KE KELIT®
CLIMATE CONTROL SYSTEMS

Water Heaters and Storage Vessels

6

Flamco's range of high quality storage vessels and calorifiers for potable water, airconditioning and heating systems. The calorifiers can be used with all modern heating systems, whilst the Twin Coil units are ideal for use with solar panels and secondary heat sources.
Made from top quality materials and insulated according to the most stringent environmental guidelines, they have a high heat output and are highly energy efficient.

Duo 120 - 3000

P. 160

Duo HLS-E 120 - 1000

P. 164

Duo HLS 300 - 1000

P. 167

WPS-E

P. 170

UHP

P. 172

TS

P. 174

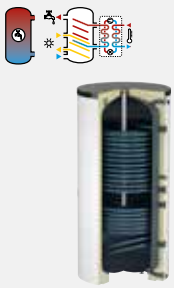
Duo Solar 200 - 1000

P. 176

Duo HLS-E Solar 200 - 1000

P. 179

HLS Solar



P. 182

WPS-E Solar

P. 184

LS 200 - 3000

P. 186

LS-E 300 - 1000

P. 188

DWH 500 - 3000

P. 190

PS 200 - 5000

P. 192

PS-R 300 - 2000

P. 194

PS-T 600 - 2000

P. 195

PS-K 500 - 3000

P. 196

FWP 500 - 1500

P. 197

KPB 500 - 1000

P. 198

Duo FWS 500 - 1500

P. 199

KPS 500 - 1000

P. 200

6

Selection of Water Heaters and Storage Vessels

The selection guide for water heaters and storage vessels helps you find the right Flamco product for the desired application quickly and easily.

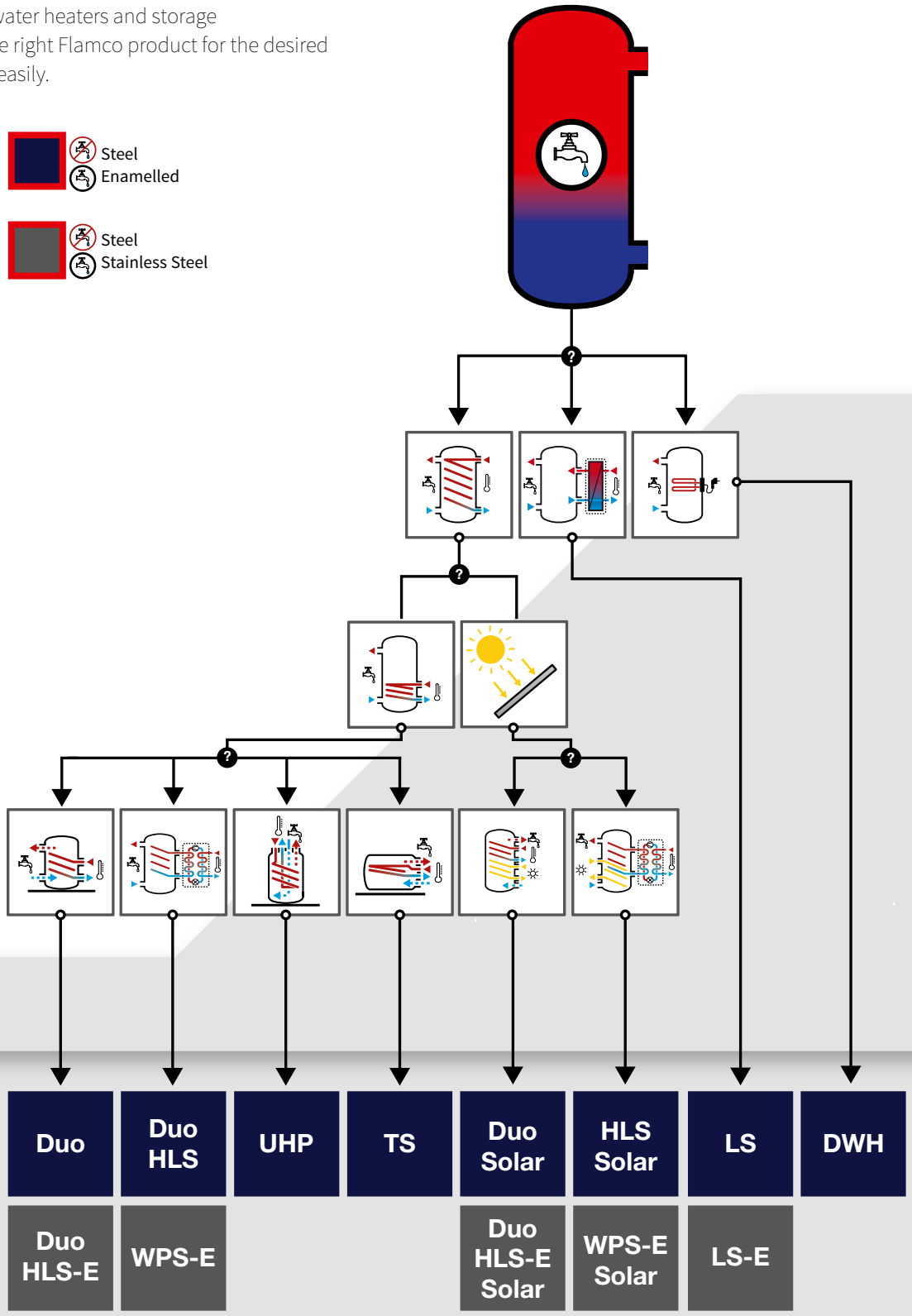
Enamelled

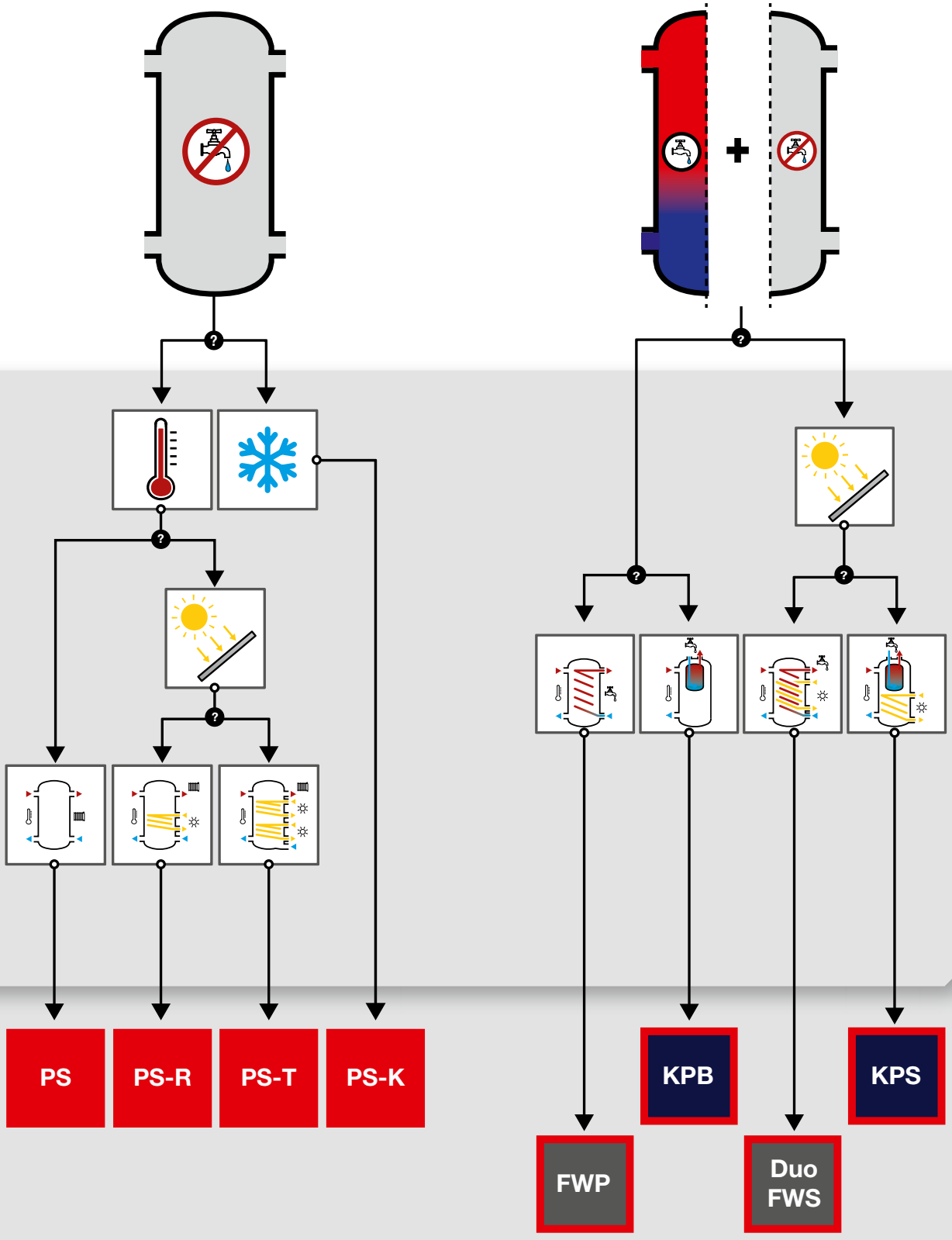
Steel
Enamelled

Stainless Steel

Steel
Stainless Steel

Steel





DUO UPRIGHT WATER HEATERS

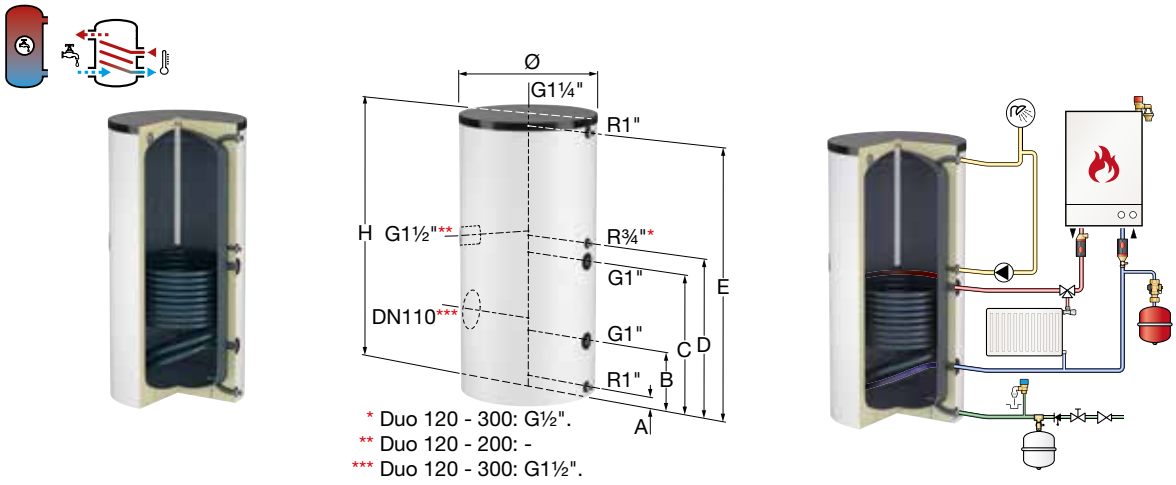
Duo 120 - 500

An indirectly heated and upright water heater including a permanently welded-in heating coil, suitable for all modern heating systems.

- Minimum lime deposits due to smooth surfaces. High-quality glass lining according to DIN 4753/part 3 for potable hot water production and optimum corrosion protection by means of a standard Mg-anode.
- Equipped with a built-in thermometer and immersion pipe.
- A set of adjustable feet is optionally available (Art.No. 18989).
- From 400 litres, equipped with a DN 110 inspection flange at the side, suitable for connecting additional heating elements; Ex Works - closed with a removeable blind flange.
- The heating coil is designed to ensure full depth heating to prevent the accretion of Legionella bacteria.
- Maximum working pressure: 10 bar (potable water vessel) / 16 bar (heating coil).
- Maximum operating temperature: 95 °C (potable water vessel) / 130 °C (heating coil).

Insulation:

- Standard colours: white (RAL 9010) and white aluminium (RAL 9006).
- Including hard foam insulation (direct foam injection) with a polystyrene outer shell.



Type	Capa-city [l]	Dimensions * Ø [mm]	H [mm]	Tilting-height [mm]	Heating surface area [m²]	Heating capacity [kW] **	Water capacity [l/h] **	Insulation colour	Weight [kg]		Order Code
Duo 120	120	560	940	1090	0.5	10.2	177	white alu.	63	1	18501
Duo 120	120	560	940	1090	0.5	10.2	177	white	63	1	18500
Duo 150	150	560	1050	1200	0.6	11.6	202	white alu.	68	1	18503
Duo 150	150	560	1050	1200	0.6	11.6	202	white	68	1	18502
Duo 200	200	560	1350	1500	0.9	18.6	323	white alu.	86	1	18505
Duo 200	200	560	1350	1500	0.9	18.6	323	white	86	1	18504
Duo 300 Ø660	300	660	1620	1750	1.3	29.5	513	white	105	1	18435
Duo 300 Ø660	300	660	1620	1750	1.3	29.5	513	white alu.	105	1	18447
Duo 400	400	750	1530	1715	1.6	35.4	615	white alu.	158	1	18390
Duo 400	400	750	1530	1715	1.6	35.4	615	white	158	1	18423
Duo 500	500	750	1730	1895	2.0	45.2	785	white alu.	181	1	18395
Duo 500	500	750	1730	1895	2.0	45.2	785	white	181	1	18429

* Dimensions including insulation.
** At 80 °C supply temperature and 60 °C potable water temperature.

Duo 120 - 500 - Connection diagram

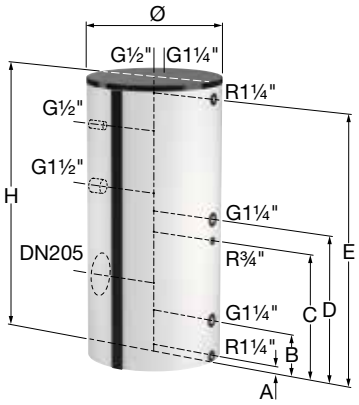
Type	Distance from floor to connection centres A [mm]	B [mm]	C [mm]	D [mm]	E [mm]
Duo 120	65	245	545	635	885
Duo 150	65	245	590	690	985
Duo 200	65	245	710	885	1285
Duo 300 Ø660	65	310	750	850	1560
Duo 400	70	330	770	870	1470
Duo 500	70	330	890	990	1670

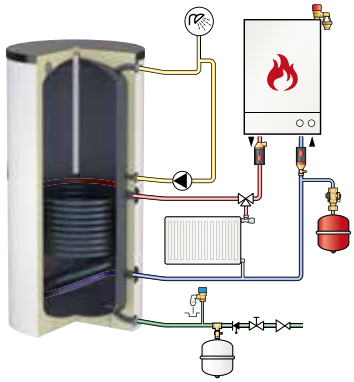
Duo 750 - 1000

An indirectly heated and upright water heater including a permanently welded-in heating coil, suitable for all modern heating systems.

- Minimum lime deposits due to smooth surfaces. High-quality glass lining according to DIN 4753/part 3 for potable hot water production and optimum corrosion protection by means of a standard Mg-anode.
- Equipped with a built-in thermometer.
- Including a clamping strip with which a temperature sensor can be affixed at any chosen height to enable optimum heat efficiency of the water heater.
- Feet adjustable in height for accurate levelling.
- Inspection flange at the side: DN 205, suitable for connecting additional heating elements; Ex Works - closed with a removeable blind flange.
- Suitable for connecting additional heating elements and fitted with a coupling sleeve for accessories.
- The heating coil is designed to ensure full depth heating to prevent the accretion of Legionella bacteria.
- Maximum working pressure: 10 bar (potable water vessel) / 16 bar (heating coil).
- Maximum operating temperature: 95 °C (potable water vessel) / 110 °C (heating coil).

Insulation:
- Standard colours: white (RAL 9010) and white aluminium (RAL 9006).
- Including EPS insulating mantle (fire category B1) with a polypropylene outer shell (fire category B2).





Type	Capa-city [l]	Dimensions * Ø [mm]	H [mm]	Tilting height [mm]	Heating surface area [m²]	Heating capacity [kW] **	Water capacity [l/h] **	Insulation colour	Weight [kg]		Order Code
Duo 750	750	750	1970	2070	2.7	67.1	1166	white	280	1	19297
Duo 750	750	750	1970	2070	2.7	67.1	1166	white alu.	280	1	19298
Duo 1000	1000	800	2230	2320	3.2	73.9	1283	white	360	1	19305
Duo 1000	1000	800	2230	2320	3.2	73.9	1283	white alu.	360	1	19306

* Dimensions excluding insulation.
** At 80 °C supply temperature and 60 °C potable water temperature.

Duo 750 - 1000 - Connection diagram

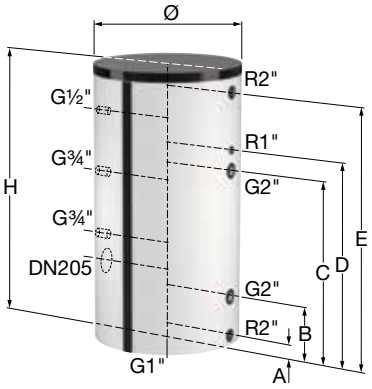
Type	Distance from floor to connection centres A [mm]	B [mm]	C [mm]	D [mm]	E [mm]
Duo 750	60	320	890	1040	1880
Duo 1000	70	330	960	1110	2140

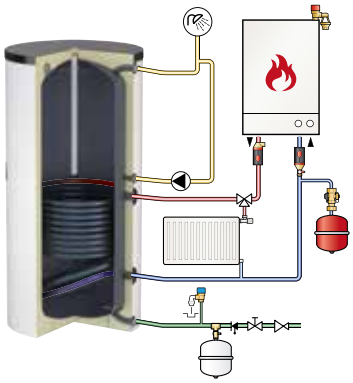
Duo 1500 - 3000

An indirectly heated and upright water heater including a permanently welded-in heating coil, suitable for all modern heating systems.

- Minimum lime deposits due to smooth surfaces. High-quality glass lining according to DIN 4753/part 3 for potable hot water production and optimum corrosion protection by means of a FSA no-maintenance anode.
- Equipped with a built-in thermometer.
- Feet adjustable in height for accurate levelling.
- Inspection flange at the side: DN 205, suitable for connecting additional heating elements; Ex Works - closed with a removeable blind flange.
- Suitable for connecting additional heating elements and fitted with a coupling sleeve for accessories.
- The heating coil is designed to ensure full depth heating to prevent the accretion of Legionella bacteria.
- Maximum working pressure: 10 bar (potable water vessel) / 16 bar (heating coil).
- Maximum operating temperature: 95 °C (potable water vessel) / 110 °C (heating coil).

Insulation:
- Standard colours: white (RAL 9010) and white aluminium (RAL 9006).
- Including EPS insulating mantle (fire category B1) with a polypropylene outer shell (fire category B2).





Type	Capa-city [l]	Dimensions * Ø [mm]	H [mm]	Tilting height [mm]	Heating surface area [m²]	Heating capacity [kW] **	Water capacity [l/h] **	Insulation colour	Weight [kg]		Order Code
Duo 1500	1500	1000	2320	2480	6.4	143	2383	white	570	1	19310
Duo 1500	1500	1000	2320	2480	6.4	143	2383	white alu.	570	1	19311
Duo 2000	2000	1100	2400	2600	7.3	170	2951	white	666	1	19315
Duo 2000	2000	1100	2400	2600	7.3	170	2951	white alu.	666	1	19316
Duo 3000	3000	1200	2830	3000	7.3	170	2951	white	939	1	19318

* Dimensions excluding insulation.
** At 80 °C supply temperature and 60 °C potable water temperature.

Duo 1500 - 3000 - Connection diagram

Type	Distance from floor to connection centres A [mm]	B [mm]	C [mm]	D [mm]	E [mm]
Duo 1500	85	435	1555	1735	2235
Duo 2000	105	455	1575	1755	2255
Duo 3000	95	470	1590	2205	2730

Duo - Performance

Technical specifications	Duo										
	120	150	200	300 Ø660	400	500	750	1000	1500	2000	3000
Total heat loss (EN 12897) [W]	56	63	83	87	96	102	117	145	160	181	n/a
Energy label	C	C	C	C	C	C	C	C	C	C	n/a
Performance index (T => 60 °C) [NL]	1.3	2.1	4.0	8.6	14.0	20.0	29.0	42.0	80.0	110.0	201.0
Continuous power (T => 45 °C) [kW] **	14.7	16.7	26.8	42.8	51.3	65.4	97.7	107.5	207.9	247.9	247.9
Continuous power (T => 60 °C) [kW] **	10.2	11.6	18.6	29.5	35.4	45.2	67.1	73.9	143.0	170.0	170.0
Continuous power (T => 70 °C) [kW] **	11.8	13.5	21.5	34.3	41.1	52.4	78.2	86.1	166.5	198.2	198.2
Peak flow (T => 40 °C) [l/10 min.] *	94	100	147	200	294	300	574	600	800	1000	1200
Peak flow (T => 60 °C) [l/10 min.] *	89	100	144	200	287	300	549	600	800	1000	1200
Continuous output (T => 40 °C) [l/h] *	357	409	653	1038	1245	1588	2362	2599	5028	5980	5980
Continuous output (T => 40 °C) [l/h] **	440	500	799	1279	1532	1953	2917	3211	6208	7402	7402
Continuous output (T => 45 °C) [l/h] **	364	414	662	1059	1269	1617	2415	2659	5141	6128	6128
Continuous output (T => 60 °C) [l/h] *	177	202	323	513	615	785	1166	1283	2483	2951	2951
Continuous output (T => 70 °C) [l/h] **	171	195	312	497	595	759	1132	1246	2410	2869	2869
First hour output (T => 40 °C) [l/h] *	391	442	691	1066	1331	1629	2543	2794	4978	5985	6336
First hour output (T => 60 °C) [l/h] *	236	272	413	633	799	982	1521	1734	2990	3662	4190
First hour output (T => 70 °C) [l/h] *	231	266	403	620	782	961	1492	1704	2933	3600	4132
Heat up time (T => 40 °C) [min.] **	16	18	15	14	16	15	15	19	14	16	24
Heat up time (T => 45 °C) [min.] **	20	22	18	17	19	19	19	23	18	20	29
Set drain rate [l/min.]	10	10	15	20	30	30	60	60	80	100	120
Hot water flow (T => 60 °C) [l/h] *	500	500	800	1500	1700	2100	3900	4400	8000	11000	11000
Heating surface of the coil [m^2]	0.5	0.6	0.9	1.3	1.6	2.0	2.7	3.2	6.4	7.3	7.3
Pressure drop coil 80/60 °C [kPa]	0.4	0.5	1.6	6.8	10.2	18.7	5.4	7.3	5.0	9.8	9.8

* Hot leg temperature: 80 °C, cold water temperature: 10 °C.
** Hot leg temperature: 90 °C, cold water temperature: 10 °C.
n/a = not applicable.

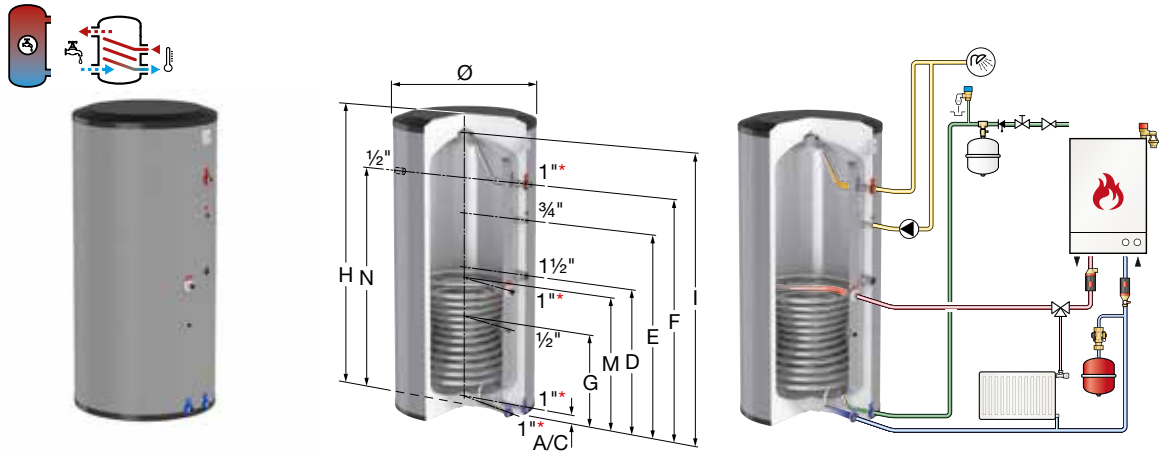
DUO HLS-E STAINLESS STEEL WATER HEATERS

Duo HLS-E 120 - 500

An indirectly heated water heater that can be combined with all heating installations.
The Diabolo-shaped coil guarantees an efficient heat exchange with a short heat up time. The Duo HLS-E provides optimum performance combined with a high level of energy efficiency.

- Efficient: Minimum heat loss and very fast heating up.
- Requires little maintenance and no anode.
- Light weight.
- Excellent stratification of the water in the vessel.
- High resistance to chloride (up to 250 ppm).
- From 300 litres, including an 1 ½" connection suitable for connecting an additional electric heating element.
- Maximum working pressure: 10 bar (potable water vessel) / 40 bar (heating coil).
- Maximum operating temperature: 95 °C (potable water vessel) / 130 °C (heating coil).
- Stainless steel type: 1.4521.

Insulation:
- Standard colours: white and silver.
- Including graphite polystyrene (GPS) insulation (direct foam injection) with a polypropylene outer shell (fire category B2).



* Duo HLS-E 120 - 200: ¾".

Type	Capa-city [l]	Dimensions * Ø [mm]	H [mm]	Tilting height [mm]	Insulation colour	Weight [kg]		Order Code
Duo HLS-E 120	119	595	994	1116	white	23	1	19900
Duo HLS-E 150	148	595	1185	1282	white	27	1	19901
Duo HLS-E 150	148	595	1185	1282	silver	27	1	19902
Duo HLS-E 200	194	595	1487	1558	white	34	1	19903
Duo HLS-E 200	194	595	1487	1558	silver	34	1	19904
Duo HLS-E 300	296	675	1805	1884	white	48	1	19905
Duo HLS-E 300	296	675	1805	1884	silver	48	1	19906
Duo HLS-E 400	393	795	1720	1844	white	69	1	19907
Duo HLS-E 400	393	795	1720	1844	silver	69	1	19908
Duo HLS-E 500	479	795	2020	2126	white	77	1	19909
Duo HLS-E 500	479	795	2020	2126	silver	77	1	19910

* Dimensions including insulation.

Duo HLS-E 120 - 500 - Connection diagram

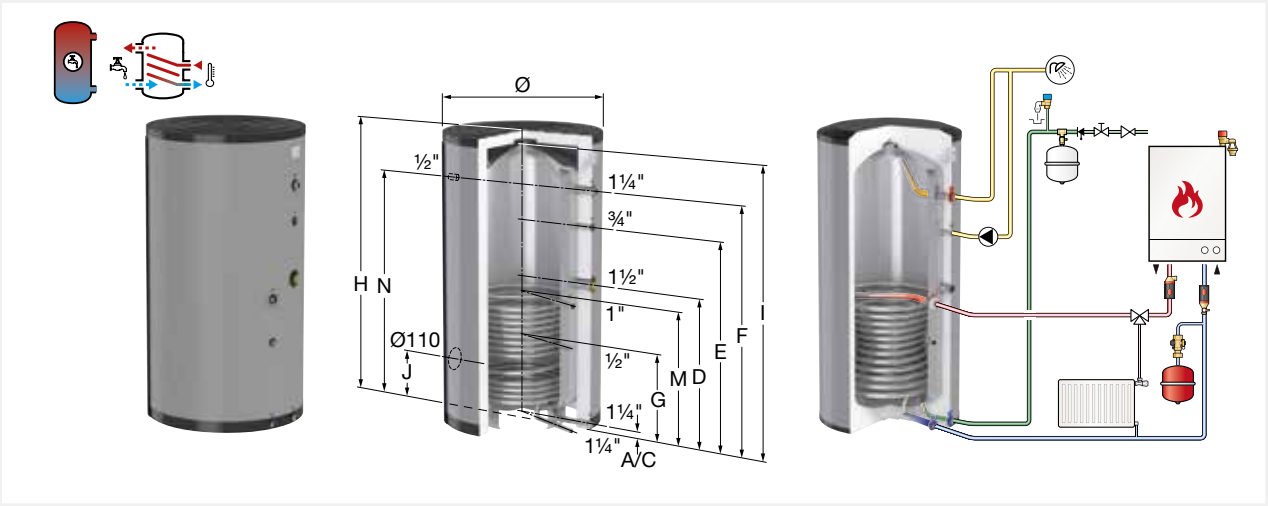
Type	Distance from floor to connection centres A/C [mm]	M [mm]	D [mm]	E [mm]	F/N [mm]	G [mm]	I [mm]
Duo HLS-E 120	50	390	-	618	748	293	933
Duo HLS-E 150	50	450	-	808	938	353	1123
Duo HLS-E 200	50	553	-	1110	1240	378	1425
Duo HLS-E 300	53	658	798	1028	1278	458	1728
Duo HLS-E 400	55	690	745	1228	1413	490	1613
Duo HLS-E 500	55	690	745	1523	1723	490	1923

Duo HLS-E 750 - 1000

An indirectly heated water heater that can be combined with all heating installations.
The Diabolo-shaped coil guarantees an efficient heat exchange with a short heat up time. The Duo HLS-E Solar provides optimum performance combined with a high level of energy efficiency.

- Efficient: Minimum heat loss and very fast heating up.
- Requires little maintenance and no anode.
- Light weight.
- Excellent stratification of the water in the vessel.
- High resistance to chloride (up to 250 ppm).
- Including an 1 ½" connection suitable for connecting an additional electric heating element.
- Including an inspection flange DN 110 at the side.
- Maximum working pressure: 10 bar (potable water vessel) / 40 bar (heating coil).
- Maximum operating temperature: 95 °C (potable water vessel) / 130 °C (heating coil).
- Stainless steel type: 1.4521.

Insulation:
- Standard colour: silver.
- Including graphite polystyrene (GPS) insulation with a polypropylene outer shell (fire category B1).



Type	Capa-city [l]	Dimensions * Ø [mm]	H [mm]	Tilting height [mm]	Insulation colour	Weight [kg]		Order Code
Duo HLS-E 750	748	990	1859	2098	silver	98	1	19411
Duo HLS-E 1000	950	990	2284	2481	silver	114	1	19912

* Dimensions including insulation.

Duo HLS-E 750 - 1000 - Connection diagram

Type	Distance from floor to connection centres A/C [mm]	M [mm]	D [mm]	E [mm]	F/N [mm]	G [mm]	I [mm]	J [mm]
Duo HLS-E 750	50	838	936	1293	1518	568	1753	413
Duo HLS-E 1000	50	838	936	1718	1943	568	2188	413

Duo HLS-E - Performance

Technical specifications	Duo HLS-E							
	120	150	200	300	400	500	750	1000
Heating surface area of the coil [m^2]	0.57	0.66	0.91	1.32	1.59	1.59	2.25	2.25
Continuous power output (DIN 4708) [kW]	29	33	42	65	85	85	130	130
Service water flow (10 - 45 °C) [l/h]	712	810	1031	1596	2088	2088	3193	3193
Total heat loss (EN 12897) [W]	33	38	47	54	60	69	100	118
Insulation thickness [mm]	70	70	70	85	95	95	100	100
Energy label	A	A	B	B	B	B	C	C
Heating water throughput [m^3/h]	2.5	2.5	2.5	3	4	4	5	5
Pressure loss [mbar]	75	90	125	260	190	190	380	380
Performance index (60 °C) [NL]	1.5	2.5	6	16	22	27	47	54
Peak flow (T =40 °C) [l/10 min.]*	211	261	365	552	685	772	1211	1428
Peak flow (T =60 °C) [l/10 min.]*	157	194	268	403	513	600	890	1107
Peak flow (T =40 °C) [l/h]*	746	911	1320	2007	2370	2457	4001	4218
Peak flow (T =60 °C) [l/h] *	422	512	738	1113	1338	1425	2075	2292
Permanent flow (T =40 °C) [l/h]**	642	780	1146	1746	2022	2022	3348	3348
Permanent flow (10 -> 40 °C, with water of 90 °C) [l/h]	714	864	1272	1938	2250	2250	3240	3240
Heat up time (10 -> 40 °C, with water of 90 °C) [min.]	10	10	9	9	10	12	13	17
Power output (at ΔT = 35 °C) [kW]	21.4	26	38.2	58.3	67.3	67.3	97.2	97.2
Heat up time (at ΔT = 35 °C) [min.]	13	13	12	12	13	17	18	23
Rated power output 85/65 °C coil [kW]	16.9	20.5	30.1	45.7	52.9	52.9	76.1	76.1
Continuous flow 85/65 °C [l/h]	266	322	474	720	834	834	1200	1200
First hour continuous flow 85/65 °C [l]	370	453	648	981	1182	1269	1853	2070
Pressure drop coil 85/65 °C [kPa]	1.1	1.9	5.2	15.9	8.3	8.3	22.9	22.9
Rated power output 90/70 °C coil [kW]	21.2	25.7	37.3	56.3	65.4	65.4	93.9	93.9
Continuous flow 90/70 °C [l/h]	335	406	587	888	1031	1031	1479	1479
First hour continuous flow 90/70 °C [l]	439	537	761	1149	1379	1466	2132	2349
Pressure drop coil 90/70 °C [kPa]	1.7	2.8	7.6	23	12	12	34.1	34.1

* Hot leg temperature: 85 °C. Heating water throughput as per rated output 85/65 °C. Cold water temperature: 10 °C.

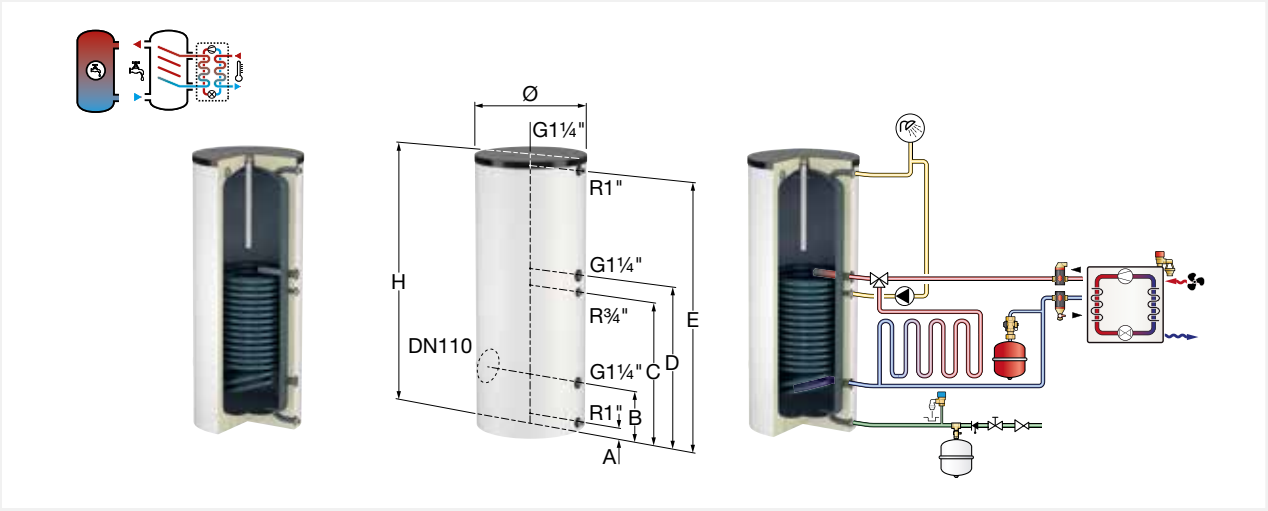
DUO HLS HIGH-YIELD WATER HEATERS

Duo HLS 300 - 500

An indirectly heated and high yield water heater that is specially developed for combination with heat pumps. Including a permanently welded-in, extra large and double heat exchanger.

- High-quality glass lining according to DIN 4753/part 3 for potable hot water production and optimum corrosion protection by means of a standard Mg-anode.
- Equipped with a built-in thermometer and immersion pipe.
- Equipped with a DN 110 inspection flange at the side, suitable for connecting additional heating elements; Ex Works - closed with a removeable blind flange.
- The heating coil is designed to ensure full depth heating to prevent the accretion of Legionella bacteria.
- A set of adjustable feet is optionally available (Art.No. 18989).
- Circulation connection R ¾".
- Maximum working pressure: 10 bar (potable water vessel) / 16 bar (heating coil).
- Maximum operating temperature: 95 °C (potable water vessel) / 110 °C (heating coil).

Insulation:
- Standard colours: white (RAL 9010).
- Including hard foam insulation (direct foam injection) with a polystyrene outer shell.



Type	Capa-city [l]	Dimensions * Ø [mm]	H [mm]	Tilting height [mm]	Heating surface area [m²]	Heating capacity [kW] **	Water capacity [l/h] **	Insulation colour	Weight [kg]		Order Code
Duo HLS 300	300	660	1710	1750	3.2	64.3	1117	white	160	1	18171
Duo HLS 400	400	750	1630	1715	4.1	80.6	1401	white	198	1	18176
Duo HLS 500	500	750	1830	1895	4.8	95.7	1663	white	222	1	18181

* Dimensions including insulation.
** At 80 °C supply temperature and 60 °C potable water temperature.

Duo HLS 300 - 500 - Connection diagram

Type	Distance from floor to connection centres A [mm]	B [mm]	C [mm]	D [mm]	E [mm]
Duo HLS 300	65	305	845	945	1560
Duo HLS 400	70	330	870	970	1470
Duo HLS 500	70	330	990	1090	1670

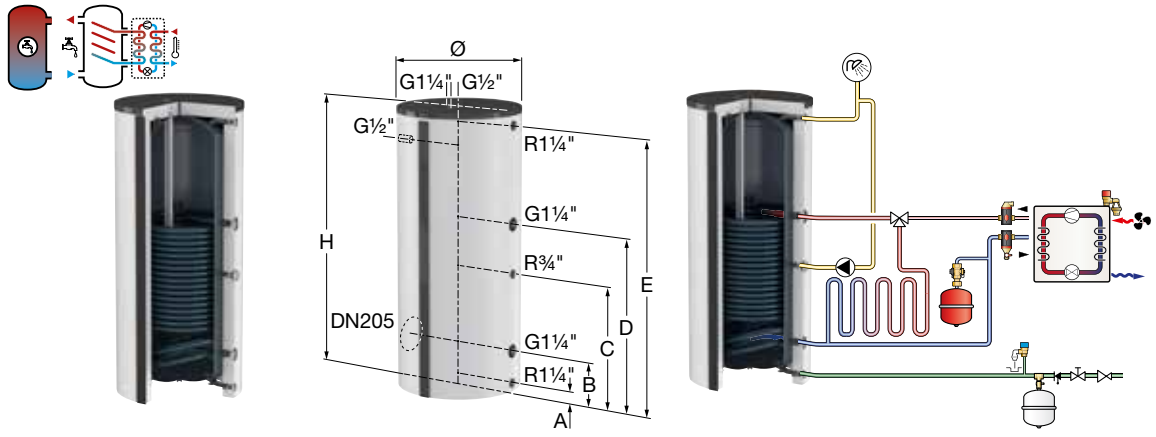
Duo HLS 750 - 1000

An indirectly heated and high yield water heater that is specially developed for combination with heat pumps. Including a permanently welded-in, extra large and double heat exchanger.

- High-quality glass lining according to DIN 4753/part 3 for potable hot water production and optimum corrosion protection by means of a standard Mg-anode.
- Equipped with a built-in thermometer.
- Equipped with a DN 205 inspection flange at the side, suitable for connecting additional heating elements; Ex Works - closed with a removeable blind flange.
- Feet adjustable in height for accurate levelling.
- Including a clamping strip with which a temperature sensor can be affixed at any chosen height to enable optimum heat efficiency of the water heater.
- The heating coil is designed to ensure full depth heating to prevent the accretion of Legionella bacteria.
- Circulation connection R ¾".
- Maximum working pressure: 10 bar (potable water vessel) / 16 bar (heating coil).
- Maximum operating temperature: 95 °C (potable water vessel) / 110 °C (heating coil).

Insulation:

- Standard colour: white (RAL 9010).
- Including EPS insulating mantle (fire category B1) with a polypropylene outer shell (fire category B2).



Type	Capa-city [l]	Dimensions * Ø [mm]	H [mm]	Tilting height [mm]	Heating surface area [m²]	Heating capacity [kW] **	Water capacity [l/h] **	Insulation colour	Weight [kg]		Order Code
Duo HLS 750	750	750	1880	2070	6.2	123.6	2146	white	300	1	18184
Duo HLS 1000	1000	800	2250	2320	7.6	150.5	2614	white	360	1	18187

* Dimensions excluding insulation.
** At 80 °C supply temperature and 60 °C potable water temperature.

Duo HLS 750 - 1000 - Connection diagram

Type	Distance from floor to connection centres A [mm]	B [mm]	C [mm]	D [mm]	E [mm]
Duo HLS 750	60	320	890	1240	1880
Duo HLS 1000	70	330	900	1360	2140

Duo HLS - Performance

Technical specifications	Duo HLS				
	300	400	500	750	1000
Total heat loss (EN 12897) [W]	91	95	101	115	143
Energy label	C	C	C	C	C
Performance index (T => 60 °C) [NL]*	12.0	18.0	23.0	37.0	51.0
Continuous power (T => 45 °C) [kW] **	93.4	116.9	138.7	179.6	218.6
Continuous power (T => 60 °C) [kW] *	64.3	80.6	95.7	123.6	150.5
Continuous power (T => 70 °C) [kW] **	75.2	94.1	111.7	144.5	175.9
Peak flow (T => 40 °C) [l/10 min.] *	323	421	518	705	810
Peak flow (T => 60 °C) [l/10 min.] *	266	350	433	614	754
Continuous output (T => 40 °C) [l/h] *	2255	2824	3353	4330	5272
Continuous output (T => 40 °C) [l/h] **	2786	3487	4138	5356	6519
Continuous output (T => 45 °C) [l/h] **	2309	2891	3430	4440	5404
Continuous output (T => 60 °C) [l/h] *	1117	1401	1663	2146	2614
Continuous output (T => 70 °C) [l/h] **	1088	1362	1617	2091	2546
First hour output (T => 40 °C) [l/h] *	2202	2775	3312	4314	5203
First hour output (T => 60 °C) [l/h] *	1197	1518	1819	2403	2933
First hour output (T => 70 °C) [l/h] **	1171	1483	1778	2355	2875
Heat up time (T => 40 °C) [min.] **	6	7	7	8	9
Heat up time (T => 45 °C) [min.] **	8	8	9	10	11
Heating surface of the coil [m^2]	3.10	4.10	4.80	6.20	7.60
Pressure drop coil 80/60 °C [kPa]	11.6	18.4	26.8	17.7	27.1
Set drain rate [l/min.]	30	40	50	70	80
Heated potable water flow (T => 60 °C) [l/h] *	3000	3500	4000	6000	7000

* Hot leg temperature: 80 °C, cold water temperature: 10 °C.
** Hot leg temperature: 90 °C, cold water temperature: 10 °C.

WPS-E STAINLESS STEEL HEAT PUMP WATER HEATERS

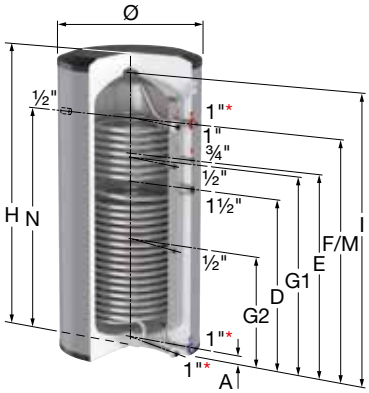
WPS-E

An indirectly heated water heater that can be used in combination with heat pumps.

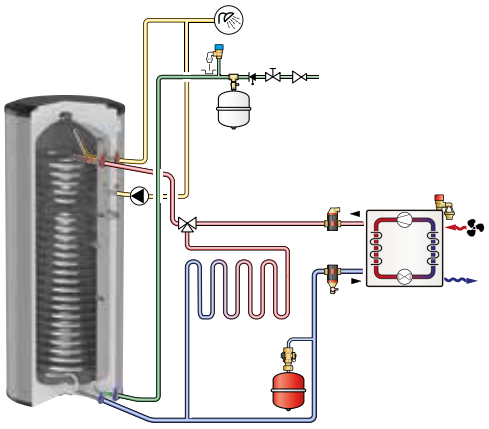
A water heater specially developed for combination with heat pumps. The large surface area of the heating coils and their innovative Diabolo shape guarantee very efficient potable hot water production. This results in a short heat up time and guaranteed hot water performance.

- Efficient: Minimum heat loss and very fast heating up.
- Requires little maintenance and no anode.
- Light weight.
- Excellent stratification of the water in the vessel.
- High resistance to chloride (up to 250 ppm).
- Including an 1 ½" connection suitable for connecting an additional electric heating element.
- Maximum working pressure: 10 bar (potable water vessel) / 40 bar (heating coil).
- Maximum operating temperature: 95 °C (potable water vessel) / 110 °C (heating coil).
- Stainless steel type: 1.4521.

Insulation:
- Standard colour: silver.
- Including graphite polystyrene (GPS) insulation (direct foam injection) with a polypropylene outer shell (fire category B2).



* WPS-E 200: ¾".



Type	Capacity [l]	Dimensions *			Insulation colour	Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting height [mm]				
WPS-E 200	181	595	1487	1558	silver	41	1	19930
WPS-E 300	283	675	1804	1884	silver	61	1	19931

* Dimensions including insulation.

WPS-E - Connection diagram

Type	Distance from floor to connection centres							
	A [mm]	D [mm]	E [mm]	F/M [mm]	G1 [mm]	G2 [mm]	N [mm]	I [mm]
WPS-E 200	50	900	1010	1240	953	553	1240	1425
WPS-E 300	53	1158	1293	1543	1258	728	1543	1728

WPS-E - Performance

Technical specifications	WPS-E	
	200	300
Heating surface area of the coil [m^2]	2.5	2.9
Continuous power output (DIN 4708) [kW]	41 / 47	45 / 52
Service water flow (10 - 45 °C) [l/h]	1008 / 1163	1104 / 1284
Total heat loss (EN 12897) [W]	48	55
Insulation thickness [mm]	70	85
Energy label	B	B
Heating water throughput [m^3/h]	2 / 3	2 / 3
Pressure loss [mbar]	117 / 243	132 / 276
Performance index (60 °C) [NL]	6	9
Peak flow (T = 40 °C) [l/10 min.]*	707	868
Peak flow (T = 60 °C) [l/10 min.]*	424	543
Peak flow (T = 40 °C) [l/h]*	3472	4053
Peak flow (T = 60 °C) [l/h]*	1774	2103
Permanent flow (T = 40 °C) [l/h]*	3318	3822
Permanent flow (10 -> 40 °C, with water of 90 °C) [l/h]	3672	4260
Heat up time (10 -> 40 °C, with water of 90 °C) [min.]	3	3
Power output (at ΔT = 35 °C) [kW]	115.3	127.1
Heat up time (at ΔT = 35 °C) [min.]	4	5
Rated power output 85/65 °C coil [kW]	86.5	99.7
Continuous flow 85/65 °C [l/h]	474	1572
First hour continuous flow 85/65 °C [l]	648	1803
Pressure drop coil 85/65 °C [kPa]	35.3	51.5
Rated power output 90/70 °C coil [kW]	107.1	123.7
Continuous flow 90/70 °C [l/h]	293	1950
First hour continuous flow 90/70 °C [l]	467	2181
Pressure drop coil 90/70 °C [kPa]	51.8	75.9

* Hot leg temperature: 85 °C. Heating water throughput as per rated output 85/65 °C. Cold water temperature: 10 °C.

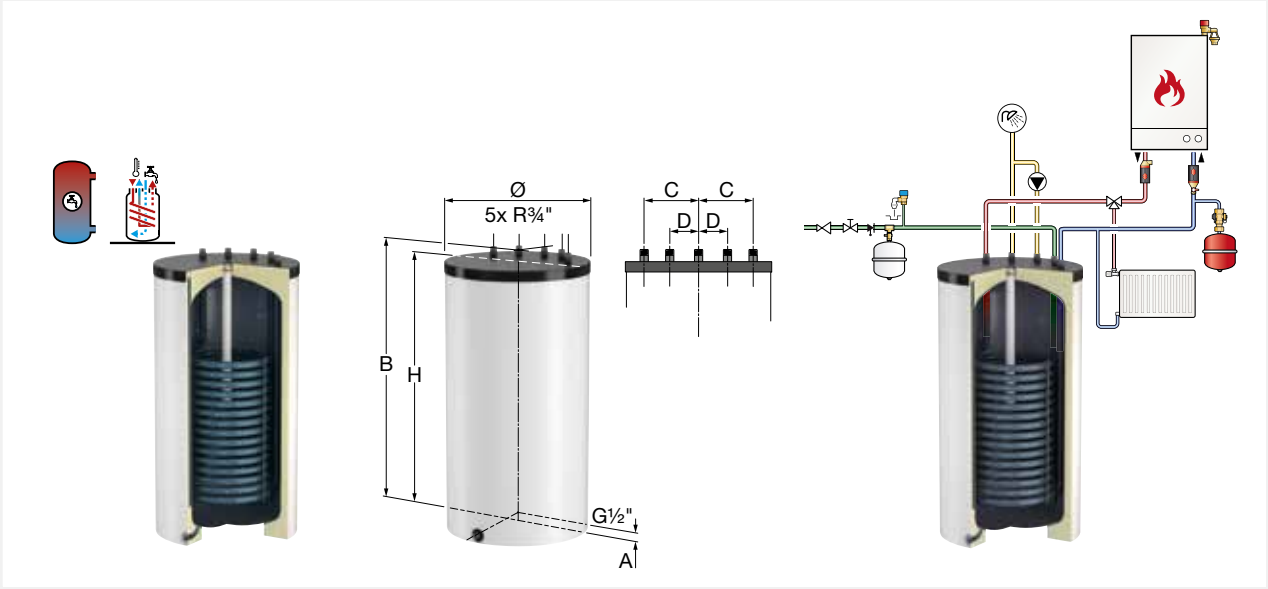
UHP LOW HEIGHT WATER HEATERS

UHP

An indirectly heated water heater with all connections on top including a permanently welded-in heating coil.

- High-quality glass lining according to DIN 4753/part 3.
- High exchange performance by a very large heating surface area.
- Equipped with an immersion pipe for temperature sensor; drain connection at the side.
- All system connections are located at the top.
- Including a standard Mg-anode.
- Special version including a thermometer and cleaning & inspection flange available upon request.
- Maximum working pressure: 10 bar (potable water vessel) / 16 bar (heating coil).
- Maximum operating temperature: 95 °C (potable water vessel) / 130 °C (heating coil).

Insulation:
- Standard colour: white (RAL 9010).
- Including hard foam insulation (direct foam injection) with a polystyrene outer shell.



Type	Capa-city [l]	Dimensions * Ø [mm]	Dimensions * H [mm]	Heating surface area [m²]	Heating capacity [kW] **	Water capacity [l/h] **	Insulation colour	Weight [kg]		Order Code
UHP 110	110	550	805	1.1	24.7	428	white	69	1	19069
UHP 160	160	550	1055	1.3	29.9	519	white	88	1	19075

* Dimensions including insulation.
** At 80 °C supply temperature and 60 °C potable water temperature.

UHP - Connection diagram

Type	Dimensions A [mm]	B [mm]	C [mm]	D [mm]
UHP 110	35	805	165	95
UHP 160	35	1055	165	95

UHP - Performance

Technical specifications	UHP	
	110	160
Total heat loss (EN 12897) [W]	65	79
Energy label	C	C
Performance index (T => 60 °C) [NL]*	1.7	2.9
Continuous power (T => 45 °C) [kW] **	35.5	43.2
Continuous power (T => 60 °C) [kW] *	24.7	29.9
Continuous power (PW=> 70 °C) [kW] **	28.5	34.6
Peak flow (T => 40 °C) [l/10 min.] *	110	156
Peak flow (T => 60 °C) [l/10 min.] *	93	134
Continuous output (PW=> 40 °C) [l/h] *	866	1049
Continuous output (PW=> 40 °C) [l/h] **	1059	1286
Continuous output (T => 45 °C) [l/h] **	877	1068
Continuous output (T => 60 °C) [l/h] *	428	519
Continuous output (T => 70 °C) [l/h] **	413	501
First hour output (T => 40 °C) [l/h] *	832	1030
First hour output (T => 60 °C) [l/h] *	450	566
First hour output (T => 70 °C) [l/h] **	437	551
Heat up time (T => 40 °C) [min.] **	6	7
Heat up time (T => 45 °C) [min.] **	8	9
Heating surface of the coil [m^2]	1.10	1.30
Pressure drop coil 80/60 °C [kPa]	3.1	5.6
Heated potable water flow (T => 60 °C) [l/h] *	1000	1300
Set drain rate [l/min]	10	15

* Hot leg temperature: 80 °C, cold water temperature: 10 °C.
** Hot leg temperature: 90 °C, cold water temperature: 10 °C.

TS HORIZONTAL WATER HEATERS

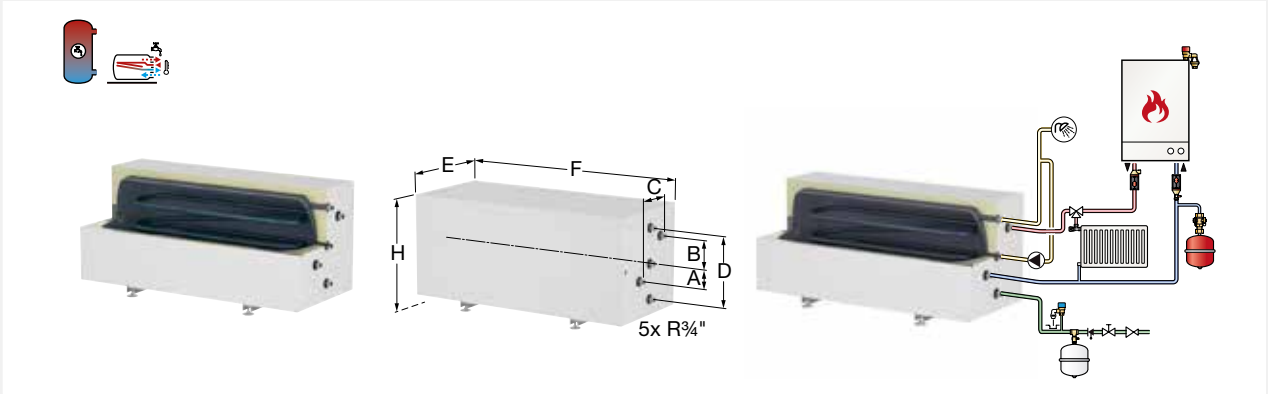
TS

An indirectly heated, horizontal water heater including a permanently welded-in heating coil.

- High-quality glass lining according to DIN 4753/part 3 for potable hot water production in combination with a standard Mg-anode.
- Equipped with a built-in thermometer and immersion pipe.
- Including adjustable feet for accurate levelling.
- Lateral cleaning flange DN 80.
- Maximum load on top of the water heater: 300 kg.
- Maximum working pressure: 10 bar.
- Maximum operating temperature: 95 °C (potable water vessel) / 110 °C (heating coil).

Insulation:

- Standard colour: white (RAL 9010).
- Including hard foam insulation (direct foam injection) with a steel sheet cladding (fire category B2).



Type	Capacity [l]	Heating surface area [m²]	Dimensions * F [mm]	Dimensions * H/E [mm]	Heating capacity [kW] **	Water capacity [l/h] **	Colour	Weight [kg]		Order Code
TS 120	120	0.4	830	600	10.9	189	white	103	1	19170
TS 150	150	0.6	1080	600	15.6	271	white	115	1	19180
TS 200	200	0.8	1330	600	18.7	325	white	136	1	19190

* Dimensions including insulation.
** At 80 °C supply temperature and 60 °C potable water temperature.

TS - Connection diagram

Type	Dimensions A [mm]	B [mm]	C [mm]	D [mm]
TS	130	75	220	380

TS - Performance

Technical specifications	TS		
	120	150	200
Total heat loss (EN 12897) [W]	55	62	70
Energy label	C	C	C
Performance index (T => 60 °C) [NL]*	1.6	2.0	3.8
Continuous power (T => 45 °C) [kW] **	15.8	22.8	27.4
Continuous power (T => 60 °C) [kW] *	10.9	15.6	18.7
Continuous power (PW=> 70 °C) [kW] **	12.6	18.2	21.9
Peak flow (T => 40 °C) [l/10 min.] *	94	100	147
Peak flow (T => 60 °C) [l/10 min.] *	89	100	144
Continuous output (T => 40 °C) [l/h] *	380	550	660
Continuous output (T => 40 °C) [l/h] **	472	682	818
Continuous output (T => 45 °C) [l/h] **	390	564	667
Continuous output (T => 60 °C) [l/h] *	189	271	325
Continuous output (T => 70 °C) [l/h] **	182	264	316
First hour output (T => 40 °C) [l/h] *	411	559	697
First hour output (T => 60 °C) [l/h] *	247	329	414
First hour output (T => 70 °C) [l/h] **	241	323	407
Heat up time (T => 40 °C) [min.] **	15	13	15
Heat up time (T => 45 °C) [min.] **	18	16	18
Heating surface of the coil [m^2]	0.40	0.60	0.80
Pressure drop coil 80/60 °C [kPa]	1.3	2.3	3.9
Heated potable water flow (T => 60 °C) [l/h] *	1100	1200	1500
Set drain rate [l/min]	10	10	15

* Hot leg temperature: 80 °C, cold water temperature: 10 °C.
** Hot leg temperature: 90 °C, cold water temperature: 10 °C.

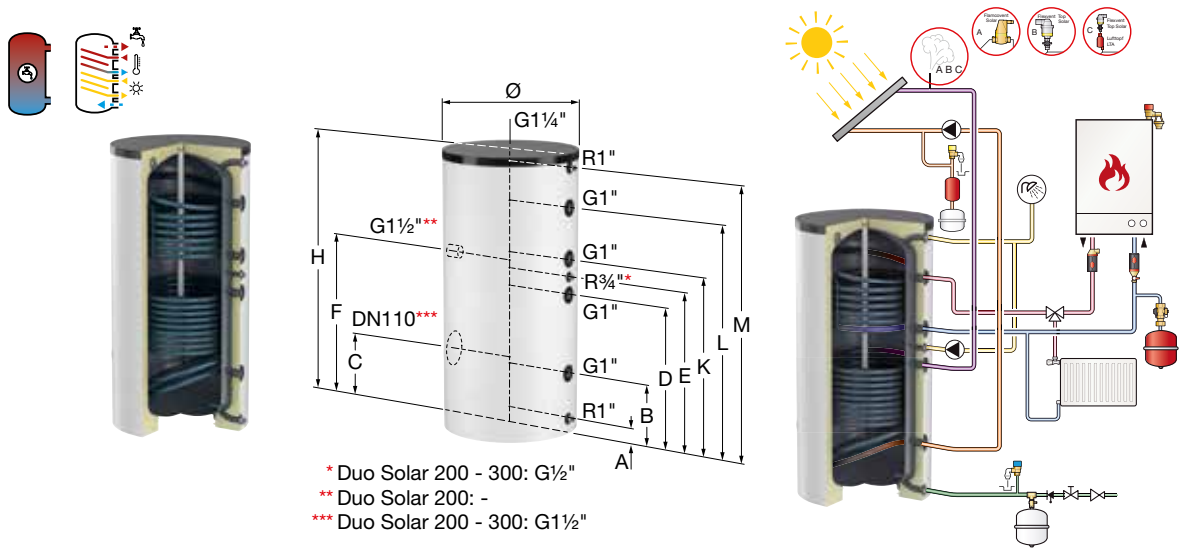
DUO SOLAR UPRIGHT WATER HEATERS

Duo Solar 200 - 500

An indirectly heated and upright water heater including two permanently welded-in heating coils, suitable for all modern heating systems. Special construction for combinations with solar systems.

- High-quality glass lining according to DIN 4753/part 3 for potable hot water production and optimum corrosion protection by means of a standard Mg-anode.
- Equipped with a built-in thermometer and immersion pipe.
- A set of adjustable feet is optionally available (Art.No. 18989).
- From 400 litres, equipped with a DN 110 inspection flange at the side, suitable for connecting additional heating elements; Ex Works - closed with removeable blind flange.
- The heating coil is designed to ensure full depth heating to prevent the accretion of Legionella bacteria.
- Maximum working pressure: 10 bar (potable water vessel) / 16 bar (heating coil).
- Maximum operating temperature: 95 °C (potable water vessel) / 130 °C (heating coil).

Insulation:
- Standard colours: white (RAL 9010) and white aluminium (RAL 9006).
- Including hard foam insulation (direct foam injection) with a polystyrene outer shell.



Type	Capa-city [l]	Dimensions * ø [mm]	H [mm]	Tilting height [mm]	Heating surface area [m²] **	Heating capacity [kW] ***	Water capacity [l/h] ***	Insulation colour	Weight [kg]		Order Code
Duo Solar 200	200	560	1350	1500	0.5 / 0.9	12.0 / 18.6	208 / 323	white	96	1	18508
Duo Solar 200	200	560	1350	1500	0.5 / 0.9	12.0 / 18.6	208 / 323	white alu.	96	1	18509
Duo Solar 300 Ø660	300	660	1620	1750	1.0 / 1.3	21.7 / 29.7	376 / 513	white	125	1	18431
Duo Solar 300 Ø660	300	660	1620	1750	1.0 / 1.3	21.7 / 29.7	376 / 513	white alu.	125	1	18448
Duo Solar 400	400	750	1530	1715	1.0 / 1.6	23.6 / 35.4	410 / 615	white	176	1	18233
Duo Solar 400	400	750	1530	1715	1.0 / 1.6	23.6 / 35.4	410 / 615	white alu.	176	1	18367
Duo Solar 500	500	750	1730	1895	1.0 / 2.0	23.6 / 45.2	410 / 785	white	199	1	18239
Duo Solar 500	500	750	1730	1895	1.0 / 2.0	23.6 / 45.2	410 / 785	white alu.	199	1	18372

* Dimensions including insulation.
** Upper/lower heating surface area.
*** At 80 °C supply temperature and 60 °C potable water temperature.

Duo Solar 200 - 500 - Connection diagram

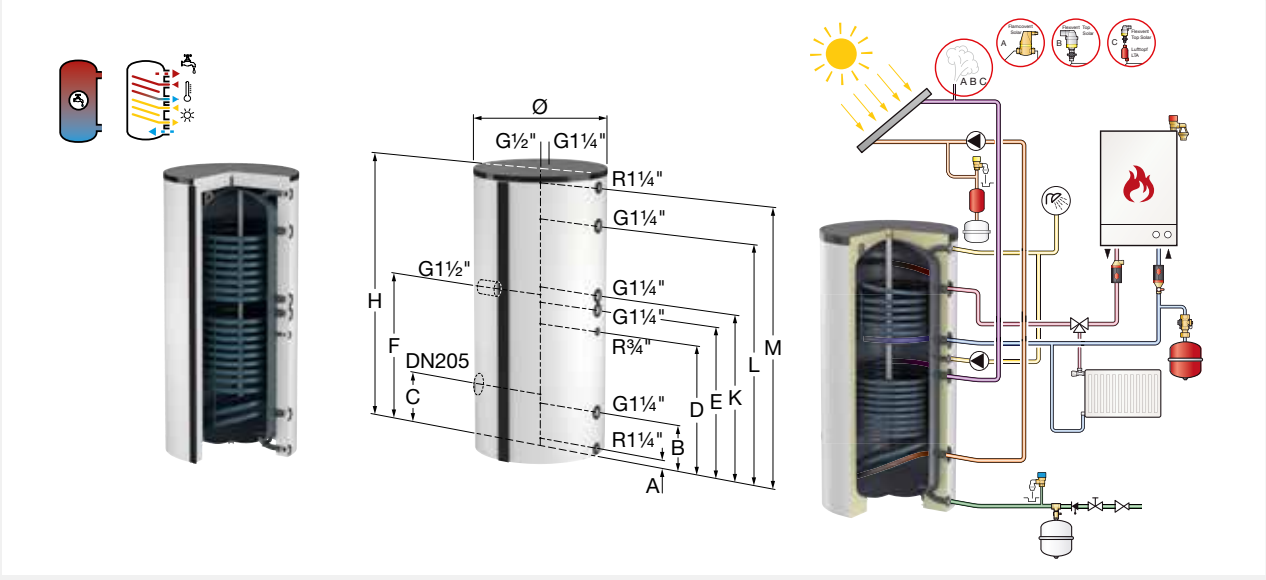
Type	Distance from floor to connection centres A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]	L [mm]	M [mm]
Duo Solar 200	65	245	-	710	545	-	885	1085	1285
Duo Solar 300 Ø660	65	310	-	750	850	845	950	1270	1560
Duo Solar 400	70	330	345	770	860	870	970	1250	1470
Duo Solar 500	70	330	345	890	980	990	1090	1370	1670

Duo Solar 750 - 1000

An indirectly heated and upright water heater including two permanently welded-in heating coils, suitable for all modern heating systems. Special construction for combinations with solar systems.

- High-quality glass lining according to DIN 4753/part 3 for potable hot water production and optimum corrosion protection by means of a standard Mg-anode.
- Feet adjustable in height for accurate levelling.
- Equipped with a built-in thermometer.
- Including a clamping strip with which a temperature sensor can be affixed at any chosen height to enable optimum heat efficiency of the water heater.
- Inspection flange at the side: DN 205, suitable for connecting additional heating elements; Ex Works - closed with a removeable blind flange.
- The heating coil is designed to ensure full depth heating to prevent the accretion of Legionella bacteria.
- Maximum working pressure: 10 bar (potable water vessel) / 16 bar (heating coil).
- Maximum operating temperature: 95 °C (potable water vessel) / 110 °C (heating coil).

Insulation:
- Standard colours: white (RAL 9010) and white aluminium (RAL 9006).
- Including EPS insulating mantle (fire category B1) with a polypropylene outer shell (fire category B2).



Type	Capa-city [l]	Dimensions * Ø [mm]	H [mm]	Tilting height [mm]	Heating surface area [m²] **	Heating capacity [kW] ***	Water capacity [l/h] ***	Insulation colour	Weight [kg]		Order Code
Duo Solar 750	750	750	1970	2070	2.0 / 2.7	40.3 / 67.1	700 / 1166	white	320	1	19320
Duo Solar 750	750	750	1970	2070	2.0 / 2.7	40.3 / 67.1	700 / 1166	white alu.	320	1	19321
Duo Solar 1000	1000	800	2230	2320	2.1 / 3.2	46.0 / 73.9	798 / 1283	white	420	1	19325
Duo Solar 1000	1000	800	2230	2320	2.1 / 3.2	46.0 / 73.9	798 / 1283	white alu.	420	1	19326

* Dimensions excluding insulation.
** Upper/lower heating surface area.
*** At 80 °C supply temperature and 60 °C potable water temperature.

Duo Solar 750 - 1000 - Connection diagram

Type	Distance from floor to connection centres A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]	L [mm]	M [mm]
Duo Solar 750	60	320	405	890	1040	1200	1140	1620	1880
Duo Solar 1000	70	330	415	960	1260	1210	1260	1740	2140

Duo Solar - Performance

Technical specifications	Duo Solar					
	200	300 Ø660	400	500	750	1000
Total heat loss (EN 12897) [W]	83	89	95	109	116	144
Energy label	C	C	C	C	C	C
Heating of vessel content by upper coil (non-solar) [l]	61	129	148	174	282	394
Performance index (T => 60 °C) [NL]*	0.9 / 4.0	2.9 / 8.6	3.4 / 14.0	4.3 / 20.0	11.0 / 29.0	17.0 / 42.0
Continuous power (T => 45 °C) [kW] **	17.4 / 26.8	31.5 / 42.8	34.4 / 51.3	34.4 / 65.4	58.5 / 97.7	66.3 / 107.5
Continuous power (T => 60 °C) [kW] *	12.0 / 18.6	21.7 / 29.5	23.6 / 35.4	23.6 / 45.2	40.3 / 67.1	46.0 / 73.9
Continuous power (T => 70 °C) [kW] **	13.9 / 21.5	25.2 / 34.3	27.5 / 41.1	27.5 / 52.4	46.9 / 78.2	53.5 / 86.1
Peak flow (T => 40 °C) [l/10 min.] *	96 / 147	165 / 200	202 / 294	214 / 300	373 / 574	443 / 600
Peak flow (T => 60 °C) [l/10 min.] *	72 / 144	133 / 200	160 / 287	176 / 300	298 / 549	378 / 600
Continuous output (T => 40 °C) [l/h] *	421 / 653	762 / 1038	831 / 1245	831 / 1588	1417 / 2362	1616 / 2599
Continuous output (T => 40 °C) [l/h] **	521 / 799	939 / 1279	1026 / 1532	1026 / 1953	1746 / 2917	1994 / 3211
Continuous output (T => 45 °C) [l/h] **	431 / 662	778 / 1059	850 / 1269	850 / 1617	1446 / 2415	1651 / 2659
Continuous output (T => 60 °C) [l/h] *	208 / 323	376 / 513	410 / 615	410 / 785	700 / 1166	798 / 1283
Continuous output (T => 70 °C) [l/h] **	202 / 312	365 / 497	398 / 595	398 / 759	678 / 1132	774 / 1246
First hour output (T => 40 °C) [l/h] *	447 / 691	800 / 1066	895 / 1331	906 / 1629	1554 / 2543	1790 / 2794
First hour output (T => 60 °C) [l/h] *	246 / 413	447 / 633	502 / 799	518 / 982	881 / 1521	1043 / 1734
First hour output (T => 70 °C) [l/h] **	240 / 403	437 / 620	490 / 782	507 / 961	861 / 1492	1021 / 1704
Heat up time (T => 40 °C) [min.] **	7 / 15	8 / 14	9 / 16	10 / 15	10 / 15	12 / 19
Heat up time (T => 45 °C) [min.] **	9 / 18	10 / 17	10 / 19	12 / 19	12 / 19	14 / 23
Heating surface of the coil [m^2]	0.50 / 0.90	1.00 / 1.30	1.00 / 1.60	1.00 / 2.00	2.00 / 2.70	2.10 / 2.30
Pressure drop coil 80/60 °C [kPa]	1.0 / 1.6	3.4 / 6.8	4.7 / 10.2	4.7 / 18.7	1.1 / 5.4	1.8 / 7.3
Set drain rate [l/min.]	15 / 15	20 / 20	30 / 30	30 / 30	60 / 60	60 / 60
Heated potable water flow (T => 60 °C) [l/h] *	850 / 800	1200 / 1500	1400 / 1700	1400 / 2100	2000 / 3900	2500 / 4400

* Hot leg temperature: 80 °C, cold water temperature: 10 °C.
** Hot leg temperature: 90 °C, cold water temperature: 10 °C.

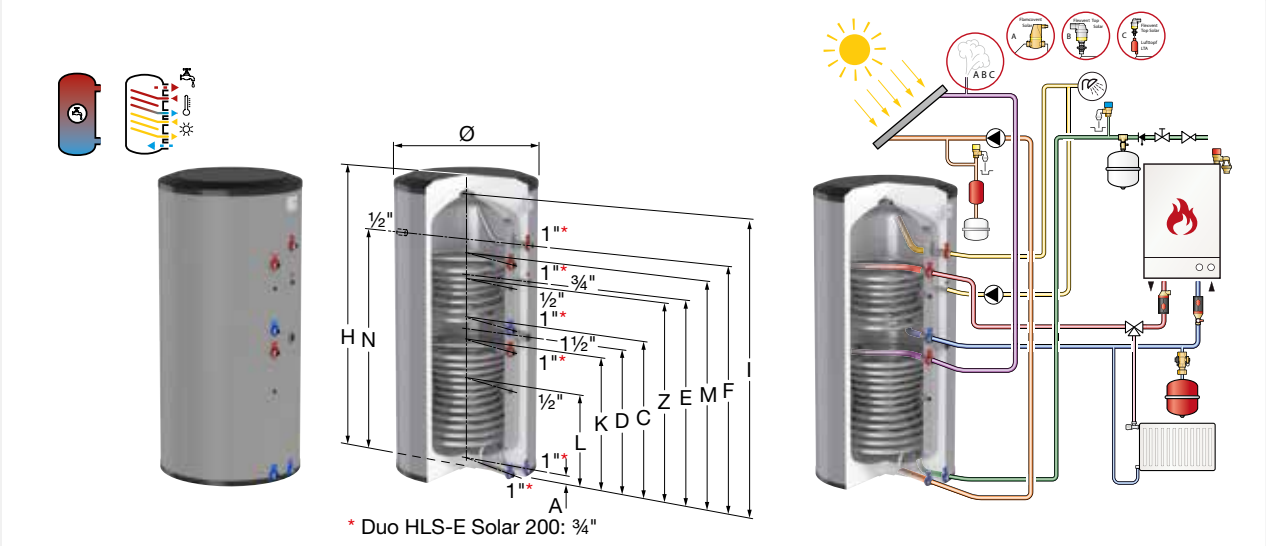
DUO HLS-E SOLAR STAINLESS STEEL WATER HEATERS

Duo HLS-E Solar 200 - 500

An indirectly heated water heater that can be combined with all heating installations.
The Diabolo-shaped coil guarantees an efficient heat exchange with a short heat up time. The Duo HLS-E Solar provides optimum performance combined with a high level of energy efficiency.

- Efficient: Minimum heat loss and very fast heating up.
- Requires little maintenance and no anode.
- Light weight.
- Excellent stratification of the water in the vessel.
- High resistance to chloride (up to 250 ppm).
- From 200 litres, including an 1 ½" connection suitable for connecting an additional electric heating element.
- Maximum working pressure: 10 bar (potable water vessel) / 40 bar (heating coil).
- Maximum operating temperature: 95 °C (potable water vessel) / 130 °C (heating coil).
- Stainless steel type: 1.4521.

Insulation:
- Standard colours: white and silver.
- Including graphite polystyrene (GPS) insulation (direct foam injection) with a polypropylene outer shell (fire category B2).



Type	Capa-city [l]	Dimensions * Ø [mm]	H [mm]	Tilting height [mm]	Insulation colour	Weight [kg]		Order Code
Duo HLS-E Solar 200	191	595	1487	1558	white	37	1	19915
Duo HLS-E Solar 200	191	595	1487	1558	silver	37	1	19916
Duo HLS-E Solar 300	291	675	1804	1884	white	53	1	19917
Duo HLS-E Solar 300	291	675	1804	1884	silver	53	1	19918
Duo HLS-E Solar 400	386	795	1710	1844	white	76	1	19919
Duo HLS-E Solar 400	386	795	1710	1844	silver	76	1	19920
Duo HLS-E Solar 500	473	795	2020	2126	white	84	1	19921
Duo HLS-E Solar 500	473	795	2020	2126	silver	84	1	19922

* Dimensions including insulation.

Duo HLS-E Solar - Connection diagram

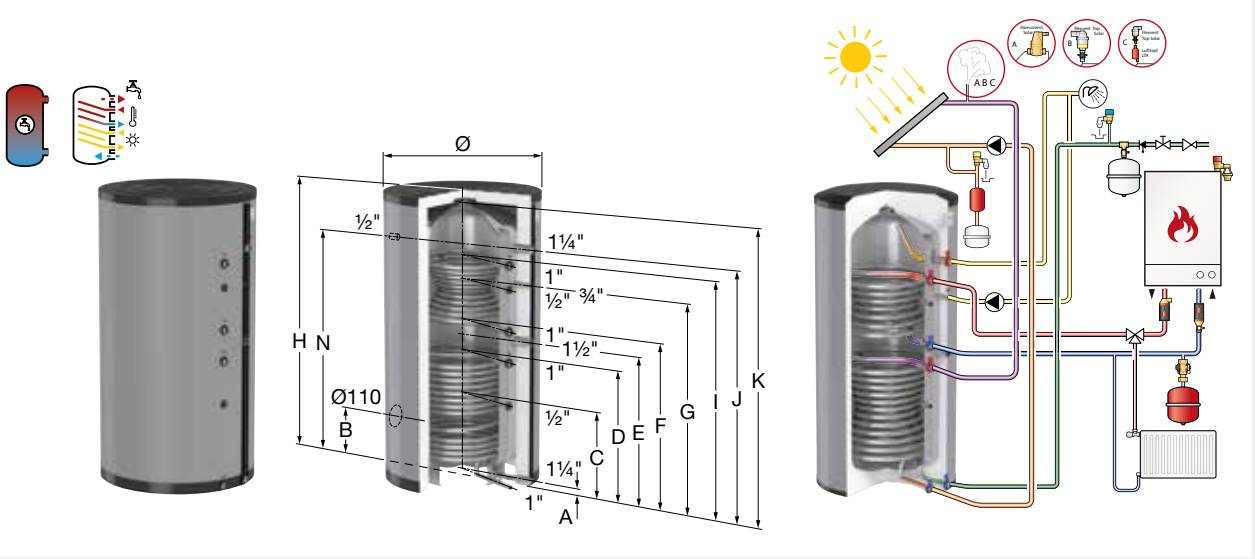
Type	Distance from floor to connection centres A [mm]	L [mm]	K [mm]	D [mm]	C [mm]	Z [mm]	E [mm]	M [mm]	N [mm]	F [mm]	I [mm]
Duo HLS-E Solar 200	50	378	553	710	868	1010	1010	1108	1240	1240	1425
Duo HLS-E Solar 300	53	458	658	798	933	1173	1293	1293	1543	1543	1728
Duo HLS-E Solar 400	55	490	690	845	1001	1213	1228	1333	1413	1413	1613
Duo HLS-E Solar 500	55	490	690	940	1191	1403	1523	1523	1723	1723	1923

Duo HLS-E Solar 750 - 1000

An indirectly heated water heater that can be combined with all heating installations.
The Diabolo-shaped coil guarantees an efficient heat exchange with a short heat up time. The Duo HLS-E Solar provides optimum performance combined with a high level of energy efficiency.

- Efficient: Minimum heat loss and very fast heating up.
- Requires little maintenance and no anode.
- Light weight.
- Excellent stratification of the water in the vessel.
- High resistance to chloride (up to 250 ppm).
- Including an 1 ½" connection suitable for connecting an additional electric heating element.
- Including an inspection flange DN 110 at the side.
- Maximum working pressure: 10 bar (potable water vessel) / 40 bar (heating coil).
- Maximum operating temperature: 95 °C (potable water vessel) / 130 °C (heating coil).
- Stainless steel type: 1.4521.

Insulation:
- Standard colour: silver.
- Including graphite polystyrene (GPS) insulation with a polypropylene outer shell (fire category B1).



Type	Capa-city [l]	Dimensions *			Insulation colour	Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting height [mm]				
Duo HLS-E Solar 750	736	990	1860	2098	silver	108	1	19423
Duo HLS-E Solar 1000	938	990	2284	2481	silver	124	1	19924

* Dimensions including insulation.

Duo HLS-E Solar - Connection diagram

Type	Distance from floor to connection centres										
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	I [mm]	J [mm]	K [mm]	N [mm]
Duo HLS-E Solar 750	50	413	568	838	936	1033	1293	1443	1518	1753	1518
Duo HLS-E Solar 1000	50	413	568	838	1061	1458	1718	1868	1943	2188	1943

Duo HLS-E Solar - Performance

Technical specifications	Duo HLS-E Solar					
	200	300	400	500	750	1000
Heating surface area of the bottom coil [m^2]	0.91	1.32	1.59	1.59	2.25	2.25
Heating surface area of the top coil [m^2]	0.5	0.88	0.89	0.89	1.58	1.58
Power output (DIN 4708) [kW]	24 / 42	44 / 65	46 / 85	46 / 85	70 / 130	70 / 130
Service water flow (10 - 45 °C) [l/h]	590 / 1031	1031 / 1596	1130 / 2088	1130 / 2088	1720 / 3193	1720 / 3193
Total heat loss (EN 12897) [W]	49	56	62	71	104	122
Insulation thickness [mm]	70	85	95	95	100	100
Energy label	B	B	B	B	C	C
Heating water throughput [m^3/h]	2 / 2.5	3 / 3	3.5 / 4	4 / 4	4 / 5	4 / 5
Pressure loss [mbar]	61 / 125	188 / 260	98 / 190	125 / 190	215 / 380	215 / 380
Performance index (60 °C) [NL]	1 / 6	3.5 / 16	6 / 22	6 / 27	15 / 47	24 / 54
Peak flow (T = 40 °C) [l/10 min.] *	365	552	685	772	1211	1428
Peak flow (T = 60 °C) [l/10 min.] *	268	403	513	600	890	1107
Peak flow (T = 40 °C) [l/h] *	1320	2007	2370	2457	4001	4128
Peak flow (T = 60 °C) [l/h] *	738	1113	1338	1425	2075	2292
Permanent flow (T = 40 °C) [l/h]* *	1146	1746	2022	2022	3348	3348
Permanent flow (10 -> 40 °C, with water of 90 °C) [l/h]	1272	1938	2250	2250	3240	3240
Heat up time (10 -> 40 °C, with water of 90 °C) [min.]	9	9	10	12	13	17
Power output (at ΔT = 35 °C) [kW]	38.2	58.3	67.3	67.3	97.2	97.2
Heat up time (at ΔT = 35 °C) [min.]	12	12	13	17	18	23
Rated power output 85/65 °C bottom coil [kW]	30.1	45.7	52.9	52.9	76.1	76.1
Rated power output 85/65 °C top coil [kW]	14.5	28.9	25.9	25.9	52.7	52.7
Continuous flow 85/65 °C [l/h]	474	720	834	834	1200	1200
First hour continuous flow 85/65 °C [l]	648	981	1182	1269	1853	2070
Pressure loss at bottom of coil 85/65 °C [kPa]	5.2	15.9	8.3	8.3	22.9	22.9
Pressure loss at top of coil 85/65 °C [kPa]	0.8	4.6	1.3	1.3	8	8
Rated power output 90/70 °C bottom of coil [kW]	37.3	56.3	65.4	65.4	93.9	93.9
Rated power output 90/70 °C top of coil [kW]	18.6	35.8	32.5	32.5	64.9	64.9
Flow 90/70 °C [l/h]	293	564	513	513	1023	1023
First hour continuous flow 90/70 °C [l]	467	825	861	948	1676	1893
Pressure loss at bottom of coil 90/70 °C [kPa]	7.6	23	12	12	34.1	34.1
Pressure loss at top of coil 90/70 °C [kPa]	1.2	6.7	2	2	11.5	11.5

* Hot leg temperature: 85 °C. Heating water throughput as per rated output 85/65 °C. Cold water temperature: 10 °C.

HLS SOLAR HIGH-YIELD WATER HEATERS

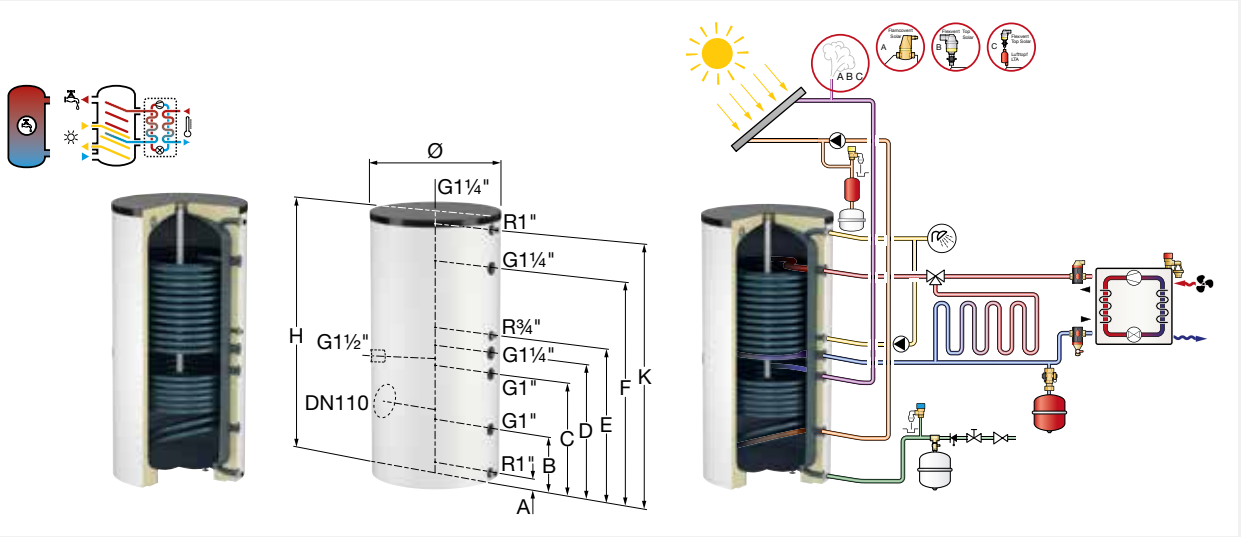
HLS Solar

An indirectly heated and high yield water heater that is specially developed for combining heat pumps with solar systems. Including a permanently welded-in, extra large and double heat exchanger for subsequent heating and additional, horizontal smooth-pipe heat exchanger for connection to the solar system.

- High-quality glass lining according to DIN 4753/part 3 for potable hot water production and optimum corrosion protection by means of a standard Mg anode.
- Equipped with a built-in thermometer and immersion pipe.
- The heating coil is designed to ensure full depth heating to prevent the accretion of Legionella bacteria.
- Including an 1 ½" sleeve for an optional connection of an EHK electric heating element.
- Inspection flange at the side: DN 110, suitable for connecting additional heating elements; Ex Works - closed with a removeable blind flange.
- A set of adjustable feet is optionally available (Art.No. 18989).
- Circulation connection R ¾".
- Maximum working pressure: 10 bar (potable water vessel) / 16 bar (heating coil).
- Maximum operating temperature: 95 °C (potable water vessel) / 110 °C (heating coil).

Insulation:

- Standard colour: white (RAL 9010).
- Including hard foam insulation (direct foam injection) with a polystyrene outer shell.



Type	Capacity [l]	Dimensions * Ø [mm]	H [mm]	Tilting height [mm]	Heating surface area [m²] **	Heating capacity [kW] ***	Water capacity [l/h] ***	Insulation colour	Weight [kg]		Order Code
HLS Solar 400	400	750	1630	1715	3.0 / 1.2	59.1 / 25.1	1031 / 435	white	210	1	18126
HLS Solar 500	500	750	1830	1895	3.6 / 1.6	69.7 / 34.1	1211 / 592	white	240	1	18128

* Dimensions including insulation.
** Upper/lower heating surface area.
*** At 80 °C supply temperature and 60 °C potable water temperature.

HLS Solar - Connection diagram

Type	Distance from floor to connection centres A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]
HLS Solar 400	65	320	640	760	860	1240	1455
HLS Solar 500	65	320	760	880	980	1440	1655

HLS Solar - Performance

Technical specifications	HLS Solar	
	400	500
Total heat loss (EN 12897) [W]	95	108
Energy label	C	C
Heating of vessel content by upper coil (non-solar) [l]	199	222
Performance index (T => 60 °C) [NL]*	11.0 / 12.0	15.0 / 18.0
Continuous power (T => 45 °C) [kW] **	86.1 / 36.3	101.1 / 49.3
Continuous power (T => 60 °C) [kW] *	59.4 / 25.1	69.7 / 34.1
Continuous power (T => 70 °C) [kW] **	69.3 / 29.1	81.4 / 39.5
Peak flow (T => 40 °C) [l/10 min.] *	322 / 290	344 / 300
Peak flow (T => 60 °C) [l/10 min.] *	240 / 285	260 / 300
Continuous output (T => 40 °C) [l/h] *	2079 / 884	2442 / 1197
Continuous output (T => 40 °C) [l/h] **	2567 / 1084	3015 / 1468
Continuous output (T => 45 °C) [l/h] **	2128 / 898	2499 / 1218
Continuous output (T => 60 °C) [l/h] *	1031 / 435	1211 / 592
Continuous output (T => 70 °C) [l/h] **	1003 / 421	1178 / 572
First hour output (T => 40 °C) [l/h] *	2054 / 1026	2379 / 1314
First hour output (T => 60 °C) [l/h] *	1099 / 647	1269 / 827
First hour output (T => 70 °C) [l/h] **	1073 / 636	1239 / 811
Heat up time (T => 40 °C) [min.] **	5 / 22	4 / 20
Heat up time (T => 45 °C) [min.] **	6 / 27	5 / 25
Heating surface of the coil [m^2]	3.00 / 1.20	3.60 / 1.60
Pressure drop coil 80/60 °C [kPa]	8.6 / 4.1	12.5 / 8.2
Set drain rate [l/min.]	30 / 30	30 / 30
Heated potable water flow (T => 60 °C) [l/h] *	2600 / 1200	3000 / 1500

* Hot leg temperature: 80 °C, cold water temperature: 10 °C.
** Hot leg temperature: 90 °C, cold water temperature: 10 °C.

WPS-E SOLAR STAINLESS STEEL HEAT PUMP WATER HEATERS

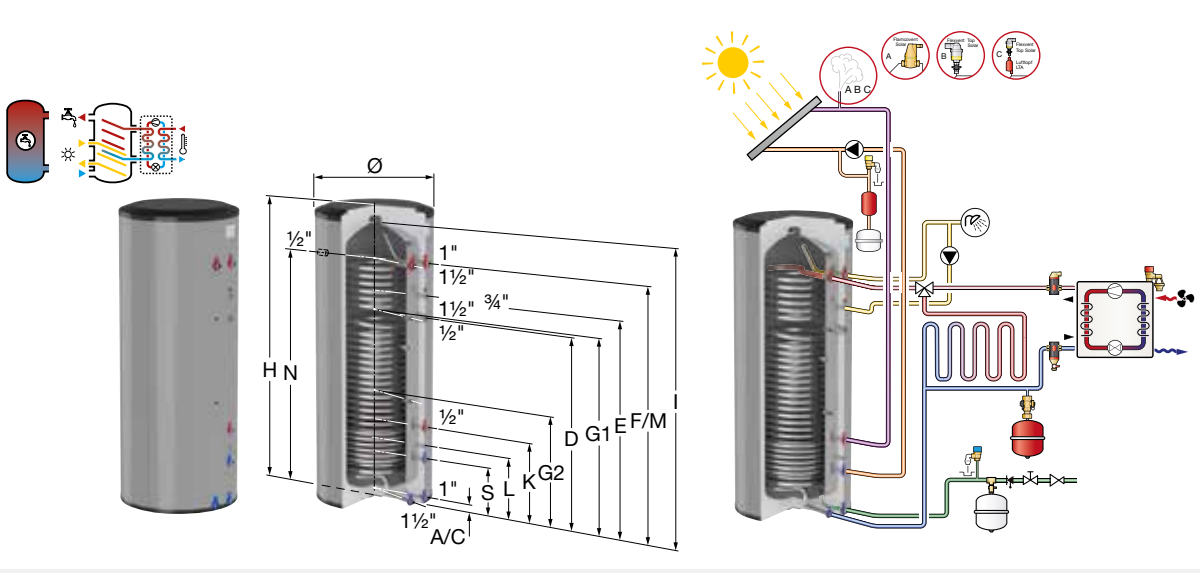
WPS-E Solar

An indirectly heated water heater that can be used for combining heat pumps and solar systems to produce potable hot water. A variant of the WPS-E, which is a combination of water heater for both heat pump systems and solar systems that is specially intended for use in renewable energy systems. The large surface of the coils guarantees a very efficient potable hot water production. This results in a short heat up time and guaranteed hot water performance.

- Efficient: Minimum heat loss and very fast heating up.
- Requires little maintenance and no anode.
- Light weight.
- Excellent stratification of the water in the vessel.
- High resistance to chloride (up to 250 ppm).
- Including an 1 ½" connection suitable for connecting an additional electric heating element.
- Maximum working pressure: 10 bar (potable water vessel) / 40 bar (heating coil).
- Maximum operating temperature: 95 °C (potable water vessel) / 110 °C (heating coil).
- Stainless steel type: 1.4521.

Insulation:

- Standard colour: silver.
- Including graphite polystyrene (GPS) insulation (direct foam injection) with a polypropylene outer shell (fire category B2).



Type	Capa-city [l]	Dimensions * Ø [mm]	H [mm]	Tilting height [mm]	Insulation colour	Weight [kg]		Order Code
WPS-E 300 Solar	281	675	1803	1884	silver	63	1	19959
WPS-E 500 Solar	459	795	2020	2126	silver	95	1	19952

* Dimensions including insulation.

WPS-E Solar - Connection diagram

Type	Distance from floor to connection centres									
	A/C [mm]	S [mm]	L [mm]	K [mm]	G2 [mm]	D [mm]	G1 [mm]	E [mm]	F/M/N [mm]	I [mm]
WPS-E 300 Solar	53	258	333	408	728	1158	1258	1293	1543	1728
WPS-E 500 Solar	55	283	383	503	690	1286	1302	1422	1723	1923

WPS-E Solar - Performance

Technical specifications	WPS-E Solar	
	300	500
Total heat loss (EN 12897) [W]	57	73
Insulation thickness [mm]	85	95
Energy label	B	B
Heating surface area [m^2]	3.13	3.7
Heating surface area solar coil [m^2]	0.38	0.75
Power output (DIN 4708) [kW]	47 / 55	52 / 62
Power output solar coil (DIN 4708) [kW]	9.8	10.5
Service water flow (10 - 45 °C) [l/h]	1164 / 1368	1284 / 1530
Service water flow - solar coil only (10 - 45 °C) [l/h]	246	258
Heating water throughput [m^3/h]	2 / 3	2 / 3
Heating water throughput solar coil [m^3/h]	0.24	0.24
Pressure loss [mbar]	142 / 294	165 / 342
Pressure loss solar coil [mbar]	2	2

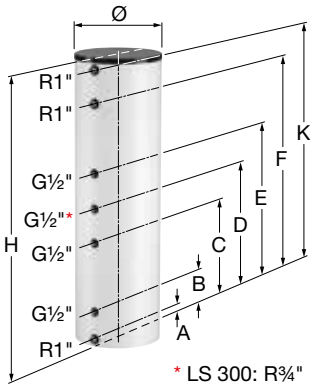
LS STORAGE VESSELS FOR POTABLE HOT WATER

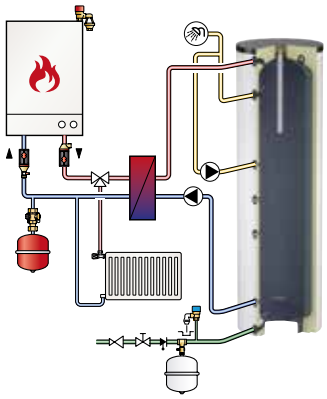
LS 200 - 300

Storage vessel for potable hot water, for use in systems in which heat can be exchanged by external heat exchangers.

- High-quality glass lining according to DIN 4753/part 3 for hygienic hot water production and optimum corrosion protection in combination with a no-maintenance or Mg anode.
- Including adjustable feet for accurate levelling.
- Suitable for connecting external heat exchangers.
- Connections for thermostat - thermometer - circulation.
- Maximum working pressure: 10 bar.
- Maximum operating temperature: 95 °C.

Insulation:
- Standard colours: white (RAL 9010) and white aluminium (RAL 9006).
- Including hard foam insulation (direct foam injection) with a polystyrene outer shell.





Type	Capacity [l]	Dimensions *			Insulation colour	Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting height [mm]				
LS 200	200	560	1360	1500	white	55	1	18623
LS 200	200	560	1360	1500	white alu.	55	1	18624
LS 300	300	660	1620	1750	white	95	1	18720
LS 300	300	660	1620	1750	white alu.	95	1	18721

* Dimensions including insulation.

LS 200 - 300 - Connection diagram

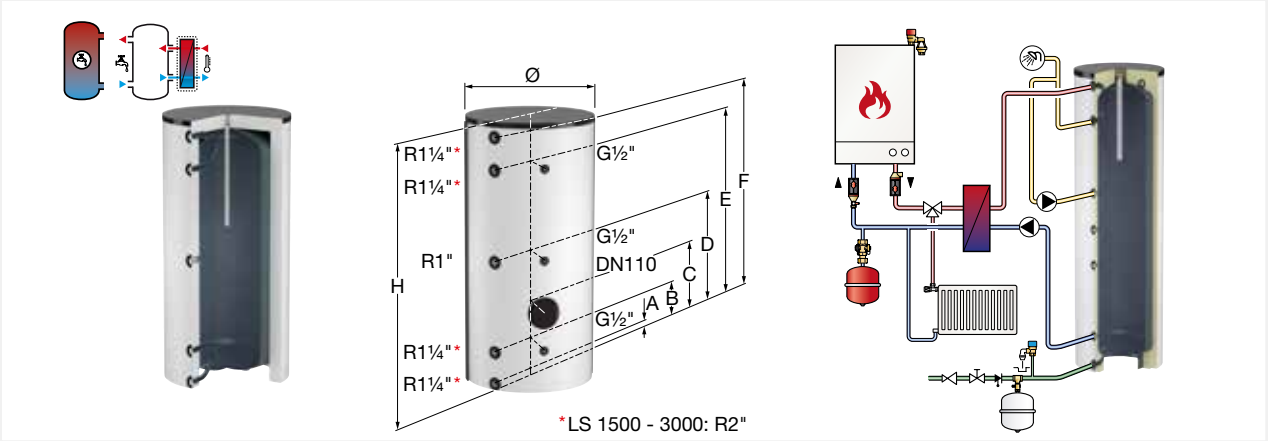
Type	Distance from floor to connection centres						
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]
LS 200	65	245	545	710	885	1075	1285
LS 300	65	310	-	850	950	1340	1560

LS 500 - 3000

Storage vessel for potable hot water, for use in systems in which heat can be exchanged by external heat exchangers.

- High-quality glass lining according to DIN 4753/part 3 for hygienic hot water production and optimum corrosion protection in combination with a no-maintenance or Mg anode (standard from 1,500 litres).
- Including adjustable feet for accurate levelling.
- Suitable for connecting external heat exchangers.
- Connections for thermostat - thermometer - circulation.
- Cleaning & inspection flange DN 110 at the side (LS 1500 - 3000 also at the top side).
- Maximum working pressure: 10 bar.
- Maximum operating temperature: 95 °C.

Insulation:
- Standard colours: white (RAL 9010) and white aluminium (RAL 9006).
- Including EPS insulating mantle (fire category B1) with a polypropylene outer shell (fire category B2).



Type	Capacity [l]	Dimensions * Ø [mm]	H [mm]	Tilting height [mm]	Insulation colour	Weight [kg]		Order Code
LS 500	500	650	1640	1800	white	125	1	18630
LS 500	500	650	1640	1800	white alu.	125	1	18635
LS 750	750	750	1970	2070	white	190	1	18637
LS 750	750	750	1970	2070	white alu.	190	1	18638
LS 1000	1000	800	2230	2320	white	232	1	18640
LS 1000	1000	800	2230	2320	white alu.	232	1	18641
LS 1500	1500	1000	2320	2480	white	397	1	18643
LS 1500	1500	1000	2320	2480	white alu.	397	1	18644
LS 2000	2000	1100	2440	2600	white	474	1	18646
LS 2000	2000	1100	2440	2600	white alu.	474	1	18647
LS 3000	3000	1200	2830	3000	white	730	1	18654

* Dimensions excluding insulation.

LS 500 - 3000 - Connection diagram

Type	Distance from floor to connection centres A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]
LS 500	60	285	485	830	1375	1600
LS 750	60	300	637	970	1420	1900
LS 1000	70	310	645	1100	1670	2160
LS 1500	85	385	585	1160	1935	2235
LS 2000	105	405	605	1180	1955	2235
LS 3000	95	420	620	1420	2405	2730

LS - Performance

Technical specifications	LS 200	300	500	750	1000	1500	2000	3000
Total heat loss (EN 12897) [W]	83	89	89	119	147	161	183	n/a
Energy label	C	C	C	C	C	C	C	n/a

n/a = not applicable.

LS-E STAINLESS STEEL STORAGE VESSELS FOR POTABLE HOT WATER

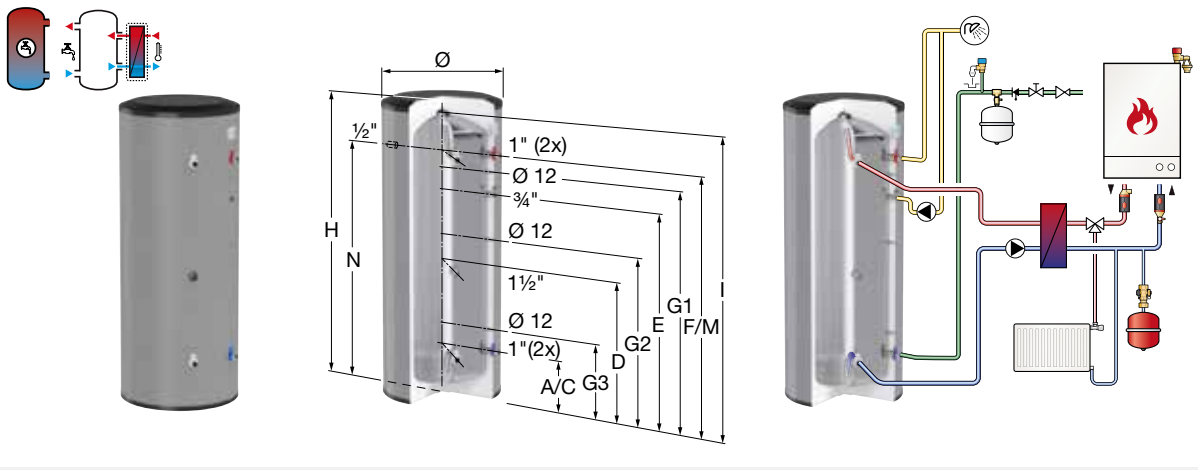
LS-E 300 - 500

Storage vessel for potable hot water, for use in systems in which heat can be exchanged by external heat exchangers.

- Efficient: Minimum heat loss and very fast heating up.
- Requires little maintenance and no anode.
- Light weight.
- Excellent stratification of the water in the vessel.
- High resistance to chloride (up to 250 ppm).
- Including an 1 ½" connection suitable for connecting an additional electric heating element.
- Maximum working pressure: 10 bar.
- Maximum operating temperature: 95 °C.
- Stainless steel type: 1.4521.

Insulation:

- Standard colour: silver.
- Including graphite polystyrene (GPS) insulation (direct foam injection) with a polypropylene outer shell (fire category B2).



Type	Capacity [l]	Dimensions * Ø [mm]	H [mm]	Tilting height [mm]	Insulation colour	Weight [kg]		Order Code
LS-E 300	304	675	1804	1884	silver	40	1	19950
LS-E 500	491	795	2020	2126	silver	70	1	19951

* Dimensions including insulation.

LS-E 300 - 500 - Connection diagram

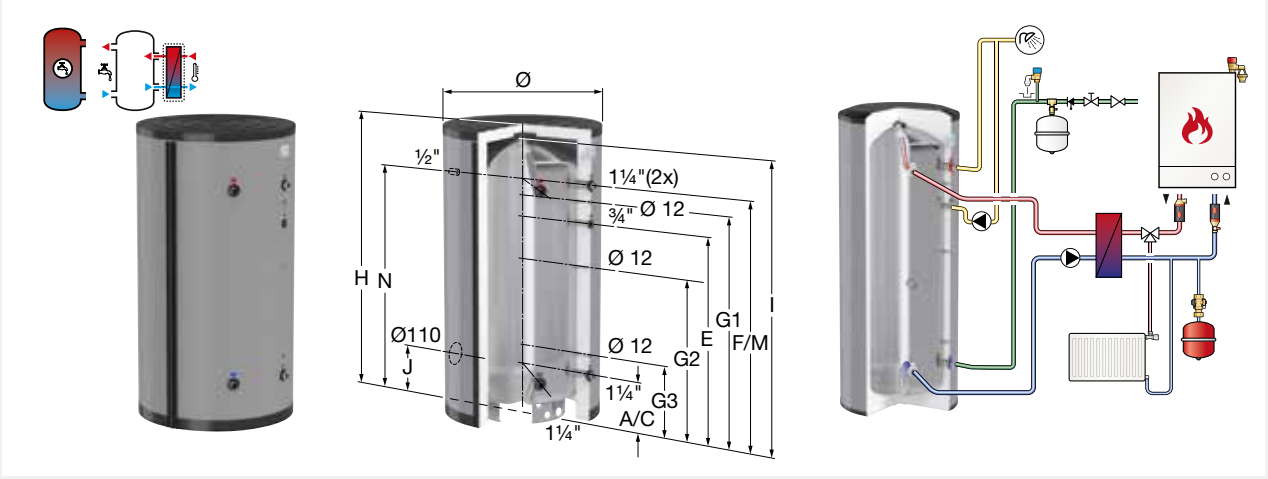
Type	Distance from floor to connection centres A/C [mm]	D [mm]	G3 [mm]	G2 [mm]	E [mm]	G1 [mm]	F/M/N [mm]	I [mm]
LS-E 300	258	798	378	798	1131	1418	1543	1728
LS-E 500	283	929	437	1095	1369	1606	1723	1923

LS-E 750 - 1000

Storage vessel for potable hot water, for use in systems in which heat can be exchanged by external heat exchangers.

- Efficient: Minimum heat loss and very fast heating up.
- Requires little maintenance and no anode.
- Light weight.
- Excellent stratification of the water in the vessel.
- High resistance to chloride (up to 250 ppm).
- Including an inspection flange DN 110 at the side.
- Maximum working pressure: 10 bar.
- Maximum operating temperature: 95 °C.
- Stainless steel type: 1.4521.

Insulation:
- Standard colour: silver.
- Including graphite polystyrene (GPS) insulation with a polypropylene outer shell (fire category B1).



Type	Capa-city [l]	Dimensions * Ø [mm]	H [mm]	Tilting height [mm]	Insulation colour	Weight [kg]		Order Code
LS-E 750	765	990	1867	2098	silver	81	1	19442
LS-E 1000	967	990	2292	2481	silver	97	1	19953

* Dimensions including insulation.

LS-E 750 - 1000 - Connection diagram

Type	Distance from floor to connection centres A/C [mm]	G3 [mm]	G2 [mm]	E [mm]	G1 [mm]	F/M/N [mm]	I [mm]	J [mm]
LS-E 750	323	448	1003	1278	1413	1518	1753	413
LS-E 1000	323	488	1128	1718	1838	1943	2188	413

LS-E - Performance

Technical specifications	LS-E 300	500	750	1000
Total heat loss (EN 12897) [W]	56	71	104	122
Insulation thickness [mm]	85	95	100	100
Energy label	B	B	C	C

DWH DIRECT WATER HEATERS

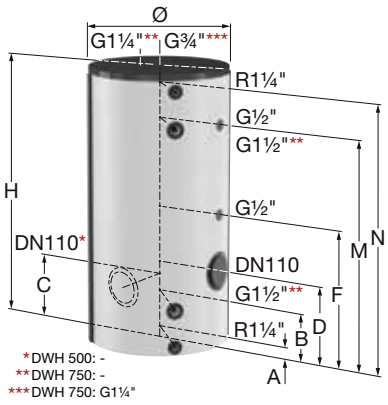
DWH 500 - 3000

Direct water heaters for potable water installations, for use in systems in which heat can be exchanged by external heat exchangers.

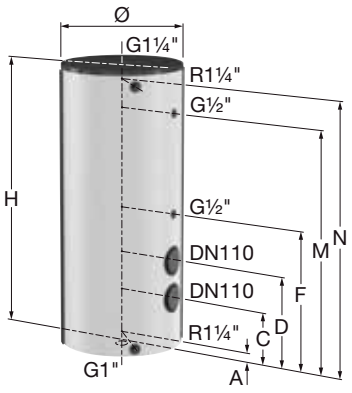
All units are extremely compact and the connections are all conveniently placed 'in-line' to make installation easier, neater and, as a result, faster. This direct model can be fitted with two or more electric immersion heating elements.

- High quality single layer glass-lining to DIN 4753 Part 3 to provide hygienic hot water supply, optimum corrosion protection and minimal calcium build up.
- Connections for thermostat - thermometer - circulation.
- Maximum operating pressure (cylinder): 10.0 bar.
- Maximum working temperature (cylinder): 95 °C.

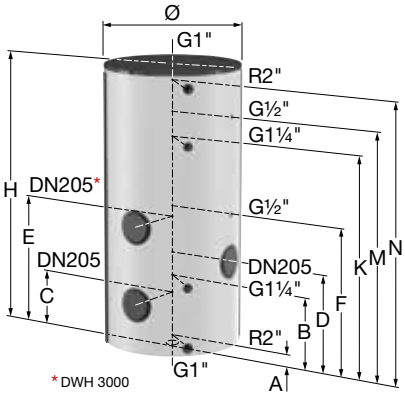
Insulation:
- Standard colours: white (RAL 9010).
- Including EPS insulating mantle (fire category B1) with a polypropylene outer shell (fire category B2).



DWH 500 - 750



DWH 1000



DWH 1500 - 3000

Type	Capacity [l]	Dimensions * Ø [mm]	Dimensions * H. [mm]	Weight [kg]		Order Code
DWH 500	500	650	1680	110	1	17360
DWH 750	750	750	1920	175	1	17361
DWH 1000	1000	800	2180	205	1	17362
DWH 1500	1500	1000	2280	365	1	17363
DWH 2000	2000	1100	2320	420	1	17364
DWH 3000	3000	1200	2793	665	1	17365

* Dimensions excluding insulation.

DWH 500 - 3000 - Connection diagram

Type	Distance from floor to connection centres								
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]	M [mm]	N [mm]
DWH 500	60	285	-	485	-	830	1375	1375	1600
DWH 750	60	-	420	620	-	970	-	1620	1880
DWH 1000	70	-	430	730	-	1105	-	1900	2140
DWH 1500	70	690	490	890	-	1290	1890	1890	2240
DWH 2000	105	705	505	905	-	1305	1905	1905	2255
DWH 3000	95	720	520	920	1320	1320	2155	2405	2730

DWH - Performance

Technical specifications	DWH 500 - 3000					
	500	750	1000	1500	2000	3000
Total heat loss (EN 12897) [W]	89	119	147	161	183	n/a
Energy label	C	n/a	n/a	n/a	n/a	n/a

n/a = not applicable.

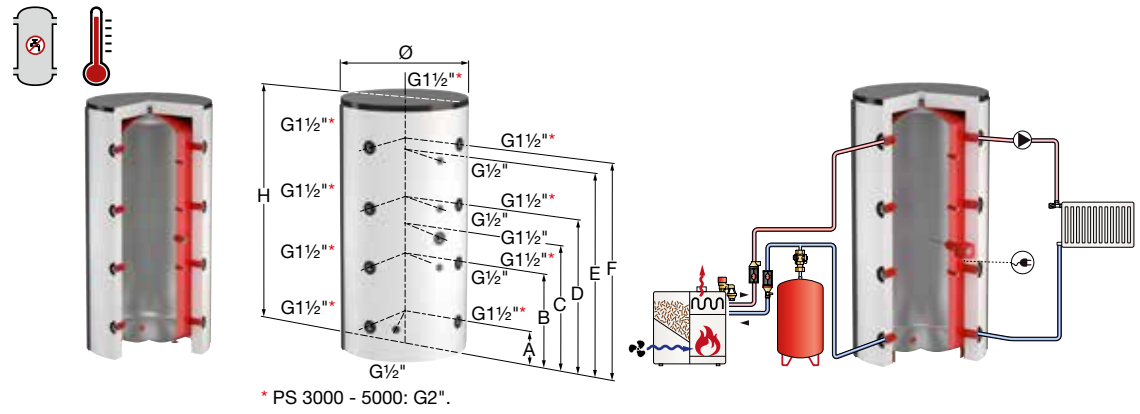
PS BUFFER VESSELS

PS 200 - 5000

Buffer vessels for use in closed heating installations. Can also be used as buffer vessel in cooling installations (insulation for cooling installations is not available; for buffer vessels for cooling installations provided with insulation, see Flamco PSK).

- On a construction with adjustable feet for accurate levelling (up to 2000 litres).
- Can be connected with several buffer vessels.
- Temperature sensor connections: G½" (4x).
- Connections under a 90° angle, enabling an angular setting.
- Alternative connections, capacities and operating pressures are available upon request.
- Maximum working pressure: 3 bar.
- Maximum operating temperature: 95 °C.
- Steel vessel (made of S235JR): Outside powder-coated, inside untreated.

Insulation (Excluded - Can be ordered separately (see Chapter 'Accessories for Water Heaters and Storage Vessels'):
- EPS insulating mantle (fire category B1) with a polypropylene outer shell in white (RAL 9010) / white aluminium (RAL 9006).



* PS 3000 - 5000: G2".

Type	Capacity [l]	Dimensions *			Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting height [mm]			
PS 200	200	480	1300	1350	47	1	18600
PS 300	300	550	1590	1650	66	1	18605
PS 500	500	650	1650	1700	80	1	18756
PS 600	600	650	2050	2100	93	1	19380
PS 750	750	790	1800	1850	102	1	18786
PS 850	850	790	1950	2000	140	1	18793
PS 1000 (Ø790)	1000	790	2200	2250	170	1	18885
PS 1000 (Ø850)	1000	850	2000	2050	172	1	18850
PS 1200	1200	850	2250	2300	175	1	18843
PS 1500	1500	1000	2320	2380	225	1	18816
PS 1800	1800	1100	2200	2250	272	1	18856
PS 2000	2000	1100	2350	2400	310	1	18826
PS 3000	3000	1250	2800	2900	586	1	18670
PS 4000	4000	1500	2950	3050	850	1	19340
PS 5000	5000	1600	3250	3350	970	1	19344

* Dimensions excluding insulation.

PS 200 - 5000 - Connection diagram

Type	System connections	Distance from floor to connections					
		A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]
PS 200	8	180	480	-	780	980	1080
PS 300	8	210	590	-	980	1260	1360
PS 500	8	180	600	770	1010	1330	1430
PS 600	8	180	730	980	1280	1730	1830
PS 750	8	270	690	940	1100	1420	1520
PS 850	8	270	740	970	1200	1570	1670
PS 1000 (Ø 790)	8	270	820	995	1370	1820	1920
PS 1000 (Ø 850)	8	305	790	1075	1220	1605	1705
PS 1200	8	305	855	1195	1405	1855	1955
PS 1500	8	340	890	1230	1440	1890	1990
PS 1800	8	350	850	1100	1350	1750	1850
PS 2000	8	350	900	1310	1450	1900	2000
PS 3000	8	450	1060	1390	1720	2240	2330
PS 4000	8	540	1150	1480	1810	2330	2420
PS 5000	8	695	1305	1635	1965	2485	2575

PS 200 - 5000 - Performance

Technical specifications	PS 200 - 5000														
	200	300	500	600	750	850	1000 Ø790	1000 Ø850	1200	1500	1800	2000	3000	4000	5000
Total heat loss (EN 12897) [W]	62	75	92	110	120	129	142	141	133	162	173	183	n/a	n/a	n/a
Energy label	C	C	C	C	C	C	C	C	C	C	C	C	n/a	n/a	n/a

n/a = not applicable.

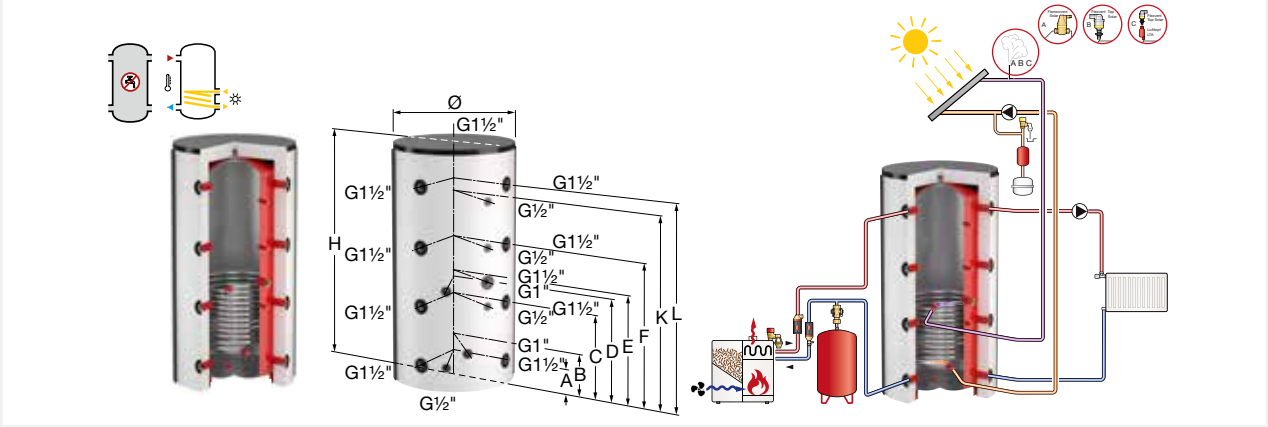
PS-R INDIRECTLY HEATED BUFFER VESSELS

PS-R 300 - 2000

Buffer vessels for use in closed heating installations. Including a permanently welded-in heating coil for connecting additional heating sources (such as a solar installation).

- Including adjustable feet for accurate levelling.
- Temperature sensor connections: G½" (4x).
- Connections under a 90° angle, enabling an angular setting.
- Alternative connections, capacities and operating pressures are available upon request.
- Maximum working pressure: 3 bar (buffer vessel) / 10 bar (heating coil).
- Maximum operating temperature: 95 °C (buffer vessel) / 110 °C (heating coil).
- Steel vessel (made of S235JR): Outside powder-coated, inside untreated.

Insulation (Excluded - Can be ordered separately (see Chapter 'Accessories for Water Heaters and Storage Vessels'):
- EPS insulating mantle (fire category B1) with a polypropylene outer shell in white (RAL 9010) / white aluminium (RAL 9006).



Type	Capa-city [l]	Dimensions * Ø [mm]	H [mm]	Tilting height [mm]	Heating surface area [m²]	Weight [kg]		Order Code
PS-R 300	300	550	1590	1650	1.0	93	1	19348
PS-R 500	500	650	1650	1700	1.6	102	1	19120
PS-R 600	600	650	2050	2100	2.0	124	1	19349
PS-R 750	750	790	1800	1850	2.1	134	1	19121
PS-R 850	850	790	1950	2000	2.3	175	1	19350
PS-R 1000 (Ø850)	1000	850	2000	2050	2.7	208	1	19122
PS-R 1000 (Ø790)	1000	790	2200	2250	2.7	210	1	18845
PS-R 1200	1200	850	2250	2300	2.9	225	1	19351
PS-R 1500	1500	1000	2320	2380	3.2	330	1	19123
PS-R 2000	2000	1100	2350	2400	5.0	380	1	19352

* Dimensions excluding insulation.

PS-R 300 - 2000 - Connection diagram

Type	System connections	Distance from floor to connections A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]	L [mm]
PS-R 300	8	210	310	590	750	-	880	1260	1360
PS-R 500	8	180	280	600	720	770	1010	1330	1430
PS-R 600	8	180	280	730	880	980	1280	1730	1830
PS-R 750	8	270	370	690	890	940	1100	1420	1520
PS-R 850	8	270	370	740	920	970	1200	1570	1670
PS-R 1000 (Ø790)	8	270	370	820	1010	1095	1370	1820	1920
PS-R 1000 (Ø850)	8	305	405	790	1005	1075	1220	1605	1705
PS-R 1200	8	305	405	855	1045	1195	1405	1855	1955
PS-R 1500	8	340	440	890	1040	1230	1440	1890	1990
PS-R 2000	8	350	450	900	1200	1310	1450	1900	2000

PS-R 300 - 2000 - Performance

Technical specifications	PS-R 300 - 2000 300	500	600	750	850	1000 Ø790	1000 Ø850	1200	1500	2000
Total heat loss (EN 12897) [W]	74	91	109	119	128	141	140	132	161	182
Energy label	C	C	C	C	C	C	C	C	C	C

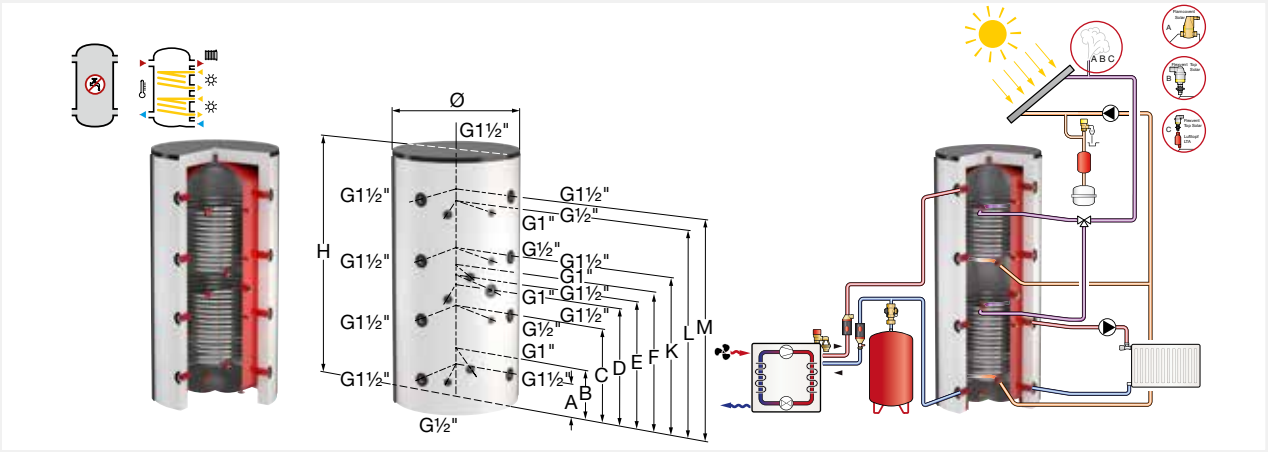
PS-T INDIRECTLY HEATED BUFFER VESSELS

PS-T 600 - 2000

Buffer vessels for use in closed heating installations. Including two permanently welded-in heating coils for connecting additional heating sources (such as a solar installation or wood-burning stove).

- Including adjustable feet for accurate levelling.
- Temperature sensor connections: G½" (4x).
- Connections under a 90° angle, enabling an angular setting.
- Maximum working pressure: 3 bar (buffer vessel) / 10 bar (heating coil).
- Maximum operating temperature: 95 °C (buffer vessel) / 110 °C (heating coil).
- Steel vessel (made of S235JR): Outside powder-coated, inside untreated.

Insulation (Excluded - Can be ordered separately (see Chapter 'Accessories for Water Heaters and Storage Vessels'):
- EPS insulating mantle (fire category B1) with a polypropylene outer shell in white (RAL 9010) / white aluminium (RAL 9006).



Type	Capacity [l]	Dimensions * Ø [mm]	H [mm]	Tilting height [mm]	Heating surface area [m²] **	Weight [kg]		Order Code
PS-T 600	600	650	2050	2100	1.5 / 2.0	146	1	19353
PS-T 750	750	790	1800	1850	1.5 / 2.1	156	1	19354
PS-T 850	850	790	1950	2000	2.0 / 2.3	205	1	19355
PS-T 1000 (Ø790)	1000	790	2200	2250	2.2 / 2.7	245	1	19356
PS-T 1000 (Ø850)	1000	850	2000	2050	2.2 / 2.7	243	1	19357
PS-T 1200	1200	850	2250	2300	2.6 / 2.9	261	1	19358
PS-T 1500	1500	1000	2320	2380	2.8 / 3.2	306	1	19359
PS-T 2000	2000	1100	2350	2400	3.5 / 5.0	396	1	19360

* Dimensions excluding insulation.
** Upper/lower heating surface area.

PS-T 600 - 2000 - Connection diagram

Type	System connections	Distance from floor to connections A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]	L [mm]	M [mm]
PS-T 600	8	180	280	730	880	980	1240	1280	1680	1830
PS-T 750	8	270	370	690	890	940	1060	1100	1420	1520
PS-T 850	8	270	370	740	920	970	1090	1200	1570	1670
PS-T 1000 (Ø790)	8	270	370	820	1010	1095	1210	1370	1820	1920
PS-T 1000 (Ø850)	8	305	405	790	1005	1075	1125	1220	1605	1705
PS-T 1200	8	305	405	855	1045	1195	1295	1405	1855	1955
PS-T 1500	8	340	440	890	1040	1230	1370	1440	1890	1990
PS-T 2000	8	350	450	900	1200	1310	1380	1450	1900	2000

PS-T 600 - 2000 - Performance

Technical specifications	PS-T 600 - 2000 600	750	850	1000 Ø790	1000 Ø850	1200	1500	2000
Total heat loss (EN 12897) [W]	108	118	127	140	139	131	160	181
Energy label	C	C	C	C	C	C	C	C

PS-K BUFFER VESSELS FOR CHILLED WATER

PS-K 500 - 3000

Buffer vessels including flange connections for use in closed chilled water installations.

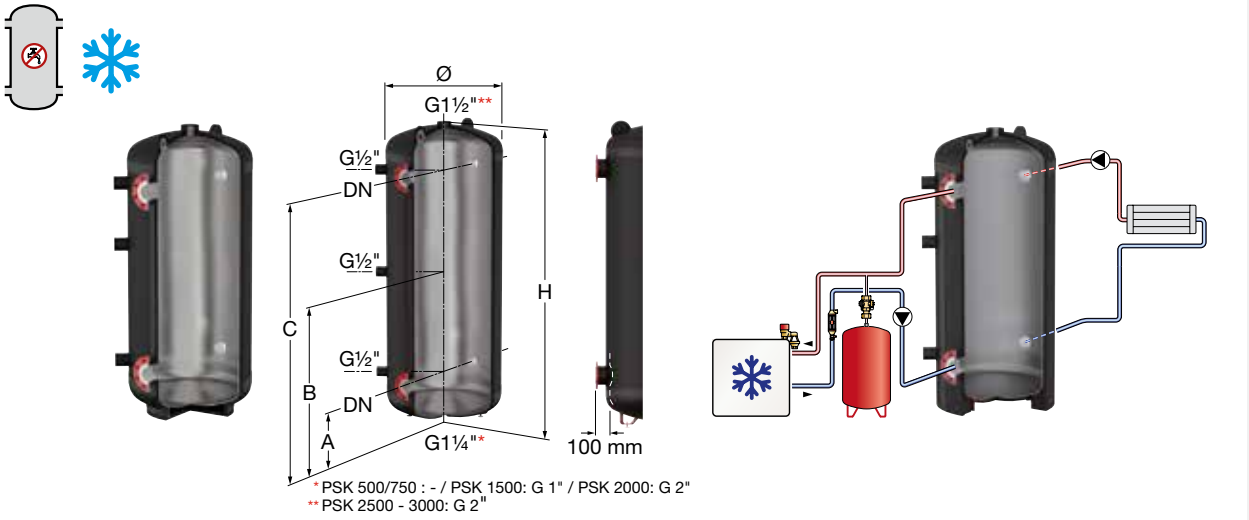
- Including adjustable feet for accurate levelling.
- Large flange connections for large water flows.
- Sturdy construction, easy to assemble.
- Temperature-sensor connections: G½" (3x).
- Connections:
  Female thread according to DIN ISO 228/T.1

Flanges according to EN 1092-1/11 B1, PN 16.

- Maximum working pressure: 6 bar.
- Minimum / maximum operating temperature: -10 °C / +50 °C.
- Steel vessel (made of S235JR): Outside powder coated, inside untreated.

Insulation (Excluded - Can be ordered separately (see Chapter 'Accessories for Water Heaters and Storage Vessels'):

- 25mm vapour-tight insulation sheath (fire category B1), suitable for cooling water applications.



Type	Capacity [l]	Dimensions *			Weight [kg]		Order Code
		Ø [mm]	H [mm]	Tilting height [mm]			
PS-K 500	500	650	1640	1700	120	1	18260
PS-K 750	750	750	1970	2000	168	1	18261
PS-K 1000	1000	790	2220	2260	182	1	18262
PS-K 1500	1500	1000	2320	2380	299	1	18263
PS-K 2000	2000	1100	2350	2400	402	1	18264
PS-K 2500	2500	1200	2650	2700	547	1	18265
PS-K 3000	3000	1250	2830	3000	617	1	18266

* Dimensions excluding insulation.

PS-K 500 - 3000 - Connection diagram

Type	System connections	DN	Distance between floor and connections		
			A [mm]	B [mm]	C [mm]
PS-K 500	4	80	315	810	1305
PS-K 750	4	100	360	970	1580
PS-K 1000	4	125	385	1100	1815
PS-K 1500	4	150	460	1165	1870
PS-K 2000	4	200	500	1175	1850
PS-K 2500	4	200	520	1320	2120
PS-K 3000	4	200	640	1440	2240

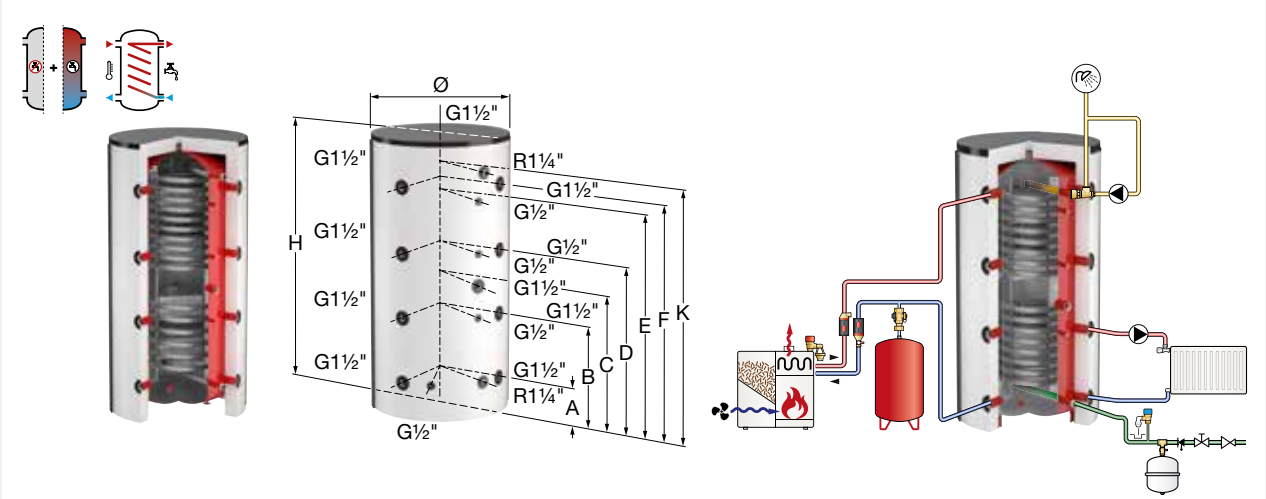
FWP COMBI WATER HEATERS

FWP 500 - 1500

Combined buffer and flow-through vessel. For combining several heating systems (such as solid fuel, oil and gas boilers) with potable water heating.
Potable water heating by means of stainless steel ribbed heating coil.
The capacity of the potable water coil is approx. 40 litres to guarantee the convenience of direct hot water supply.

- Maximum working pressure: 3 bar (buffer vessel) / 6 bar (potable water heating coil).
- Maximum operating temperature: 95 °C.

Insulation (Excluded - Can be ordered separately (see Chapter 'Accessories for Water Heaters and Storage Vessels'):
- EPS insulating mantle (fire category B1) with a polypropylene outer shell in white (RAL 9010) / white aluminium (RAL 9006).



Type	Capacity [l]	Heating surface area [m²]	Dimensions *			Weight [kg]		Order Code
			Ø [mm]	H [mm]	Tilting height [mm]			
FWP 500	500	3.7	650	1650	1700	106	1	19373
FWP 750	750	3.7	790	1800	1850	126	1	18151
FWP 1000	1000	7.2	790	2200	2250	210	1	18161
FWP 1500	1500	7.4	1000	2320	2380	265	1	19377

* Dimensions excluding insulation.

FWP - Connection diagram

Type	Distance from floor to connection centres						
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]
FWP 500	180	600	770	1010	1350	1430	-
FWP 750	270	690	940	1100	1420	1520	1620
FWP 1000	270	820	1095	1370	1820	1920	2020
FWP 1500	340	890	1230	1440	1890	1990	2090

FWP - Performance

Technical specifications	FWP 500 - 1500			
	500	750	1000	1500
Total heat loss (EN 12897) [W]	93	109	141	161
Energy label	C	C	C	C

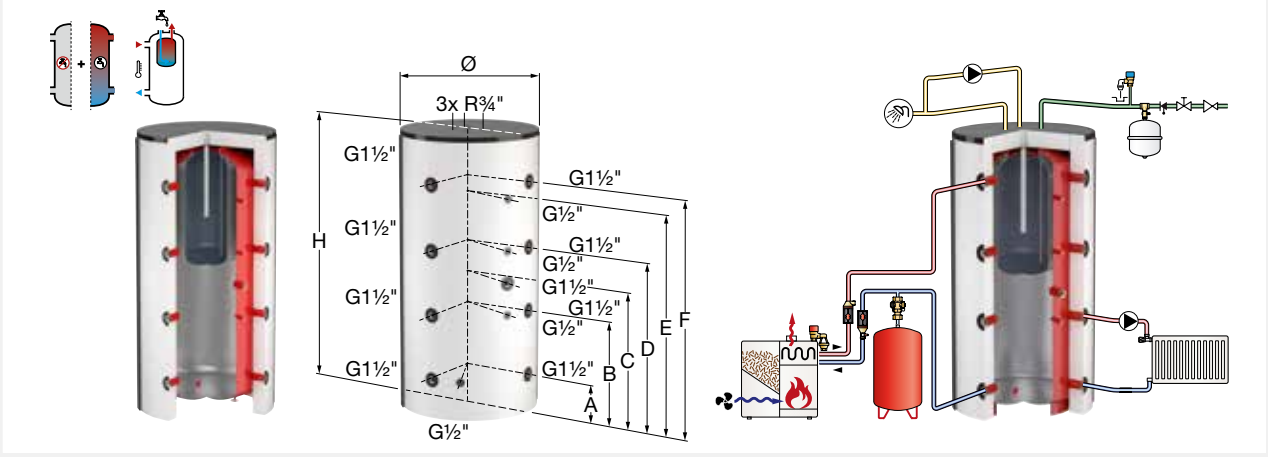
KPB COMBI WATER HEATERS

KPB 500 - 1000

Space-saving water heater and buffer vessel in one for combining several heating systems (such as solid fuel, oil and gas boilers) with potable water heating.

- Including adjustable feet for accurate levelling (< 600 litre) or on fixed feet (> 750 litre).
- Equipped with several connections and an immersion pipe for a temperature sensor.
- Cold water supply at the bottom to prevent turbulence and to maintain stratification.
- Including Mg-anode in the potable water vessel.
- Connections under a 90° angle, enabling an angular setting.
- Temperature sensor connections: G½" (4x).
- Maximum working pressure: 3 bar (buffer vessel) / 10 bar (potable water vessel).
- Maximum operating temperature: 95 °C.
- Buffer vessel made from steel (S235JR): Outside powder-coated, inside untreated.
  Potable water vessel made from steel (S235JR): Outside untreated, inside with high-quality glass lining according to DIN 4753/ part 3 for potable water.

Insulation (Excluded - Can be ordered separately (see Chapter 'Accessories for Water Heaters and Storage Vessels'):
- EPS insulating mantle (fire category B1) with a polypropylene outer shell in white (RAL 9010) / white aluminium (RAL 9006).



Type	Capacity		Dimensions *			Weight [kg]		Order Code
	Total [l]	Potable water [l]	Ø [mm]	H [mm]	Tilting height [mm]			
KPB 500/155	500	155	650	1610	1700	107	1	19361
KPB 600/155	600	155	650	2010	2100	130	1	19362
KPB 750/155	750	155	790	1760	1850	138	1	19363
KPB 850/175	850	175	790	1930	2000	180	1	19364
KPB 1000/215	1000	215	790	2180	2250	220	1	19365

* Dimensions excluding insulation.

KPB 500 - 1000 - Connection diagram

Type	Distance from floor to connection centres					
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]
KPB 500/155	180	600	770	1010	1330	1430
KPB 600/155	180	730	980	1280	1730	1830
KPB 750/155	270	690	940	1100	1420	1520
KPB 850/175	270	740	970	1200	1670	1920
KPB 1000/215	270	820	1095	1370	1820	1920

KPB 500 - 1000 - Performance

Technical specifications	KPB 500 - 1000				
	500/155	600/155	750/155	850/175	1000/215
Total heat loss (EN 12897) [W]	92	107	118	127	140
Energy label	C	C	C	C	C

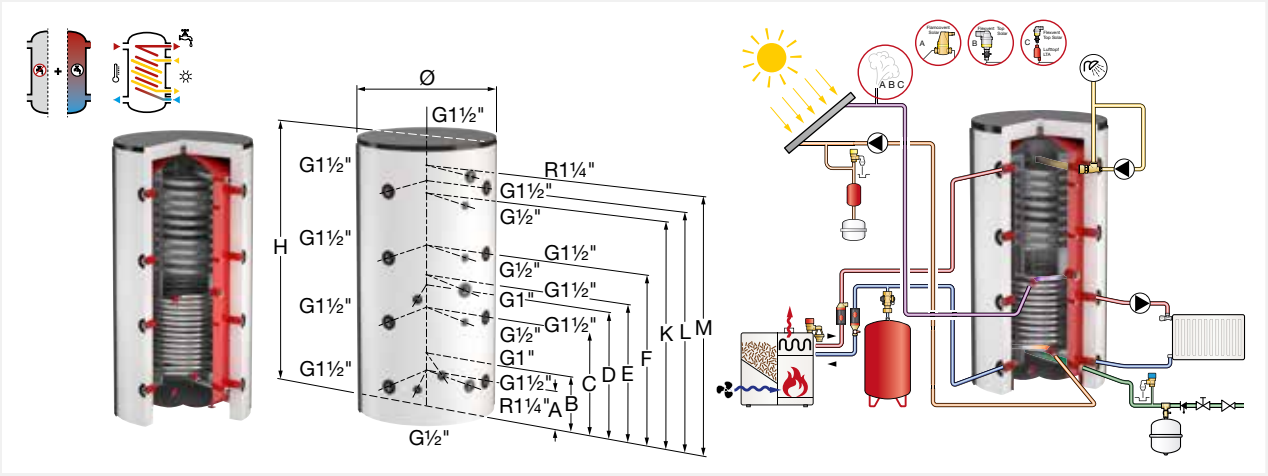
DUO FWS COMBI WATER HEATERS

Duo FWS 500 - 1500

Combined buffer and flow-through vessel. For combining several heating systems (such as solid fuel, oil and gas boilers) and a second heating coil for separate additional heating of solar-energy installations in combination with potable water heating.
Potable water heating by means of a stainless steel ribbed heating coil.
The capacity of the potable water coil is approx. 40 litres to guarantee the convenience of direct hot water supply.

- Maximum working pressure: 3 bar (buffer vessel) / 6 bar (potable water coil) / 10 bar (solar system heating coil).
- Maximum operating temperature: 95 °C (buffer vessel/potable water coil) / 110 °C (solar system heating coil).

Insulation (Excluded - Can be ordered separately (see Chapter 'Accessories for Water Heaters and Storage Vessels'):
- EPS insulating mantle (fire category B1) with a polypropylene outer shell in white (RAL 9010) / white aluminium (RAL 9006).



Type	Capacity [l]	Heating surface area		Dimensions *			Weight [kg]		Order Code
		Potable water [m²]	Solar [m²]	Ø [mm]	H [mm]	Tilting height [mm]			
Duo FWS 500	500	3.7	1.6	650	1650	1700	118	1	18162
Duo FWS 750	750	3.7	2.1	790	1800	1850	158	1	18190
Duo FWS 1000	1000	7.2	2.7	790	2200	2250	250	1	18195
Duo FWS 1500	1500	7.4	3.2	1000	2320	2380	309	1	19371

* Dimensions excluding insulation.

Duo FWS - Connection diagram

Type	Distance from floor to connection centres								
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]	L [mm]	M [mm]
Duo FWS 500	180	280	600	720	770	1010	1330	1430	1430
Duo FWS 750	270	370	690	890	940	1100	1420	1520	1620
Duo FWS 1000	270	370	820	1010	1095	1370	1820	1920	2020
Duo FWS 1500	340	440	890	1040	1230	1440	1890	1990	2090

Duo FWS - Performance

Technical specifications	Duo FWS 500 - 1500			
	500	750	1000	1500
Total heat loss (EN 12897) [W]	92	118	140	160
Energy label	C	C	C	C

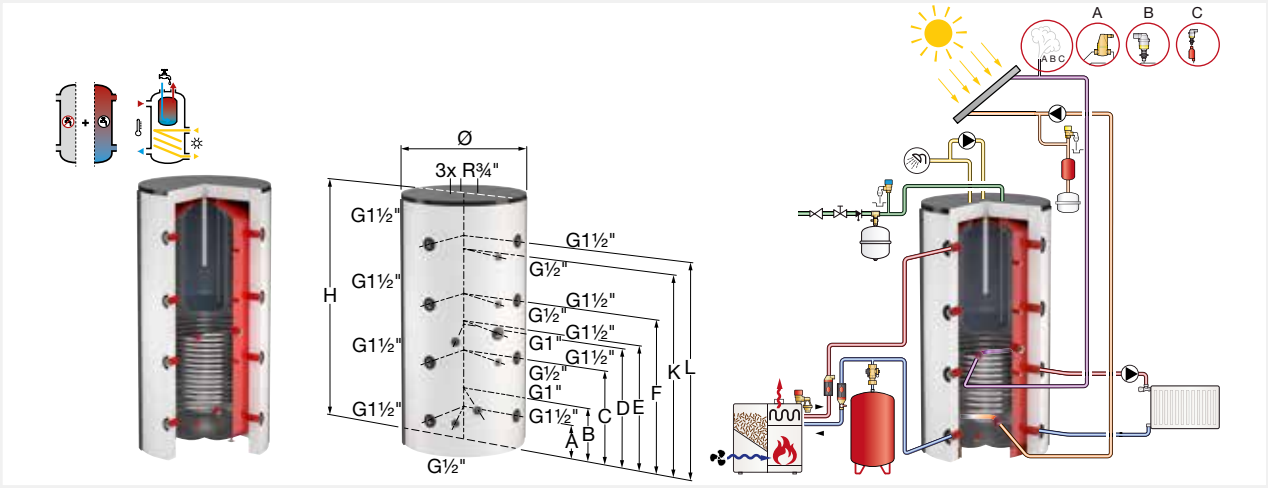
KPS COMBI WATER HEATERS

KPS 500 - 1000

Space-saving water heater and buffer vessel in one for combining several heating systems (such as solid fuel, oil and gas boilers) with potable water heating.
Including a permanently welded-in heating coil for coupling to additional heating sources (such as a solar installation).

- Including adjustable feet for accurate levelling (< 600 litre) or on fixed feet (> 750 litre).
- Equipped with several connections and an immersion pipe for a temperature sensor.
- Cold water supply at the bottom to prevent turbulence and to maintain stratification.
- Including Mg-anode in the potable water vessel.
- Connections under a 90° angle, enabling an angular setting.
- Temperature sensor connections: G½" (4x).
- Maximum working pressure: 3 bar (buffer vessel) / 10 bar (potable water vessel / heating coil).
- Maximum operating temperature: 95 °C (buffer vessel / potable water vessel) / 110 °C (heating coil).
- Buffer vessel made from steel (S235JR): Outside powder-coated, inside untreated.
  Potable water vessel made from steel (S235JR): Outside untreated, inside with high-quality glass lining according to DIN 4753/ part 3 for potable water.

Insulation (Excluded - Can be ordered separately (see Chapter 'Accessories for Water Heaters and Storage Vessels'):
- EPS insulating mantle (fire category B1) with a polypropylene outer shell in white (RAL 9010) / white aluminium (RAL 9006).



Type	Capacity		Dimensions *			Heating surface area of coil [m²]	Weight [kg]		Order Code
	Total [l]	Potable water [l]	Ø [mm]	H [mm]	Tilting height [mm]				
KPS 500/155	500	155	650	1610	1700	1.6	138	1	19110
KPS 600/155	600	155	650	2010	2100	2.0	160	1	19366
KPS 750/155	750	155	790	1760	1850	2.1	170	1	19080
KPS 850/175	850	175	790	1930	2000	2.3	215	1	19367
KPS 1000/215	1000	215	790	2180	2250	2.7	260	1	19090

* Dimensions excluding insulation.

KPS 500 - 1000 - Connection diagram

Type	Distance from floor to connection centres							
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]	L [mm]
KPS 500/155	180	280	600	770	770	1010	1330	1430
KPS 600/155	180	280	730	880	980	1280	1730	1830
KPS 750/155	270	370	690	890	940	1100	1420	1520
KPS 850/175	270	370	740	920	970	1200	1570	1670
KPS 1000/215	270	370	820	1010	1095	1370	1820	1920

KPS 500 - 1000 - Performance

Technical specifications	KPS 500 - 1000				
	500/155	600/155	750/155	850/175	1000/215
Total heat loss (EN 12897) [W]	92	108	118	126	139
Energy label	C	C	C	C	C

KE KELIT®
INNOVATIVE PIPE SYSTEMS

Accessories for Water Heaters and Storage Vessels

7

With a product range that includes ribbed-tube heat exchangers, insulation fittings and capillary dip tubes for temperature sensors, Flamco's range of accessories for water heaters and storage vessels is extensive.
As with the calorifiers and storage vessels, the range of accessories is made from the highest quality materials and contributes to the efficiency of the system.

EPS insulating mantle

P. 208

25mm Vapour-tight insulation mantle

P. 209

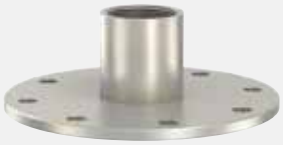
Insulating Connection Cap

P. 209

Reducing flange

P. 210

Reducing flange - Stainless steel

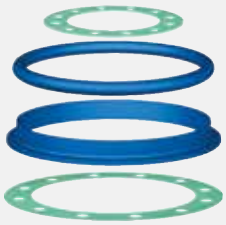


P. 210

Blind flange

P. 210

Gaskets



P. 210

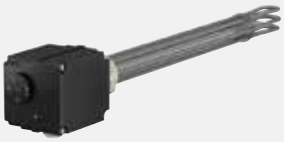
EHF heating element

P. 211

EHK heating element

P. 211

EHK-E stainless steel heating element



P. 211

RWT ribbed heating coil

P. 212

IVS insulation coupling

P. 212

Prescor T&P

P. 212

TH thermometer

P. 213

ATH wall-mounted thermostat

P. 213

TR immersion pipe for temperature sensor

P. 213

FSA no-maintenance anode

P. 213

Magnesium anode (MgA)

P. 213

Foot height adjuster

P. 214

PSV connector

P. 214

Circulation set

P. 214

Oval lid for service hatch - Stainless steel

P. 214

Accessories for Water Heaters and Storage Vessels

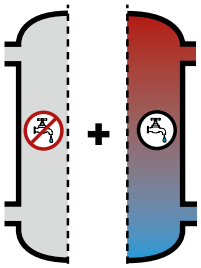
Type		Inspection port	Reducing Flange	Gasket DN 110-F / DN 110 m. socket G 1½"	Heating element with flange connection: EHF 2.5	EHF 3	EHF 3,8	EHF 5	EHF 6	EHF 7,5	EHF 10	EHF 12	EHF 15	EHF 25	EHF 45	Thermometer: TH 80/100	TH 50/40	Built-in thermometer	ATH External thermostat	RWT 4,6 Ribbed tube heat exchanger	Plunge pipe [1]: TR ½" L = 300 mm	TR ¾" L = 200 mm	Magnesium anode (spare part): MGA 500-M	MGA 700-M	MGA 700-L 22	MGA 900-M	MGA 1100-M	MGA 1500-M	MGA 1500-L 22	Screw-in heating element: EHK 2	EHK 3	EHK 4,5	EHK 6	EHK 7,5	EHK 9	EHK-E 3	EHK-E 4,5	EHK-E 6	EHK-E 8	EHK-E 10	Maintenance-free anode: FSA 400	FSA 800	FSA 401	FSA 801	Isolation coupling: IVS - G ½"	IVS - G ¾"	IVS - G 1"	Foot-height adjuster	PSV buffer vessel connector
Duo	120															Standard					Standard		•						C	C										•						•	
	150																						•						C	C										•						•	
	200																						•						C	C										•						•	
	300																						•						C	C										•						•	
	400	110			•	•	•	•	•	•	•	•												•					A	A	A	E							•						•	
	500	110			•	•	•	•	•	•	•	•												•					A	A	A	E							•						•	
	750	205			R	R	R	R	R	R	R	R															•		C	C	C	C	C	C						•							
	1000	205			R	R	R	R	R	R	R	R	R	•	•	Standard											•	D	C	C	C	C	C	C						•			D	For RWT 1					
	1500	205			R	R	R	R	R	R	R	R	R	•	•				•	I																							For RWT 1,8 - 3				
	2000	205			R	R	R	R	R	R	R	R	R	•	•				•	I																							For RWT 4,6				
	3000	205			R	R	R	R	R	R	R	R	R	•	•				•	I																											
Duo HLS-E	100															•																																
	150															•																																
	200															•																																
	300															•																			•	•											
	400															•																			•	•	•										
	500															•																			•	•	•										
	750	110	•	•												•																			A	A	A	•	•								
	1000	110	•	•												•																			A	A	A	•	•								
Duo HLS	300	110			•	•	•	•	•	•	•	•						Stand.			Stand.					•			B											•						•	
	400	110			•	•	•	•	•	•	•	•														•			B	B										•						•	
	500	110			•	•	•	•	•	•	•	•													•				B	B											•						•	
	750	205			R	R	R	R	R	R	R	R				Sta.									•																•							
	1000	205			R	R	R	R	R	R	R	R													•																•							
WPS-E	200															•																																
	300															•																			•	•											
UHP	110																				Sta.		•		K															•		K					
	160																						•		K															•		K					
TS	120	80																Stand.			Stand.				•																•						
	150	80																Stand.			Stand.				•																•						
	200	80																Stand.			Stand.				•																•						
Duo Solar	200																	Standard			Standard		•						C	C	C									•						•	
	300																	Standard			Standard		•						C	C	C									•						•	
	400	110			•	•	•	•	•	•	•	•						Standard			Standard				•				A	A	A	E							•						•	
	500	110			•	•	•	•	•	•	•	•						Standard			Standard				•				A	A	A	E							•						•	
	750	205			R	R	R	R	R	R	R	R		•	•			Standard			Standard						•		C	C	C	C	C	C						•			For RWT 1				
	1000	205			R	R	R	R	R	R	R	R	R	•	•			Standard			Standard						•		C	C	C	C	C	C						•			For RWT 1,8 - 3				
Duo HLS- E Solar	200															•																												For RWT 4,6				
	300															•																			•	•											
	400															•																			•	•	•										
	500															•																			•	•	•										
	750	110	•	•												•																			A	A	A	•	•								
	1000	110	•	•												•																			A	A	A	•	•								
HLS Solar	400	110			•	•	•	•	•	•	•	•	•					Sta.			Sta.					•			A	A	A	E							•						•	
	500	110			•	•	•	•	•	•	•	•	•					Sta.			Sta.						•		A	A	A	E							•						•	
WPS-E Solar	300															•															•	•															
	500															•															•	•															

Type		Inspection port	Reducing Flange	Gasket DN 110-F / DN 110 m. socket G 1½"	Heating element with flange connection: EHF 2.5	EHF 3	EHF 3,8	EHF 5	EHF 6	EHF 7,5	EHF 10	EHF 12	EHF 15	EHF 25	EHF 45	Thermometer: TH 80/100	TH 50/40	Built-in thermometer	ATH External thermostat	RWT 4,6 Ribbed tube heat exchanger	Plunge pipe [1]: TR ½" L = 300 mm	TR ¾" L = 200 mm	Magnesium anode (spare part): MGA 500-M	MGA 700-M	MGA 700-L 22	MGA 900-M	MGA 1100-M	MGA 1500-M	MGA 1500-L 22	Screw-in heating element: EHK 2	EHK 3	EHK 4,5	EHK 6	EHK 7,5	EHK 9	EHK-E 3	EHK-E 4,5	EHK-E 6	EHK-E 8	EHK-E 10	Maintenance-free anode: FSA 400	FSA 800	FSA 401	FSA 801	Isulation coupling: IVS - G ½"	IVS - G ¾"	IVS - G 1"	Foot-height adjuster	PSV buffer vessel connector
LS	200														•				•			•																	•								
	300														•				•			•																	•								
	500	110			•	•	•	•	•	•	•	•	•		•				•			•							B	B	B	B							•				For RWT 1				
	750	110			•	•	•	•	•	•	•	•	•		•				•				•						B	B	B	B	B						•								
	1000	110			•	•	•	•	•	•	•	•	•		•				•					•					B	B	B	B	B	B						•								
	1500	110			•	•	•	•	•	•	•	•	•		•				•										B	B	B	B	B	B													
	2000	110			•	•	•	•	•	•	•	•	•		•				•										B	B	B	B	B	B													
	3000	110			•	•	•	•	•	•	•	•	•		•				•										B	B	B	B	B	B													
LS-E	300														•				•															•	•												
	500														•				•															•	•	•											
	750	110	•	•											•				•															B	B	B	B	B								
	1000	110	•	•											•				•															B	B	B	B	B								
DWH	500	110			•	•	•	•	•	•	•	•	•		•							•						•	•	•	•	•										RWT 1				
	750	2 x 110			•	•	•	•	•	•	•	•	•		•							•																								
	1000	2 x 110			•	•	•	•	•	•	•	•	•		•							•																								
	1500	2 x 205			R	R	R	R	R	R	R	R	R	•	•	•			I	•			•																					RWT 1,8 -3				
	2000	2 x 205			R	R	R	R	R	R	R	R	R	•	•	•			I	•				•																					RWT 4,6			
	3000	3 x 205			R	R	R	R	R	R	R	R	R	•	•	•			I	•				•																								

• = Can be used without additional accessories.
A = Can be built in using DN 110 flange adapter including sleeve/socket G 1½" (order code 18967); alternatively can be fitted directly into sleeve/socket G 1½" above the lower coil (Mg anode must be replaced with maintenance-free anode from EHK 3 in 400 and 500 litre model).
B = Can be built in using DN 110 flange adapter including sleeve/socket G 1½" (order code 18967, for stainless steel calorifiers in combination with stainless steel reducing flange DN 110 including socket G 1½" (order code 19458)).
C = Can be fitted directly into sleeve/socket G 1½" above the lower coil, or with the Duo, Duo Solar <400 in between the lower coil.
D = For Duo 1000 Ø 850 (old model) only.
E = Can be fitted directly into sleeve/socket G 1½" above the lower coil; Mg anode must be replaced with maintenance-free anode in 400/500 litre models.
I = Use in combination with IVS insulation coupling only; a prerequisite for glass lined water heaters.
K = For models with cleaning flange only.
R = Can be built in using adapter flange. DN 205/DN 110 (order code 18920).
[1] Standard here means that the plunge pipe is already built in. (Varies in length depending on the type).

Accessories for Water Heaters and Storage Vessels

Type		Inspection port	Reducing Flange	Gasket DN 110-F / DN 110 m. socket G 1½"	Heating element with flange connection: EHF 2.5	EHF 3	EHF 3,8	EHF 5	EHF 6	EHF 7,5	EHF 10	EHF 12	EHF 15	EHF 25	EHF 45	Thermometer: TH 80/100	TH 50/40	Built-in thermometer	ATH External thermostat	RWT 4,6 Ribbed tube heat exchanger	Plunge pipe [1]: TR ½" L = 300 mm	TR ¾" L = 200 mm	Magnesium anode (spare part): MGA 500-M	MGA 700-M	MGA 700-L 22	MGA 900-M	MGA 1100-M	MGA 1500-M	MGA 1500-L 22	Screw-in heating element: EHK 2	EHK 3	EHK 4,5	EHK 6	EHK 7,5	EHK 9	EHK-E 3	EHK-E 4,5	EHK-E 6	EHK-E 8	EHK-E 10	Maintenance-free anode: FSA 400	FSA 800	FSA 401	FSA 801	Isulation coupling: IVS - G ½"	IVS - G ¾"	IVS - G 1"	Foot-height adjuster	PSV buffer vessel connector
PS	200														•			•			•								•	•	•																•
	300														•			•			•								•	•	•																•
	500														•			•			•								•	•	•	•															•
	600														•			•			•								•	•	•	•															•
	750														•			•			•								•	•	•	•	•	•													•
	825														•			•			•								•	•	•	•	•	•													•
	850														•			•			•								•	•	•	•	•	•													•
	1000														•			•			•								•	•	•	•	•	•													•
	1200														•			•			•								•	•	•	•	•	•													•
	1500														•			•			•								•	•	•	•	•	•													•
	1800														•			•			•								•	•	•	•	•	•													•
	2000														•			•			•								•	•	•	•	•	•													•
	3000														•			•			•								•	•	•	•	•	•													
	4000														•			•			•								•	•	•	•	•	•													
	5000														•			•			•								•	•	•	•	•	•													
PS-R	300														•			•			•								•	•	•																•
	500														•			•			•								•	•	•	•															•
	600														•			•			•								•	•	•	•															•
	750														•			•			•								•	•	•	•	•	•													•
	850														•			•			•								•	•	•	•	•	•													•
	1000														•			•			•								•	•	•	•	•	•													•
	1200														•			•			•								•	•	•	•	•	•													•
	1500														•			•			•								•	•	•	•	•	•													•
	2000														•			•			•								•	•	•	•	•	•													•
PS-T	600														•			•			•								•	•	•	•															•
	750														•			•			•								•	•	•	•	•	•													•
	850														•			•			•								•	•	•	•	•	•													•
	1000														•			•			•								•	•	•	•	•	•													•
	1200														•			•			•								•	•	•	•	•	•													•
	1500														•			•			•								•	•	•	•	•	•													•
	2000														•			•			•								•	•	•	•	•	•													•
PS-K	500														•			•																													
	750														•			•																													
	1000														•			•																													
	1500														•			•																													
	2000														•			•																													
	2500														•			•																													
	3000														•			•																													



Type		Inspection port	Reducing Flange	Gasket DN 110-F / DN 110 m. socket G 1½"	Heating element with flange connection													Thermometer			Isulation coupling			Foot-height adjuster	Plunge pipe [1]		Magnesium anode (spare part)						Screw-in heating element									Maintenance-free anode				Isulation coupling			Foot-height adjuster	PSV buffer vessel connector
					EHF 2.5	EHF 3	EHF 3,8	EHF 5	EHF 6	EHF 7,5	EHF 10	EHF 12	EHF 15	EHF 25	EHF 45	TH 80/100	TH 50/40	Built-in thermometer	ATH External thermostat	RWT 4,6 Ribbed tube heat exchanger	TR ½" L = 300 mm	TR ¾" L = 200 mm	MGA 500-M	MGA 700-M	MGA 700-L 22	MGA 900-M	MGA 1100-M	MGA 1500-M	MGA 1500-L 22	EHK 2	EHK 3	EHK 4,5	EHK 6	EHK 7,5	EHK 9	EHK-E 3	EHK-E 4,5	EHK-E 6	EHK-E 8	EHK-E 10	FSA 400	FSA 800	FSA 401	FSA 801	IVS - G ½"	IVS - G ¾"	IVS - G 1"		
FWP	500															•			•		•								•	•	•	•																	•
	750															•			•		•								•	•	•	•	•	•															•
	1000															•			•		•								•	•	•	•	•	•															•
	1500															•			•		•								•	•	•	•	•	•															•
KPB	500/155															•			•		•	•							•	•	•	•								•									•
	600/155															•			•		•	•							•	•	•	•								•									•
	750/155															•			•		•	•							•	•	•	•	•	•						•									•
	850/175															•			•		•	•							•	•	•	•	•	•						•									•
	1000/215															•			•		•	•							•	•	•	•	•	•						•									•
Duo FWS	500																																																	
	750															•			•		•								•	•	•	•	•	•															•
	1000															•			•		•								•	•	•	•	•	•															•
	1500															•			•		•								•	•	•	•	•	•															•
KPS	500/155															•			•		•	•							•	•	•	•								•									•
	600/155															•			•		•	•							•	•	•	•								•									•
	750/155															•			•		•	•							•	•	•	•	•	•						•									•
	850/175															•			•		•	•							•	•	•	•	•	•						•									•
	1000/215															•			•		•	•							•	•	•	•	•	•						•									•

• = Can be used without additional accessories.

INSULATION MANTLES

EPS insulating mantle

EPS insulating mantle with a polypropylene outer shell and lid (white, RAL 9010 / white aluminium, RAL 9006).

- Approximately 25% reduction of heat loss compared to soft foam insulation.
- EPS insulating mantle: fire category B1 according to DIN 4102.
- Thermal conductivity = 0.032 W/(m.K) according to DIN EN 12667.
- Easy to install using a zip.

Type	Colour	Thickness [mm]		Order Code
200 PS	white	80	1	18675
200 PS	white aluminium	80	1	18676
300 PS, PS-R	white	80	1	18678
300 PS, PS-R	white aluminium	80	1	18679
500 PS, PS-R, KPB, KPS, Duo FWS, FWP	white	80	1	18681
500 PS, PS-R, KPB, KPS, Duo FWS, FWP	white aluminium	80	1	18682
600 PS, PS-R, PS-T, KPB, KPS	white	80	1	18684
600 PS, PS-R, PS-T, KPB, KPS	white aluminium	80	1	18685
750 PS, PS-R, PS-T, KPB, KPS, Duo FWS, FWP	white	80	1	18687
750 PS, PS-R, PS-T, KPB, KPS, Duo FWS, FWP	white aluminium	80	1	18688
850 PS, PS-R, PS-T, KPB, KPS	white	80	1	18690
850 PS, PS-R, PS-T, KPB, KPS	white aluminium	80	1	18691
1000 (Ø 790) PS, PS-R, PS-T, KPB, KPS, Duo FWS, FWP	white	80	1	18693
1000 (Ø 790) PS, PS-R, PS-T, KPB, KPS, Duo FWS, FWP	white aluminium	80	1	18694
1000 (Ø 850) PS, PS-R, PS-T	white	80	1	18696
1000 (Ø 850) PS, PS-R, PS-T	white aluminium	80	1	18697
1200 PS, PS-R, PS-T	white	100	1	18699
1200 PS, PS-R, PS-T	white aluminium	100	1	18700
1500 PS, PS-R, PS-T, Duo FWS, FWP	white	100	1	18702
1500 PS, PS-R, PS-T, Duo FWS, FWP	white aluminium	100	1	18703
1800 PS	white	100	1	18705
1800 PS	white aluminium	100	1	18706
2000 PS, PS-R, PS-T	white	100	1	18708
2000 PS, PS-R, PS-T	white aluminium	100	1	18709
3000 PS	white	100	1	18711
3000 PS	white aluminium	100	1	18712
4000 PS	white	100	1	18714
4000 PS	white aluminium	100	1	18715
5000 PS	white	100	1	18717
5000 PS	white aluminium	100	1	18718

25mm Vapour-tight insulation mantle

Vapour-tight insulation for use in cooling water installations.

- Fire category B1 according to DIN 4102.
- λ – value according to DIN EN 12667:
  0.031 W/(m.K) at -20 °C
  0.035 W/(m.K) at +20 °C
- Temperature range (min./max.): -200 °C / +105 °C.
- Diffusion resistance according to EN 12086 (DIN 52615): μ = 10000.
- Thickness: 25 mm (if used as insulation).
- Corrosion risk according to DIN 1988/7: pH neutral.

Type	Colour		Order Code
500 PS-K	black	1	18270
750 PS-K	black	1	18271
1000 PS-K	black	1	18272
1500 PS-K	black	1	18273
2000 PS-K	black	1	18274
2500 PS-K	black	1	18275
3000 PS-K	black	1	18276

Insulating Connection Cap

Insulating cap (EPP) for unused connections of Flamco Water Heaters and Storage Vessels.

Type	For connection	Ø [mm]		Order Code
Type 1	≤ 1 ½"	100	1	18938
Type 2	1 ½" < x ≤ 2"	232	1	18939

FLANGES AND GASKETS

Reducing flange

- With high quality glass lining.
- Including gasket and M12 bolts.

Type		Order Code
Reducing flange DN 205 / DN 110	1	18920
Reducing flange DN 110 / G 1 ½ *	1	18967
Reducing flange DN 205 / G 1 ½ *	1	18969

* Including socket G 1 ½". For mounting the screw-in heating element EHK.

Reducing flange - Stainless steel

Flange DN 110 with G 1 ½" connection. The G 1 ½" connection of the flange allows to combine accessories such as an additional immersion heater (EHK-E) with a stainless steel calorifier.

- Stainless steel 1.4301.
- For LS-E 750 - 1000, Duo HLS-E 750 - 1000 and Duo HLS-E Solar 750 - 1000.

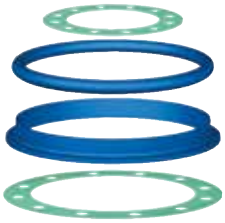
Type		Order Code
Reducing flange DN 110 / G 1 ½" - Stainless steel	1	19458

Blind flange

- With high quality glass lining.
- Including gasket and bolts.

Type		Order Code
Blind flange DN 110	1	18980
Blind flange DN 205	1	18922

Gaskets



Type		Order Code
Gasket DN 110 - Surface-sealing	1	18990
Gasket DN 110 - Lip seal	1	18993
Gasket DN 120	1	18992
Gasket DN 205	1	18923

HEATING ELEMENTS

EHF heating element

Electric heating element (Incoloy) including flange.

Type	Power supply [V]	Power output [kW]	Built-in length [mm]	System connec-tion	📦	Order Code
EHF 2.5	400	2.5	450	DN 110	1	18910
EHF 3	400	3.0	450	DN 110	1	18911
EHF 3.8	400	3.8	450	DN 110	1	18912
EHF 5	400	5.0	450	DN 110	1	18913
EHF 6	400	6.0	450	DN 110	1	18914
EHF 7.5	400	7.5	450	DN 110	1	18915
EHF 10	400	10.0	450	DN 110	1	18916
EHF 12 *	400	12.0	530	DN 110	1	18917
EHF 15 *	400	15.0	630	DN 110	1	17340
EHF 25 *	400	12.5 / 25	620	DN 205	1	17346
EHF 45 *	400	15 / 30 / 45	620	DN 205	1	17345

* External relays for temperature regulation and temperature limiter are mandatory.

EHK heating element

Electrical screw-in heating element for glass lined calorifiers.

Type	Power supply [V]	Power output [kW]	Built-in length [mm]	Connec-tion	📦	Order Code
EHK 2 [1) 2)]	230	2.0	320	G 1 ½"	1	18930
EHK 3 [1) 2)]	400	3.0	390	G 1 ½"	1	18931
EHK 4.5 [1) 2)]	400	4.5	470	G 1 ½"	1	18932
EHK 6 [2)]	400	6.0	620	G 1 ½"	1	18933
EHK 7.5	400	7.5	720	G 1 ½"	1	18934
EHK 9	400	9.0	780	G 1 ½"	1	18935

[1)] EHK 2 - 4.5 for building into Duo 120 - 300, Duo Solar 300: Also order a reducing flange DN 110 including G 1 ½" (18967).
[2)] Duo/Duo Solar 300 and over may be fitted with a built-in element using a G 1½" connection above the lower heater exchanger. In this case the Mg anode should be replaced with an FSE type anode within vessels of 400 and 500 litres in which elements EHK 3 and above are used. The EHK 6 may only be used in cylinders of 400 litres and above.

EHK-E stainless steel heating element

Electrical screw-in heating element for stainless steel calorifiers.

- Reducing flange DN 110 including G 1 ½" connection (order code 19458) can be ordered separately.

Type	Power supply [V]	Power output [kW]	Built-in length [mm]	Connec-tion	📦	Order Code
EHK-E 3	400	3.0	290	G 1 ½"	1	19453
EHK-E 4.5	400	4.5	350	G 1 ½"	1	19454
EHK-E 6	400	6.0	450	G 1 ½"	1	19455
EHK-E 8	400	8.0	650	G 1 ½"	1	19456
EHK-E 10	400	10.0	750	G 1 ½"	1	19457

RWT ribbed heating coil

- With blind flange.

When installed in glass lined calorifiers, insulating fittings are required.

Type	Connection		Built-in length [mm]	Heating surface area [m²]		Order Code
	Flange [DN]	Thread				
RWT 4.6	205	G 1" M	790	4.6	1	18944

IVS insulation coupling

- Set for ribbed heating coil RWT.
- 1 set = 2 pieces.

Type		Order Code
IVS - G ½	1	18945
IVS - G ¾	1	18946
IVS - G 1	1	18947

PRESCOR T&P VALVE

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

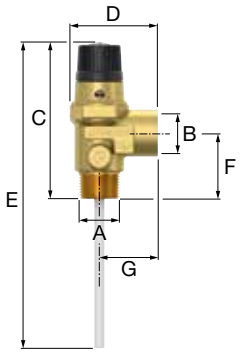
The valve opens the outlet on reaching the settings for:

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

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

Prescor T&P

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



Type	Set pressure [bar]	Connection		Dimensions					Heating capacity [kW]		Order Code
		A	B	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]			
Prescor T&P - 3.5 bar	3.5	22 mm	22 mm	110		198	51	47	23	1	27135
Prescor T&P - 7 bar	7.0	R ¾"	G ¾" M	101		198	42	38	23	1	27146

THERMOSTATS AND THERMOMETERS

TH thermometer

Type		Order Code
TH 50/40	1	18928
TH 80/100 ½" *	1	18926
Built-in thermometer with capillary sensor	1	18927

* Including immersion pipe.

ATH wall-mounted thermostat

- Including safety temperature limiter.
- Temperature range (min./max.): 30 °C / 90 °C.
- Power supply 230V / 50 Hz.

Type	Switching load [A]	Connection		Order Code
ATH	16	1/2"	1	18951

TR immersion pipe for temperature sensor

Type	Connection	Length [mm]		Order Code
TR G 1/2 / 300	G 1/2"	300	1	18955
TR G 3/4 / 200	G 3/4"	200	1	18956

ANODES

FSA no-maintenance anode

- Power supply 230V / 50 Hz.

Type	Suitable for	Connec-tion	Built-in length [mm]		Order Code
FSA 400	Duo 120-500, Duo Solar 200-500, UHP 110-160, LS 200-750, KPS, KPB	G 3/4" M	400	1	18960
FSA 800	Duo/Duo Solar 750-1000, LS 1000	G 3/4" M	800	1	18961
FSA 401	UHP 110-160, TS 120-200	M 8 M	400	1	18962
FSA 801	Duo 1000 (Ø 850)	M 8 M	800	1	18963

Magnesium anode (MgA)

- Replaceable magnesium anode.

Type	Application	Connec-tion	Built-in length [mm]		Order Code
MgA 500 - M	Duo 120-300, LS 200-500, UHP 110-160, KPS, KPB	G 1 1/4" M	500	1	18970
MgA 700 - M	Duo 400-500, Duo Solar 300-400, LS 750	G 1 1/4" M	700	1	18971
MgA 700 - L 22	TS 120-200, UHP (B) 110-160	M 8 M	700	1	18974
MgA 900 - M	Duo Solar 500, LS 1000, Duo HLS 300-400, HLS-Solar 400	G 1 1/4" M	900	1	18973
MgA 1100 - M	Duo HLS 500, Duo Solar 500	G 1 1/4" M	1100	1	18977
MgA 1500 - M	Duo/Duo Solar 750 - 1000	G 1 1/4" M	1500	1	18975
MgA 1500 - L	Duo 1000 (Ø 850)	M 8 M	1500	1	18976

OTHER ACCESSORIES

Foot height adjuster

- Set of three adjustable feet.

Type	Application		Order Code
Foot height adjuster	Duo 120 - 500, Duo Solar 200 - 500, Duo HLS 300 - 500, HLS Solar	1	18989

PSV connector

For connecting two or more PS 500 - 2000 or PS-R 750 - 2000.

- Complete with plastic connectors and gasket on both sides.
- Maximum length: 300 mm.
- Maximum working pressure: PN 6.
- Maximum working temperature: 80 °C.
- Maximum torque: 35 Nm.

Type	Connection		Order Code
PSV	1 ½" M	1	18996

Circulation set

- For Duo FWS and FWP.

The set consists of various bronze fittings and a ribbed stainless steel pipe with brazed bronze double nipples for connecting the recirculation pipe to the hot water outlet connection.

Type		Order Code
Circulation set	1	18937

Oval lid for service hatch - Stainless steel

Oval lid for stainless steel calorifiers.

- For LS-E, Duo HLS-E, Duo HLS-E Solar, WPS-E and WPS-E Solar.
- Complete with gasket and fixing strap.

Type		Order Code
Oval lid for service hatch - stainless steel	1	19460

KE KELIT®
CLIMATE CONTROL SYSTEMS
KE KELIT NZ Ltd.
0800 4 KE KELIT
0800 4 5353548
climatecontrol@kekelit.co.nz
www.kekelit.co.nz