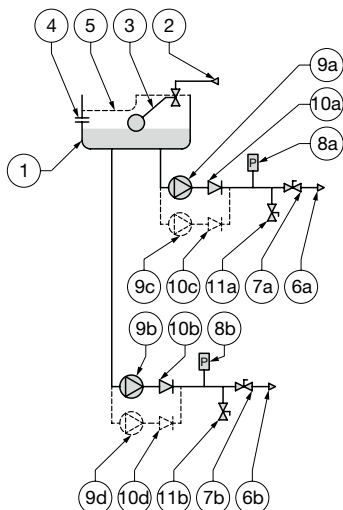
PressDS



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

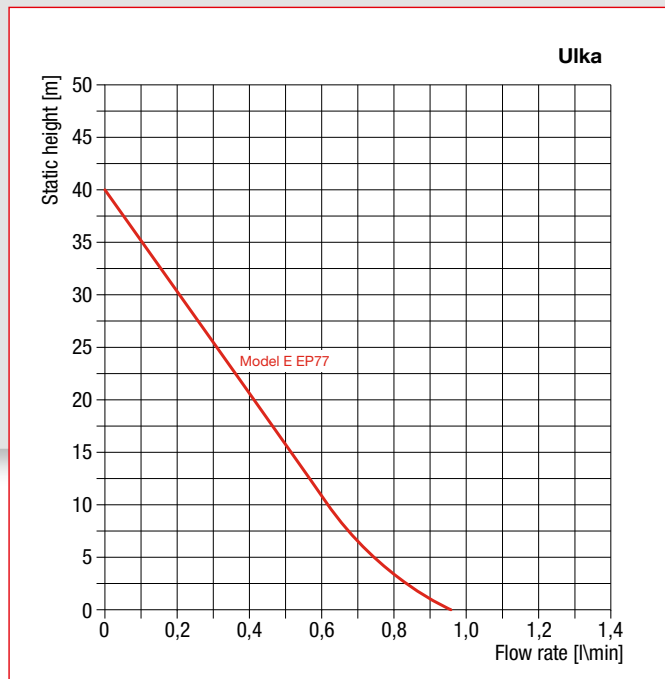
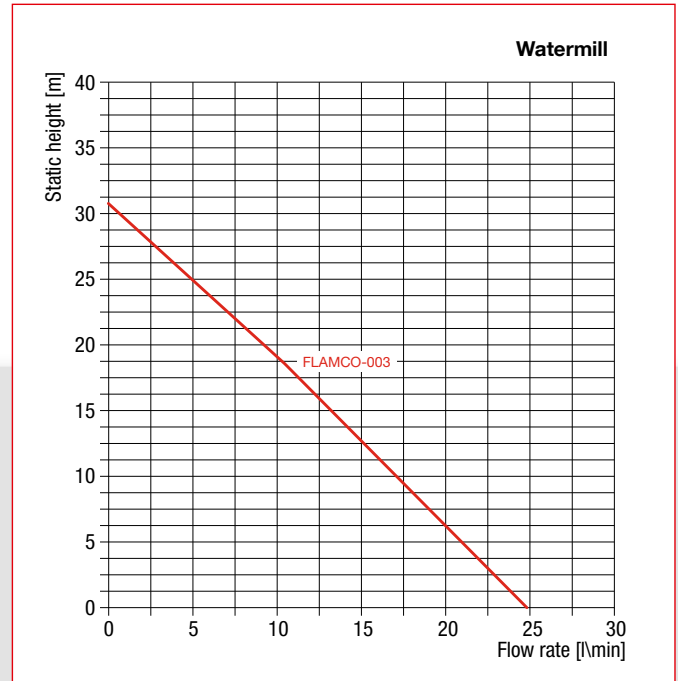
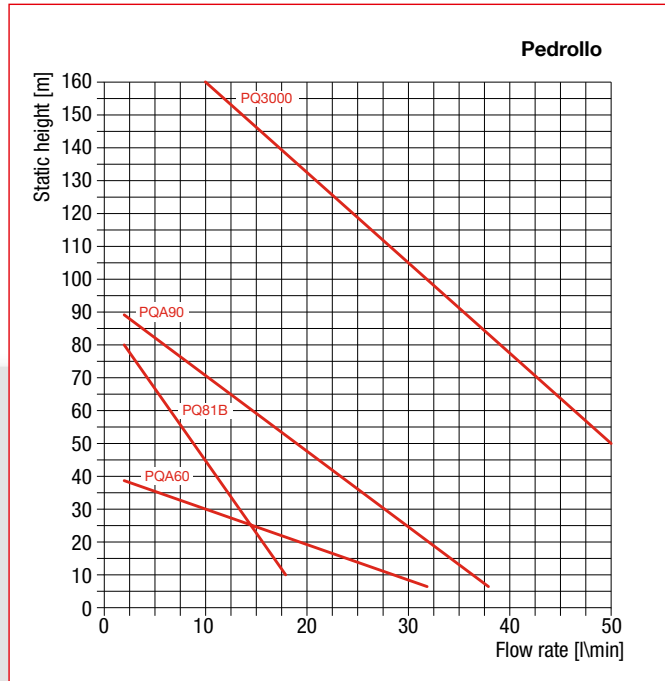
Before pumps are introduced to Flamco equipment, they are subjected to rigorous testing. Each pump is run for 744 hours (1 month, day and night) and then checked that the delivery pressure is within the design parameters.

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.



Spare Parts Pressurisation Units

Type		Spare Part	
		Article number	
Flexfiller + Flexfiller 60Hz	125D	•	Controller
	225D	•	Mini Transformer
	150D	•	Rock switch
	250D	•	Pressure Transducer (0-10 Bar, 1-6V)
	180D	•	Pressure Sensor 16b (1-6V)
	280D	•	Combined Isolation & Drain Valve
Flexfiller Midi + Flexfiller IP66	2160D	•	1/2" Non-Return Valve
	125D	•	1/2" x 15mm C x MI Coupling
	225D	•	Float Valve
	150D	•	Mini Float Valve
	250D	•	Overflow Connection
	180D	•	Float Switch L90 cm wire
Digifiller	280D	•	Float Switch L55 cm wire
	2160D	•	Float switch for glycol tank
	125D	•	Mesh Strainer
	225D	•	1/4" Brass Locking Nut
	150D	•	1/4" BSP M x 8mm Push-Fit
	250D	•	Flanged Tank Connector 15 mm
Flexfiller Mini Digital	130D	•	Extended Tank Connector 1/2" x 15 mm
	230D	•	1/4" BSP F Tee
	225D	•	1/4" Ball Valve
	250D	•	40 mm Pressure Gauge c/w Capillary
	180D	•	8mm Push-Fit Tee
	280D	•	Pump Control Pressure Switch
PressDS	2 x 125D	•	High/Low Pressure Switch
	2 x 225D	•	Fused Terminal Block
	2 x 250D	•	6mm x 8mm Push-Fit Manifold
	Midifill	•	DN15 Balancing Valve - Glycol / Water
	250D	•	1/2" Tee Brass
	280D	•	Pump Elbow 4mm
Flexfiller Plus	2160D	•	Tank Elbow 4mm
	250D	•	4mm Tube
	280D	•	1/2" x 15 mm MI Elbow
	2160D	•	Flexible Pump Support
	250D	•	6 mm Poly-tube
	280D	•	8 mm Hose Tail
PressDS Plus	2 x 125D	•	8 mm Poly-tube
	2 x 225D	•	PSD Controller
	2 x 250D	•	Vacuum Cylinder 4.8ltr
	Midifill	•	Vacuum Cylinder Midi
	250D	•	Vacuum Pressure Sensor
	280D	•	Solenoid Valve 1/2" (Slam shut)
Flexfiller Twin System	2160D	•	Solenoid Valve 1/2" 1mm Hole (Bypass)
	250D	•	AC Solenoid Coil Clip-on BB240AS
	280D	•	RSF86V100R Cynergys3
	Midifill	•	Pressure Reducing Valve
	250D	•	PSD & SPC Air Vent With Air Intake Preventor
	280D	•	Gauze
Flexfiller Plus	2160D	•	22 mm x 1/2" F Coupling
	250D	•	Prescor B 6 bar 3/4" Inlet 1" Outlet
	280D	•	Prescor 1/2" 3 Bar Safety Relief Valve
	2160D	•	Flexible Hose
	250D	•	Pump Pedrollo PQA60
	280D	•	Pump Pedrollo PQ81B
PressDS Plus	2 x 125D	•	Pump Pedrollo PQA90
	2 x 225D	•	Pump Pedrollo PQ3000
	2 x 250D	•	Pump Flamco 003 2.5 bar
	Midifill	•	Pump UKLA EP77 Model E
	250D	•	
	280D	•	

STANDARD DIGITAL 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.
Available with single pump or double pump (for duty/standby configuration).

Application:

- Commercial.
- Industrial.
- Residential.

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

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

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

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.
- WRAS approved float valve to BS1212.
- IP54 (BS EN60529) rated controller.

Operating Conditions:

- Maximum system temperature: 85 °C.
- Maximum ambient temperature: 40 °C.
- Relative humidity 95% non-condensing.
- Noise Rating Data: < 75 dBA.

Material of Construction:

- Cabinet: Mild steel CR4.
- Float: WRAS Approved Torbeck Side Entry.
- Break Tank: Stainless Steel 304.
- Pump: PEDROLLO / ULKA (Unit dependant. See pump details for more information).
- Connection: Brass / Polypropylene.
- Pipework: Braided flexihose / EPDM.
- Finish: Powder coated.



Flexfiller

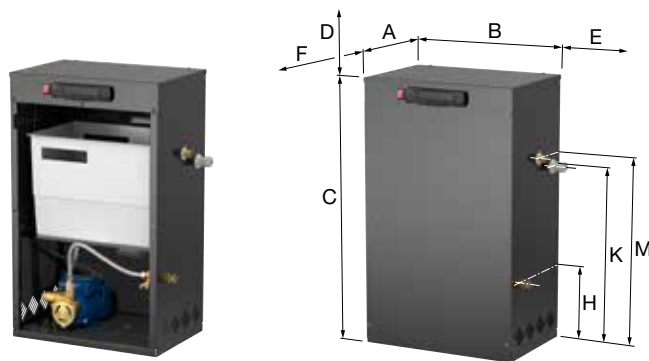
The Flexfiller is a floor standing, high flow rate (<18 l/min) top-up pressurisation unit with 18 litre break tank.

Product Features:

- For system volumes up to 300,000 litres.
- Break Tank: 18 litre break tank with type AB Air Gap Fluid Cat 5.
- MODBUS Communication output.
- System quick-fill mode.
- Password protection for parameter entry.
- Pressure settings in 0.1 bar increments.
- Service reminder option (12 months).
- Pump pulse option (2 second pulse if inactive for 60 days).
- Flood protection options.
- High flow applications (<18.0 l/min).
- 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.
- Electric pump, 230V 50Hz 1ph (60Hz 1ph available upon request).
- Colour: Black (RAL 9005).

Factory fit options:

- Single or twin pump version.
- High water level.
- BACnet communication protocol in place of MODBUS connection.



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	2.5	0.37	2.6	29	1	17395
Flexfiller 150D	1	15 (1/2" M)	15 (1/2" M)	22	5	0.5	3.4	31	1	17396
Flexfiller 225D	2	15 (1/2" M)	15 (1/2" M)	22	2.5	0.37	2.6	35	1	17397
Flexfiller 250D	2	15 (1/2" M)	15 (1/2" M)	22	5	0.5	3.4	39	1	17398
Flexfiller 180D	2	15 (1/2" M)	15 (1/2" M)	22	8	0.75	5.6	34	1	45049
Flexfiller 280D	2	15 (1/2" M)	15 (1/2" M)	22	8	0.75	5.6	45	1	17394
Flexfiller 2160D	2	15 (1/2" M)	15 (1/2" M)	22	16	2.2	6.6	67	1	17393

kiwa

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	470	320	800	500	150	800	225	550	590
Flexfiller 2160D	600	390	800	500	150	800	225	550	590

Flexfiller Mini Digital

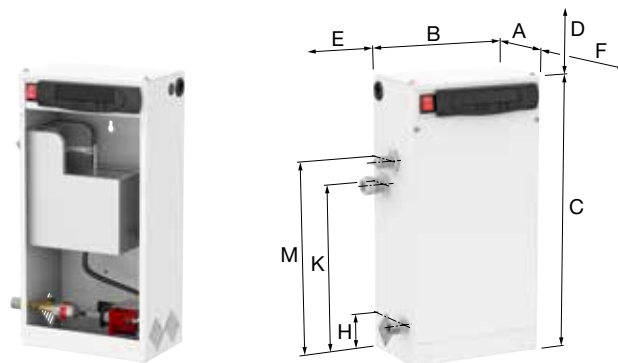
The Flexfiller Mini Digital is a narrow wall mounted, low flow rate (0.4 l/min) top-up pressurisation unit with 2 litre break tank. Ideal for large residential or small commercial application. For use on heating systems utilising a 300 litre expansion vessel or less, or chilled systems utilising a 50 litre expansion vessel or less.

Product Features:

- For system volumes up to 2,600 litres.
- Break Tank: 2 litre break tank with type AB Air Gap Fluid Cat 5.
- MODBUS Communication output.
- System quick-fill mode.
- Password protection for parameter entry.
- Pressure settings in 0.1 bar increments.
- Service reminder option (12 months).
- Pump pulse option (2 second pulse if inactive for 60 days).
- Flood protection options.
- Flow applications (0.4 l/min).
- 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.
- Electric pump, 230V 50Hz 1ph.
- Colour: White (RAL 9910).

Factory fit options:

- Single or twin pump version.
- High water level.
- BACnet communication protocol (in addition to MODBUS communications).



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	0.035	0.3	7	1	17455
Flexfiller Mini 230D	2	8 (1/4" M)	15 (1/2" M)	22	3	2 x 0.035	2 x 0.3	8	1	17456

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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	305	345

Flexfiller Midi

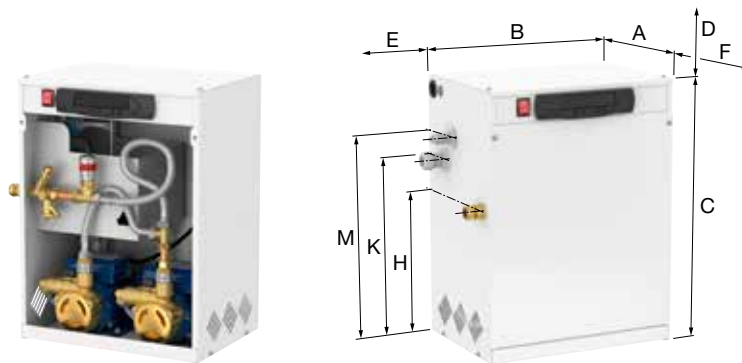
The Midi is a deep wall mounted, 12 l/min flow rate top-up pressurisation unit with 4 litre break tank.

Product Features:

- For system volumes up to 50,000 litres.
- Break Tank: 4 litre break tank with type AB Air Gap Fluid Cat 5.
- MODBUS Communication output.
- System quick-fill mode.
- Password protection for parameter entry.
- Pressure settings in 0.1 bar increments.
- Service reminder option (12 months).
- Pump pulse option (2 second pulse if inactive for 60 days).
- Flood protection options.
- High flow applications (12.0 l/min).
- 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.
- Electric pump, 230V 50Hz 1ph.
- Colour: White (RAL 9910).

Factory fit options:

- Single or twin pump version.
- High water level.
- BACnet communication protocol in place of MODBUS connections.



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	2.5	0.37	2.6	17	1	17460
Flexfiller Midi 150D	1	15 (1/2" M)	15 (1/2" M)	22	5	0.5	3.4	32.5	1	17461
Flexfiller Midi 225D	2	15 (1/2" M)	15 (1/2" M)	22	2.5	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	5	2 x 0.5	2 x 3.4	42	1	17463

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Dimensions Flexfiller Midi

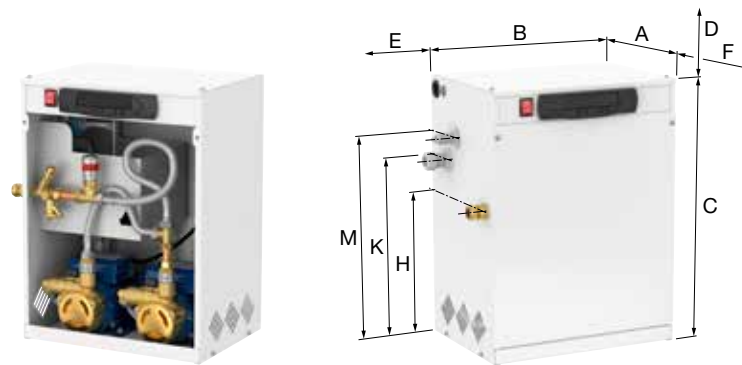
Type	Dimensions								
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	H [mm]	K [mm]	M [mm]
Flexfiller Midi 125D	230	240	480	500	150	800	330	335	380
Flexfiller Midi 150D - 250D	260	360	485	500	150	800	330	335	380

Flexfiller IP66

The Flexfiller IP66 is a deep, compact and totally enclosed wall mounted, 12 l/min flow rate digital top-up pressurisation unit with electronic pressure transducer, user-friendly microprocessor and a 4 litre break tank.

Product Features:

- For system volumes up to 50,000 litres.
- Break Tank: 4 litre break tank with type AB Air Gap Fluid Cat 5.
- AB air gap to EN13077:2008.
- WRAS approved break tank and float valve.
- IP66 rated cabinet.
- Internal thermostat & heater.
- Neon power indicator.
- Password protection for parameter entry.
- Pressure settings in 0.1 bar increments.
- Service reminder option (12 months).
- Pump pulse option (2 second pulse if inactive for 60 days).
- Flood protection options.
- High flow applications (12.0 l/min).
- 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.
- Electric pump, 230V 50Hz 1ph.
- Colour: White (RAL 9910).



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	2.5	0.37	2.6	28	1	45090
Flexfiller IP66 150D	1	15 (1/2" M)	15 (1/2" M)	22	5	0.5	3.4	28	1	45123
Flexfiller IP66 225D	2	15 (1/2" M)	15 (1/2" M)	22	2.5	2 x 0.37	2 x 2.6	34	1	45091
Flexfiller IP66 250D	2	15 (1/2" M)	15 (1/2" M)	22	5	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	230	240	480	500	150	800	330	335	380
Flexfiller IP66 150D - 250D	260	360	485	500	150	800	330	335	380

DIGIFILLER PRESSURISATION PRODUCT RANGE

Compact, wall mounted, totally enclosed digital pressurisation unit with electronic pressure transducer and user-friendly microprocessor for use on sealed systems in order to provide a minimum system pressure requirement. Self bleeding pumps can be factory preset to meet your system requirements.

Application:

- Commercial.
- Industrial.
- Residential.

System Volume (Guide): < 50,000 litres

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.
- WRAS approved float valve to BS1212.
- IP54 (BS EN 60529) rated controller.
- IPX2 (BS EN60529) rated pump.

Operating Conditions:

- Maximum system temperature: 85 °C.
- Maximum ambient temperature: 40 °C.
- Relative humidity 95% non-condensing.
- Noise Rating Data: < 75 dBA.

Material of Construction:

- Cabinet: Mild steel CR4.
- Float: WRAS Approved Torbeck Side Entry.
- Break Tank: Stainless Steel 304.
- Pump: Watermill Flamco-003 (See pump details for more information).
- Connection: Brass / Polypropylene.
- Pipework: Braided flexihose / EPDM.
- Finish: Powder coated.

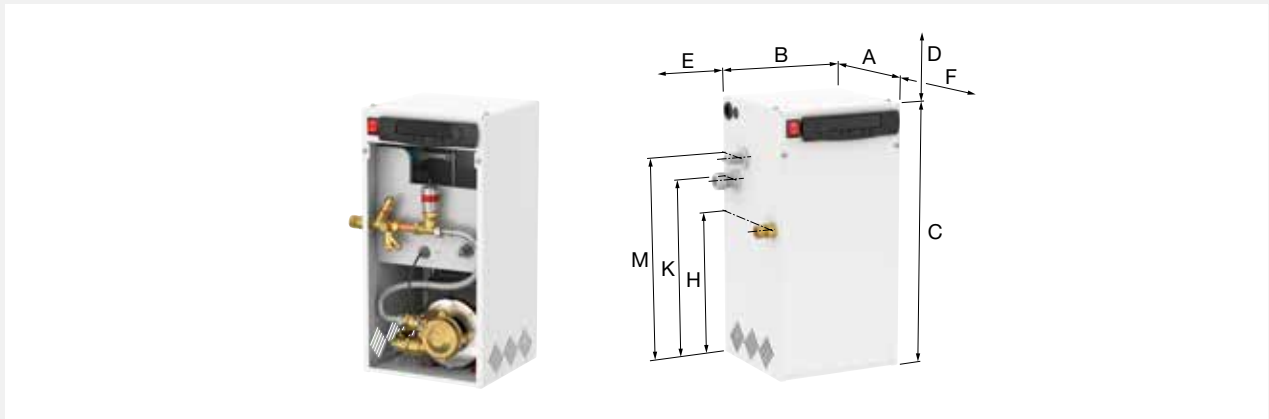


Digifiller

The Digifiller is a deep wall mounted, 12 l/min flow rate top-up pressurisation unit with 4 litre break tank. A self-bleed pump configuration.

Product Features:

- For system volumes up to 50,000 litres.
- Break Tank: 4 litre break tank with type AB Air Gap Fluid Cat 5.
- Pre-commissioned.
- Pre-set (Bar).
- Plug & play, but easily adjustable on site if required.
- System quick-fill mode.
- Self-bleed pump.
- Password protection for parameter entry.
- Pressure settings in 0.1 bar increments.
- Service reminder option (12 months).
- Pump pulse option (2 second pulse if inactive for 60 days).
- Flood protection options.
- High flow applications (12.0 l/min).
- 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.
- Electric pump, 230V 50Hz 1ph.
- Colour: White (RAL 9910).



Type	Pump quantity	Connections			Max. Delivery Pressure [bar]	Power Consumption [kW]	Full Load Current [A]	Weight [kg]	Preset Settings				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	0.37	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	0.37	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	0.37	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	0.37	2.6	2.0	1.5	2.7	17	1	45036

Dimensions Digifiller 0.5 - 2.0

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	330	335	380

OTHER PRESSURISATION PRODUCT RANGE

Twin System

Compact, totally enclosed digital pressurisation unit with electronic pressure transducer and user-friendly microprocessor for use on two sealed systems in order to provide a minimum system pressure requirement.
Available with single pump or double pump (for duty/standby configuration) per system.

System Volume (Guide): < 300,000 litres per system

PressDS (Pressurisation/Dosing System)

Compact, totally enclosed digital pressurisation unit with electronic pressure transducer and user-friendly microprocessor for use on sealed systems in order to provide a minimum system pressure requirement. The correct fluid mix is blended on demand at the time of system top-up.
Available with double pump (for duty/standby configuration).

System Volume (Guide): < 300,000 litres

Application:

- 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.
- WRAS approved float valve to BS1212.
- IP54 (BS EN60529) rated controller.

Operating Conditions:

- Maximum system temperature: 85 °C.
- Maximum ambient temperature: 40 °C.
- Relative humidity 95% non-condensing.
- Noise Rating Data: < 75 dBA.

Material of Construction:

- Cabinet: Mild steel CR4.
- Float: WRAS Approved Torbeck Side Entry.
- Break Tank: Stainless Steel 304.
- Pump: PEDROLLO (Unit dependant. See pump details for more information).
- Connection: Brass / Polypropylene.
- Pipework: Braided flexihose / EPDM.
- Finish: Powder coated.



Flexfiller Twin System

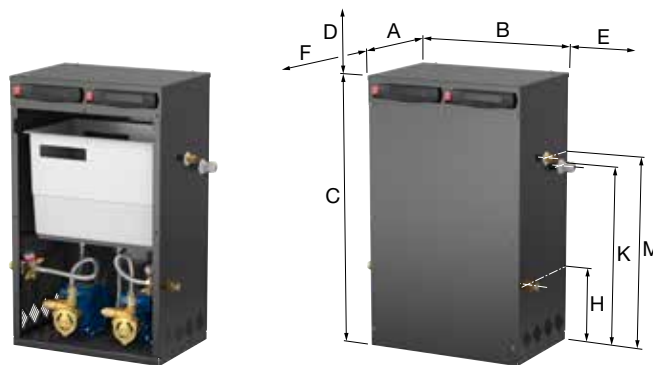
The Twin system is a floor standing unit, ideal where space restrictions make it beneficial to locate two systems in a single enclosure. The system combines two high flow rate (<18 l/min) top-up pressurisation units and two controllers with a single 18 litre break tank.

Product Features:

- For system volumes up to 300,000 litres per system.
- Break Tank: 18 litre break tank with type AB Air Gap Fluid Cat 5.
- MODBUS Communication output.
- System quick-fill mode.
- Password protection for parameter entry.
- Pressure settings in 0.1 bar increments.
- Service reminder option (12 months).
- Pump pulse option (2 second pulse if inactive for 60 days).
- Flood protection options.
- High flow applications (<18.0 l/min).
- Event logging for pump start, individual pump run hour's counter, electrical interruption and common alarm.
- Volt free contacts for common fault, high pressure, low pressure, pump fault, pressure transducer fault.
- Electric pump, 230V 50Hz 1ph.
- Colour: Black (RAL 9005).

Factory fit options:

- High water level.
- BACnet communication protocol in place of MODBUS connection.



Type	Pump quantity	Connections			Max. Delivery Pressure [bar]	Power Consumption [kW]	Full Load Current [A]	Weight [kg]		Order Code
		System [mm]	Mains Supply [mm]	Drain [mm]						
Twin System 2 x 125D	2 *	2 x 15 (1/2" M)	15 (1/2" M)	22	2.5	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	2.5	2 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	5	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	5	2 x 0.5	2 x 3.4	39	1	45063

* 1 pump for each system.

** 2 pumps for each system.

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Dimensions Flexfiller Twin System 125D - 250D

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 250D	320	470	800	500	150	800	225	549	590

PressDS

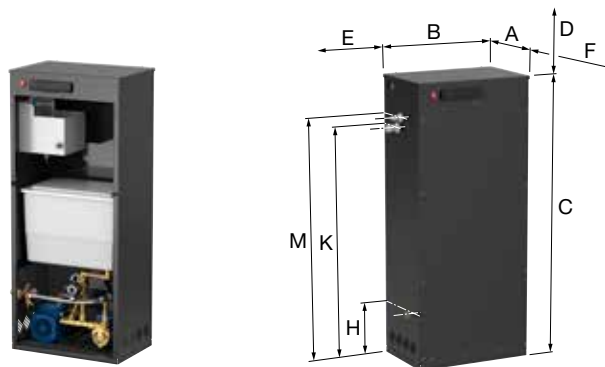
The PressDS (Pressurisation/Dosing System) is a floor standing, high flow rate (<18 l/min) additive top-up mixing pressurisation unit with a 4 litre break tank. 18 litre tank for additive top-up. Each time the unit tops-up the system with water, it also automatically adds additive from a dedicated tank at a predetermined rate, reducing intervention and maximising system protection.

Product Features:

- For system volumes up to 300,000 litres.
- Break Tank: 4 litre water break tank with type AB Air Gap Fluid Cat 5.
- MODBUS communication output.
- System quick-fill mode.
- Password protection for parameter entry.
- Pressure settings in 0.1 bar increments.
- Service reminder option (12 months).
- Pump pulse option (2 second pulse if inactive for 60 days).
- Flood protection options.
- 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 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.
- Colour: Black (RAL 9005)

Factory fit options:

- High water level.
- BACnet communication protocol in place of MODBUS connection.



Type	Pump quantity	Connections			Max. Delivery Pressure [bar]	Power Consumption [kW]	Full Load Current [A]	Weight [kg]		Order Code
		System [mm]	Mains Supply [mm]	Drain [mm]						
PressDS 225	2	15 (1/2" M)	15 (1/2" M)	22	2.5	0.37	2.6	35	1	45046
PressDS 250	2	15 (1/2" M)	15 (1/2" M)	22	5	0.5	3.5	39	1	45047
PressDS 280	2	15 (1/2" M)	15 (1/2" M)	22	8	0.75	5.6	45	1	17392

Dimensions PressDS 225 - 280

Type	Dimensions								
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]	M [mm]	N [mm]
PressDS 225 - 280	470	320	1160	500	150	800	125	160	260

COMBINED PRESSURISATION AND DEGASSING PRODUCT RANGE

Flexfiller Plus & Midifill Plus

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.
Available with single pump (Midifill Plus) or double pump (for duty/standby configuration).

PressDS Plus

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 and adding additive to system. The correct fluid mix is blended on demand at the time of system top-up.
Available with double pump (for duty/standby configuration).

System Volume (Guide): < 300,000 litres (Midifill Plus 150D: < 50,000 litres)

Application:

- Commercial.
- Industrial.
- Residential.

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

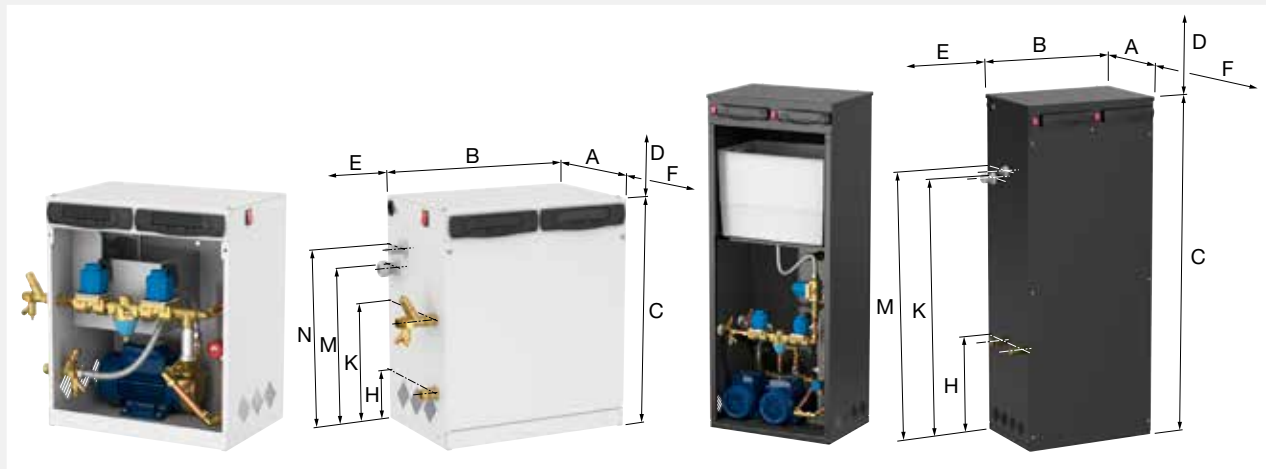
The Flexfiller Plus and Midifill Plus are compact, totally enclosed combined digital pressurisation units with vacuum degasser for use on sealed systems in order to provide a minimum system pressure requirement and effective dissolved gas removal.

Product Features:

- For system volumes up to 300,000 litres.
- Break Tank: 18 litre break tank with type AB Air Gap Fluid Cat 5 (Midifill Plus: 4 litre).
- System quick-fill mode.
- Password protection for parameter entry.
- Pressure settings in 0.1 bar increments.
- Service reminder option (12 months).
- Pump pulse option (2 second pulse if inactive for 60 days).
- Flood protection options.
- 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 (Top-up controller only).
- Individual controllers for pressurisation and degassing function.
- Vacuum degassing, turbo and normal interval modes.
- Electric pump, 230V 50Hz 1ph (2160D: 415V 50Hz 3ph).

Operating Conditions:

- System Temperature Range: 0 - 90 °C.
- Ambient Temperature Range: 0 - 45 °C.
- Maximum system temperature at the Point of connection: 70 °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	Dimensions		Pressure Rating [PN]	Operating Pressure [bar]	Power Consumption [kW]	Full Load Current [A]		Order Code
			System [mm]	Overflow [mm]						
Midifill Plus 150D	1	Wall	2 x 15 (1/2")	22	10	1 - 5	0.5	3.4	1	45053
Flexfiller Plus 250D	2	Floor	2 x 15 (1/2")	22	10	1 - 6	2 x 0.52	2 x 3.4	1	45045
Flexfiller Plus 280D	2	Floor	2 x 15 (1/2")	22	10	1 - 8	2 x 0.75	2 x 5.6	1	45121
Flexfiller Plus 2160D	2	Floor	2 x 15 (1/2")	22	16	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	480	500	150	800				
Flexfiller Plus 250D	320	470	1160	500	150	800	455	915	955	-
Flexfiller Plus 280D	320	600	1160	500	150	800	455	915	955	-
Flexfiller Plus 2160D	320	600	1160	500	150	800	455	915	955	-

PressDS Plus

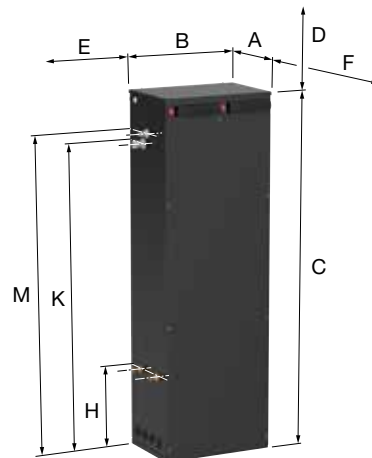
The PressDS Plus (Pressurisation/Degassing/Dosing System) is a compact, totally enclosed combined digital pressurisation unit with vacuum degasser and additive tank for use on sealed systems in order to provide a minimum system pressure requirement, effective dissolved gas removal and adding additives to the system. The correct fluid mix is blended on demand at the time of system top-up.

Product Features:

- For system volumes up to 300,000 litres.
- Break Tank: 4 litre break tank with type AB Air Gap Fluid Cat 5.
- MODBUS Communication output.
- System quick-fill mode.
- Password protection for parameter entry.
- Pressure settings in 0.1 bar increments.
- Service reminder option (12 months).
- Pump pulse option (2 second pulse if inactive for 60 days).
- Flood protection options.
- 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 (Top-up controller only).
- 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).

Operating Conditions:

- Maximum system temperature: 85 °C.
- Maximum ambient temperature: 40 °C.
- Relative humidity 95% non-condensing.



Type	Pump quantity	Connections		Pressure Rating [PN]	Operating Pressure [bar]	Power Rating [kW]	Full Load Current [A]	Nom. Weight [kg]		Order Code
		System [mm]	Overflow [mm]							
PressDS Plus 250D	2	2 x 15 (1/2")	22	10	1 - 6	2 x 0.52	2 x 3.4	62.7	1	45102
PressDS Plus 280D	2	2 x 15 (1/2")	22	10	1 - 8	3 x 0.52	3 x 3.4	71.5	1	45119
PressDS Plus 2160D	2	2 x 15 (1/2")	22	16	8 - 16	4 x 0.52	4 x 3.4	91.3	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	470	320	1475						
PressDS Plus 280D	600	320	1475						
PressDS Plus 2160D	600	320	1475						

Expansion Vessels for Potable Water Installations

4

4



Domestic installations lose millions of litres of potable water due to expansion water leaking from the vent and expansion pipe. Flamco's Airfix diaphragm pressure expansion vessels for mains water systems work to prevent this waste. Bacteria formation is prevented because Airfix A, D and D-E vessels are designed to allow a continuous flow through of water to maintain constant circulation. These expansion vessels can be applied in combination with all hot water calorifiers and as surge vessels in pressure boosting systems.

Airfix D 8 - 35



P. 130

Airfix A 8 - 80



P. 131

Airfix D-E - 10/16 bar



P. 132

Mono Connections



P. 134

Duo Connections



P. 134

Airfix P 2 - 300



P. 135

Airfix P 400 - 5000



P. 136

Airfix P Horizontal



P. 136

Airfix 2 - 4



P. 137

Airfix D-E-B - 10/16/25 bar



P. 137

Mono Connections



P. 138

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 (¾") and internal synthetic flow through construction.
- Quality Vignette DIN-DVGW: NW-9481 AU2096.



Type	Pre-charge [bar]	Max. working pressure [bar]	Dimensions		Connection	Weight [kg]		Order Code
			Ø [mm]	H. [mm]				
Airfix D 8	4	10	245	301	R ¾"	3.2	50	14259
Airfix D 12	4	10	286	334	R ¾"	4.3	36	14349
Airfix D 18	4	10	328	325	R ¾"	4.9	24	14459
Airfix D 25	4	10	358	378	R ¾"	6.6	18	14559
Airfix D 35	4	8	396	437	R ¾"	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 AG 003/04.



Type	Pre-charge [bar]	Max. working pressure [bar]	Dimensions		Connection	Weight [kg]		Order Code
			Ø [mm]	H. [mm]				
Airfix A 8	4	10	245	301	R 3/4"	3.2	50	24259
Airfix A 8	specify	10	245	301	R 3/4"	3.2	50	24257
Airfix A 12	3	10	286	334	R 3/4"	4.3	36	24348
Airfix A 12	4	10	286	334	R 3/4"	4.3	36	24349
Airfix A 12	specify	10	286	334	R 3/4"	4.3	36	24347
Airfix A 18	3	10	328	325	R 3/4"	4.9	24	24458
Airfix A 18	3.5	10	328	325	R 3/4"	4.9	24	24460
Airfix A 18	4	10	328	325	R 3/4"	4.9	24	24459
Airfix A 18	5	10	328	325	R 3/4"	4.9	24	24455
Airfix A 18	specify	10	328	325	R 3/4"	4.9	24	24457
Airfix A 25	3	10	358	378	R 3/4"	6.6	18	24558
Airfix A 25	4	10	358	378	R 3/4"	6.6	18	24559
Airfix A 25	specify	10	358	378	R 3/4"	6.6	18	24557
Airfix A 35	4	8	396	437	R 3/4"	8.1	18	24659
Airfix A 35	specify	8	396	437	R 3/4"	8.1	18	24657
Airfix A 50	4	8	437	473	R 3/4"	11.2	12	24749
Airfix A 80	4	8	519	540	R 3/4"	15.0	12	24809



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 operating 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 operating 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 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.

Airfix P 2 - 300

- Maximum operating pressure: 10.0 bar.
- Maximum working temperature (bladder): 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 2 **	2	0.7	120	235	G 1/2" M	Butyl	4.6*	336	24840
Airfix P 2	2	3.5	120	235	G 1/2" M	Butyl	4.6*	336	24850
Airfix P 3	3	3.5	170	240	G 3/4" M	Butyl	1.5	168	24851
Airfix P 5	5	3.5	170	275	G 3/4" M	Butyl	1.7	144	24852
Airfix P 8	8	3.5	220	305	G 3/4" M	Butyl	2.2	90	24853
Airfix P 12	12	3.5	260	310	G 3/4" M	Butyl	2.9	72	24854
Airfix P 16	16	3.5	260	345	G 3/4" M	EPDM	3.4	60	24855
Airfix P 18	18	3.5	260	375	G 3/4" M	EPDM	3.5	60	24856
Airfix P 24	24	3.5	260	485	G 3/4" M	EPDM	4.3	56	24857
Airfix P 35	35	3.5	380	470	G 1" M	EPDM	8.0	24	24858
Airfix P 50	50	3.5	380	720	G 1" M	EPDM	9.9	15	24859
Airfix P 60	60	3.5	380	830	G 1" M	EPDM	12.1	15	24860
Airfix P 80	80	3.5	460	760	G 1" M	EPDM	14.0	10	24861
Airfix P 100	100	3.5	460	880	G 1" M	EPDM	16.0	10	24862
Airfix P 150	150	3.5	510	1030	G 1" M	EPDM	25.5	8	24863
Airfix P 200	200	3.5	590	1070	G 1 1/4" M	EPDM	37.5	8	24864
Airfix P 300	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 operating pressure: 10.0 bar.
- Maximum working temperature (bladder): 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).

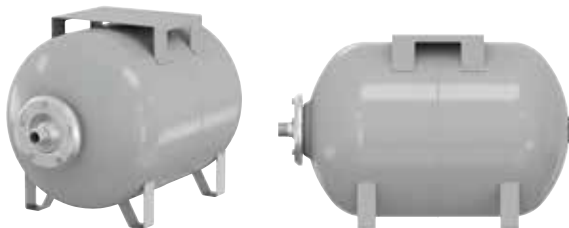


Type	Capacity [l]	Pre-charge [bar]	Dimensions		Connection	Bladder	Weight [kg]		Order Code
			Ø [mm]	H [mm]					
Airfix P 400	400	3.5	790	1287	G 1 1/4" M	EPDM	84	3	24933
Airfix P 600	600	3.5	790	1647	G 1 1/4" M	EPDM	106	1	24934
Airfix P 800	800	3.5	790	1994	G 1 1/4" M	EPDM	145	1	24935
Airfix P 1000	1000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



Airfix P Horizontal

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



Type	Capacity [l]	Pre-charge [bar]	Dimensions		Connection	Bladder	Weight [kg]		Order Code
			Ø [mm]	L. [mm]					
Airfix P 24-H	24	3.5	260	485	G 3/4" M	EPDM	4.7	56	24880
Airfix P 50-H	50	3.5	380	595	G 1" M	EPDM	8.1	20	24890
Airfix P 60-H	60	3.5	380	720	G 1" M	EPDM	10.4	15	24881
Airfix P 80-H	80	3.5	460	660	G 1" M	EPDM	12.3	12	24882
Airfix P 100-H	100	3.5	460	780	G 1" M	EPDM	14.0	12	24883
Airfix P 150-H	150	3.5	510	950	G 1" M	EPDM	23.5	6	24884
Airfix P 200-H	200	3.5	590	940	G 1 1/4" M	EPDM	34.2	6	24885
Airfix P 300-H	300	3.5	650	1150	G 1 1/4" M	EPDM	44.0	6	24886
Airfix P 500-H	500	3.5	750	1420	G 1 1/4" M	EPDM	58.0	6	24887



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 operating pressure: 6.0 bar.

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

* Gas charge must be stated on order.

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 Ø [mm] H. [mm]	Connection	Weight [kg]		Order Code
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 Ø [mm] H. [mm]	Connection	Weight [kg]		Order Code
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

