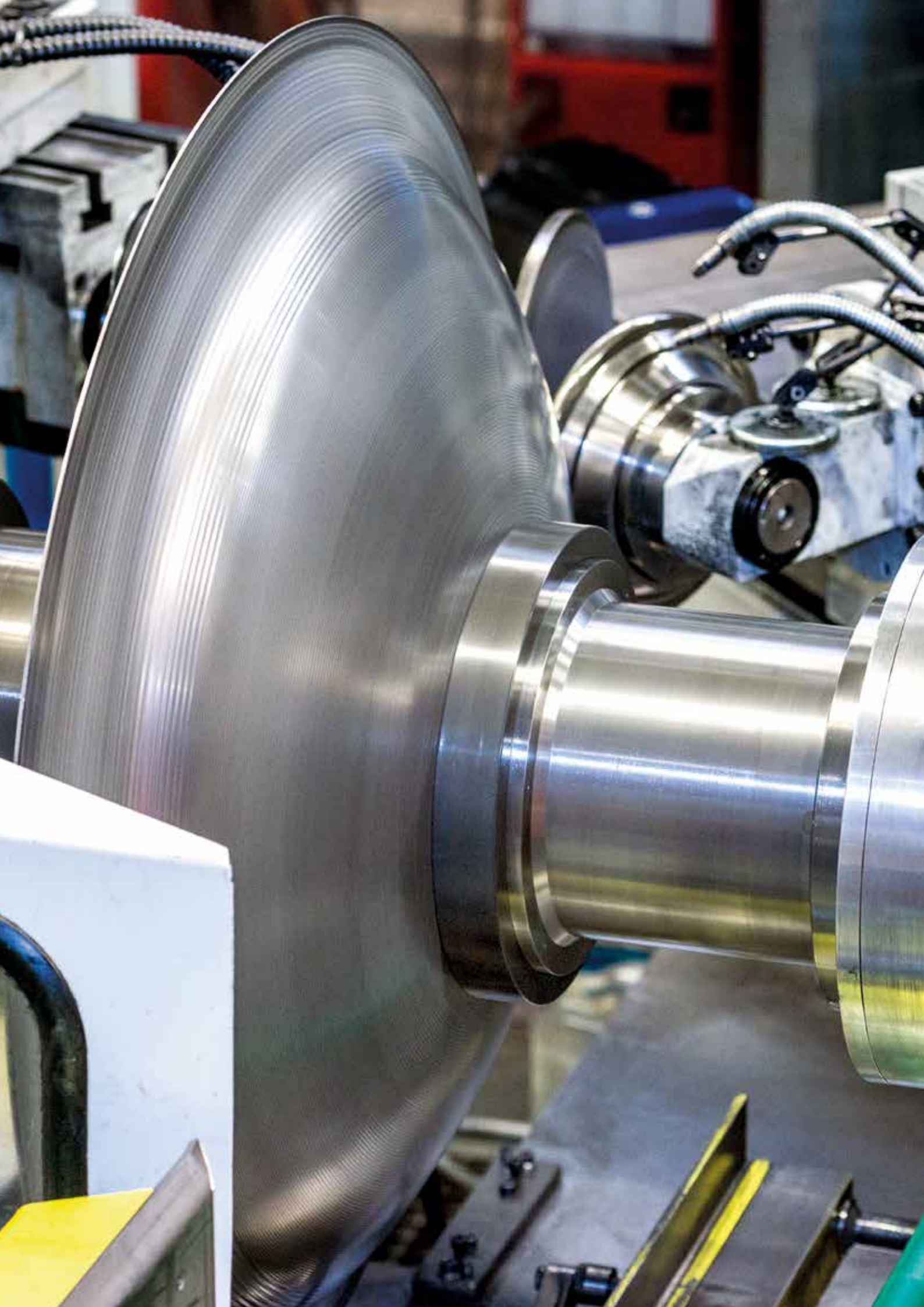
Flamco
Flow of Innovation

Product Overview

Edition 2018

Pressurisation and Storage Technology
Efficiency and Safety Technology



Flamco
Flow of Innovation

Dear Partner

We, the Flamco Group, specialise in the development, production and sale of high quality components for heating, cooling and solar systems. We are one of the global players in the market: with twelve offices and several production facilities around the world, we supply innovative solutions for both residential and commercial buildings as well as sustainable energy solutions to customers in more than 70 countries around the world.

Our product range includes expansion vessels, air and dirt separators, safety valves, fittings for solar systems, pipe clamps and mounting rails, water heaters as well as pressurisation systems for heating and cooling installations – all of which are developed paying regard to user-friendliness, energy efficiency and sustainability.

For us, however, quality goes further than just our products. The service we provide with our technical assistance and logistics is just as important to our understanding of quality. Furthermore, the excellent interaction with the market participants – endusers, installers, specifiers and wholesalers– and ongoing product innovation is the basis for our endeavour to remain ahead of the competition.

The Flamco Group is part of the Dutch technology concern Aalberts Industries N. V. Flamco is an internationally active group concentrating on technical products in the field of heating, cooling and solar systems. Together with our sister companies Meibes and Simplex we cover a broad spectrum of innovative building technology systems. The synergy effects of this strong coalition make us your competent partner when total solutions are desired – complete from the source to the emitter.

Maarten van de Veen
CEO Climate Control

Customer Solutions

Energy Effiency

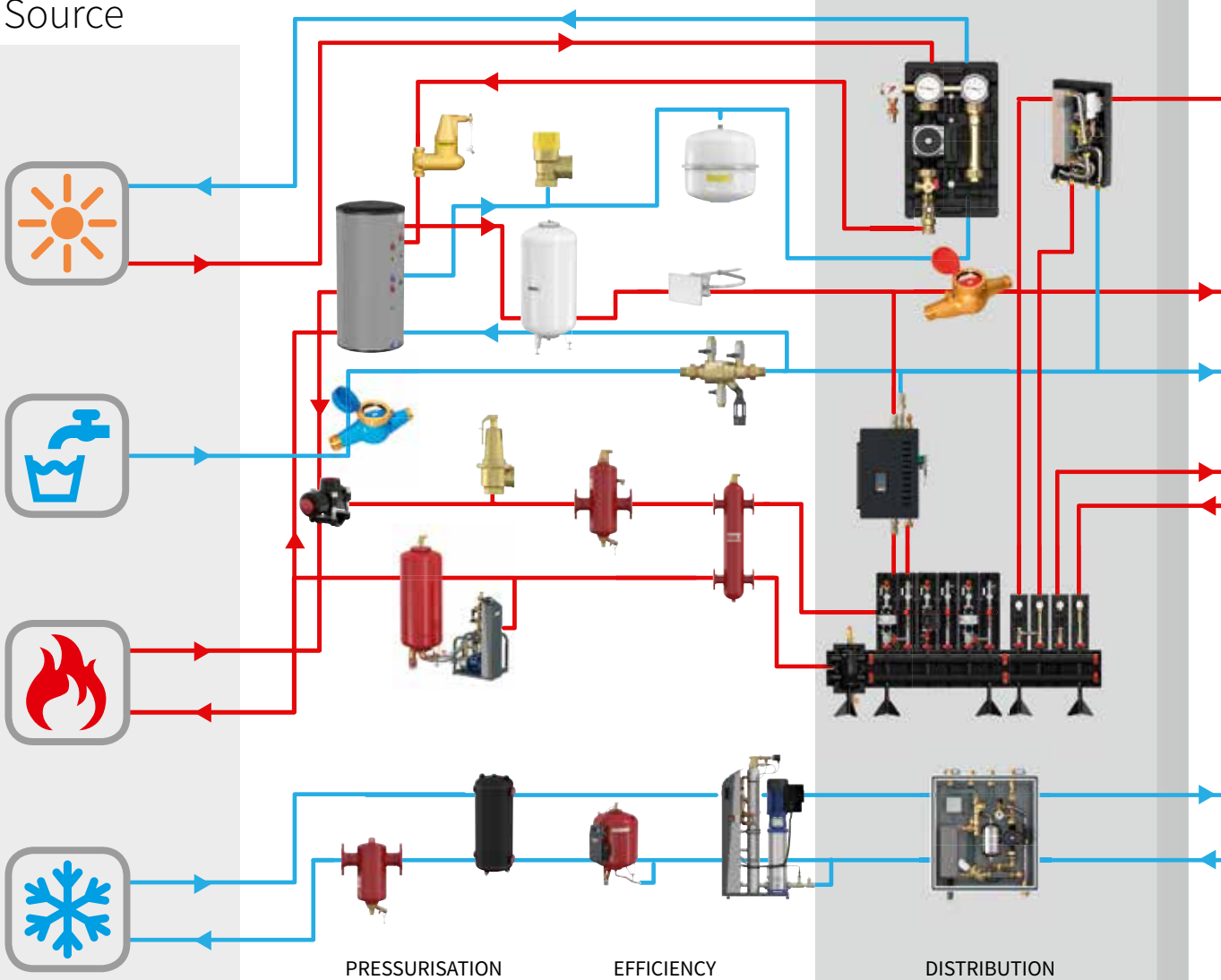
Customer Service

Hydronic Flow Control

From Source

BOILER ROOM

Source



PRESSURISATION & STORAGE

EFFICIENCY & STORAGE

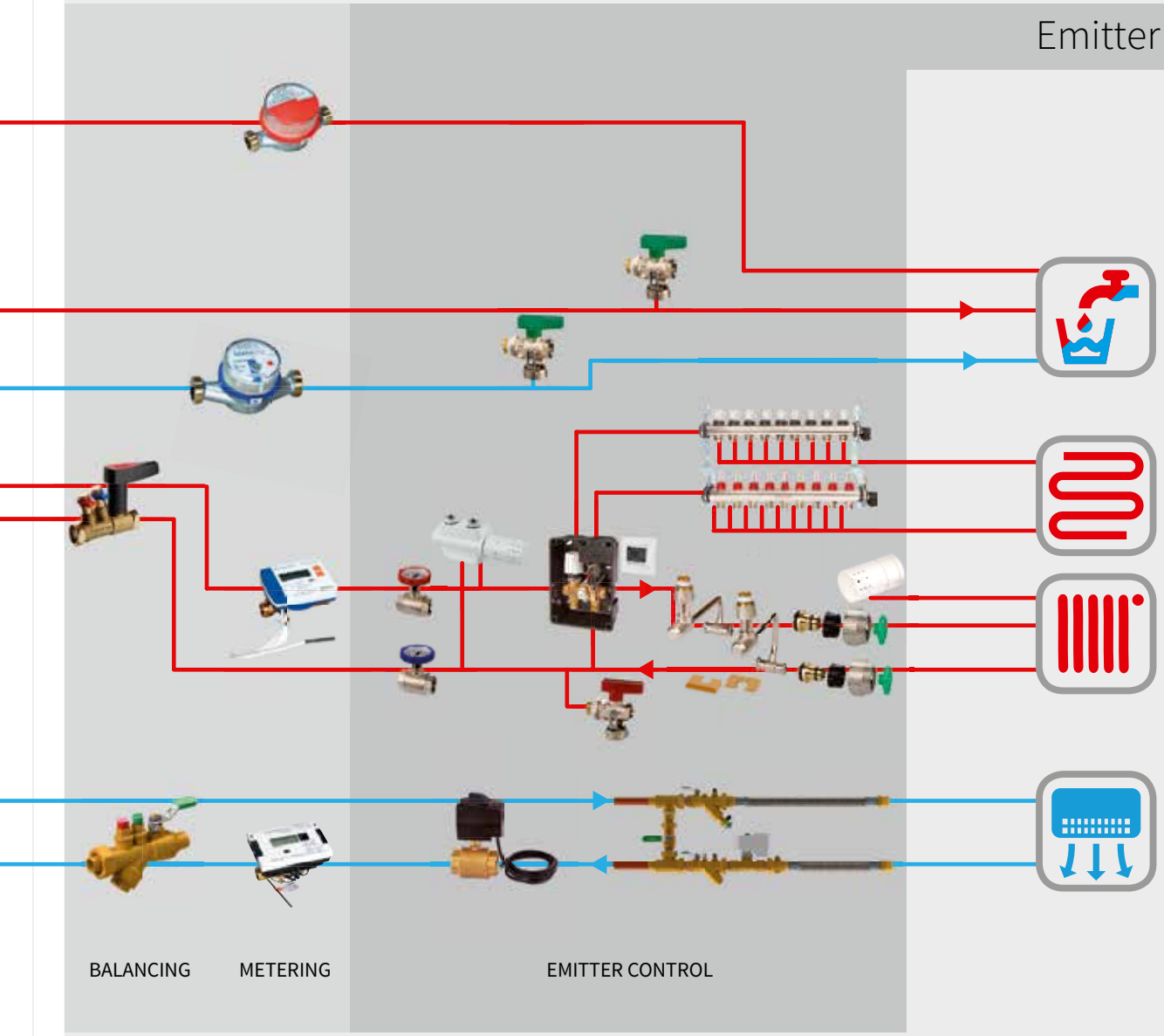
DISTRIBUTION

Flamco

meibes

to Emitter

HEAT & COOLING DISTRIBUTION



meibes

simplex

System components for Building Technology

Meibes' core competence is the development of quality products for heating systems that meet the latest energy and efficiency standards. The pioneer in the market for quick mounting units offers pre-assembled sets which bring more convenience to setting up these systems worldwide.

Innovative developments

Pre-assembled sets

More convenience in installing systems

Solutions for heating components and systems

Simplex develops, produces and distributes intelligent solutions and systems for the heating and sanitary industry – "Made in Germany" and far beyond the German market. Thanks to intensive market observation, the latest production technologies and a well thought-out selection of materials, the company is constantly setting new product and performance standards.

Solutions for heating components and systems

Innovative problem solvers

Quality "Made in Germany"

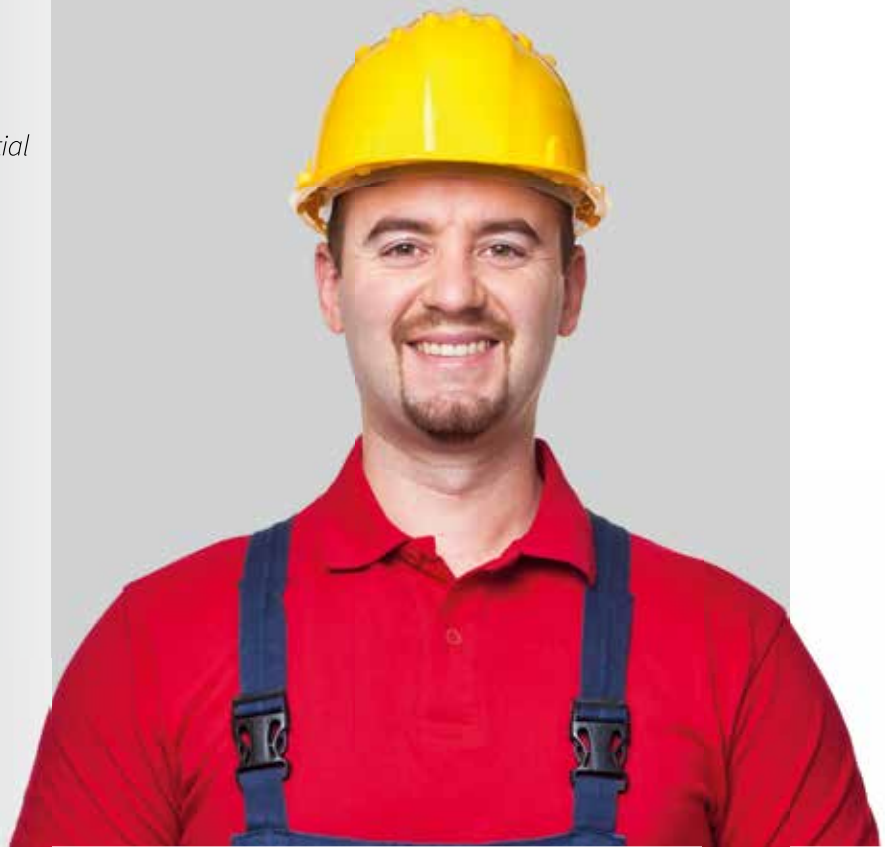
System components for Heating, Cooling & Potable Water Installations

The Flamco Group specialises in the development, production and sale of high-quality components for heating, ventilation and cooling systems. Whether it be systems for pressure maintaining, fittings for solar systems, safety valves or pipe clamps and mounting rails – all products are engineered to meet the highest standards in user-friendliness, energy efficiency and sustainability.

Components for heating, ventilation and cooling systems

Innovative solutions for residential and commercial buildings

Sustainable energy in over 70 countries



Highlights

Expansion and pressurisation automats

- For heating and cooling installations
- Balance the system pressure using highly efficient vessel design and control equipment
- Either pump or compressor operated
- Automatic expansion control, pressurisation, de-aeration and make-up for sealed systems

Air & dirt separation equipment

- Technology to extract air and solid particles from the water
- Efficient and automatic air vents, air separators, vacuum degassers and dirt separators
- Less noise emission and longer service life
- For domestic environment as well as commercial installations

Water heaters & Buffer vessels

- Indirectly heated and upright water heaters
- With up to two permanently welded-in heating coils
- Suitable for all modern heating systems
- Special construction for combinations with solar systems available
- Buffer vessels for closed heating or cooling installations

Contact

We're pleased to be of service to you

Flamco is known around the world for its quality and service. You can rely on our experience, quality products and service at all times.
If you have any questions or would like information of a more general nature on Flamco products, then visit our website or get in touch with one of the staff members in our sales department.
For an immediate answer to your technical question, call one of our product specialists or send them an e-mail.
If you have a question or a situation that requires on-site service, then contact our Service department.
The team is standing by to arrange an appointment with you at the earliest opportunity.
Our field sales staff will also drop by to offer you no-obligation advice on the best and fastest solutions using Flamco products.

Africa / South America / Eastern Europe / Asia / Oceania
Ulco Middendorp
T +31 6 22 09 66 80
E ulco.middendorp@flamcogroup.com

Middle East / Egypt
Jim Martin
T +971 4 881 95 40
+971 504 566 473
E jim.martin@flamco-gulf.com

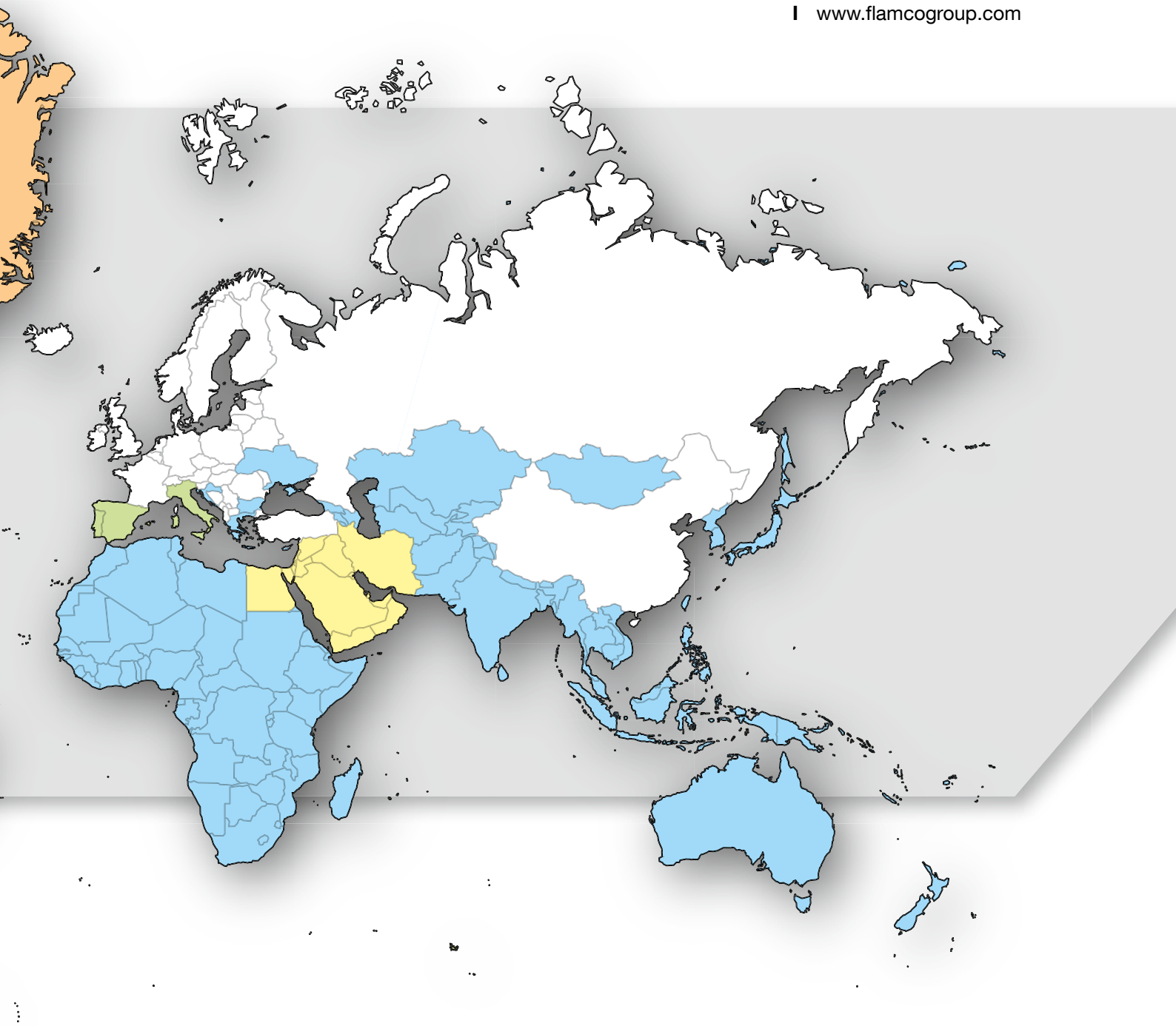
North America
Ken Shockley
T +1317 257 6050
+1317 407 0187
E kshockley@nexusvalve.com

Southern Europe
Thierry Pelletier
T +33 1 34 21 91 91
+33 6 98 12 58 45
E thierry.pelletier@aalberts.com

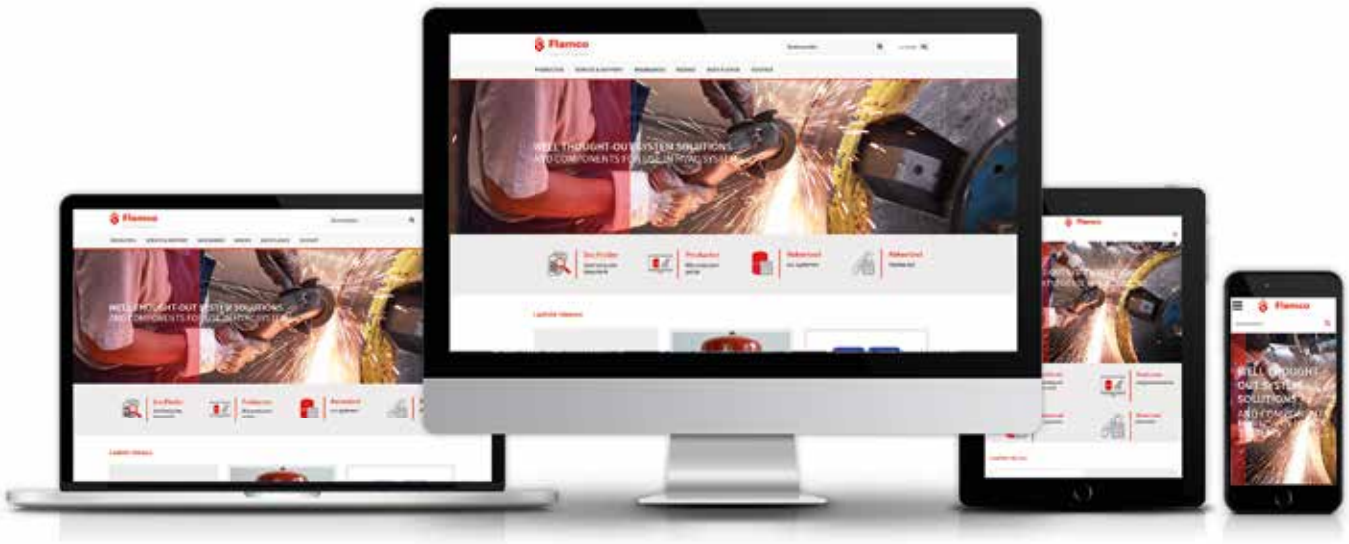
Sales department
T +31 33 299 75 00
E info@flamco.nl

Product Specialists & Service
T +31 33 299 18 50
E support@flamco.nl

Flamco B.V.
Postbus 502
3750 GM BUNSCHOTEN
Amersfoortseweg 9,
3751 LJ BUNSCHOTEN
the Netherlands
T +31 33 299 75 00
F +31 33 298 64 45
E info@flamcogroup.com
I www.flamcogroup.com



Flamco Online



Videos
Calculation Tools
Whitepapers
3D CAD Symbols
Pictures
Online Catalogue
News
Brochures
Animations
Downloads
Manuals
Support
Docfinder
Certificates

www.flamcogroup.com

Pressurisation and Storage Technology / Efficiency and Safety Technology

Contents

1. Flexcon Expansion Vessels

2. Expansion Automats and Pressurisation Equipment

3. Accessories for Heating and Cooling Installations

4. Expansion Vessels for Potable Water Installations

5. Accessories for Potable Water Installations

6. Water Heaters and Storage Vessels

7. Accessories for Water Heaters and Storage Vessels

8. Venting Range and Air/Dirt Separators

9. T-plus

Flexcon Expansion Vessels

1

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

Flexcon 2 - 80

P. 22

Flexcon 110 - 300

P. 23

Flexcon 425 - 1000

P. 24

Flexcon Top 2 - 80

P. 26

Flexcon Top 110 - 1000

P. 27

Flexcon Solar 8 - 80

P. 28

Flexcon Solar 110 - 1000

P. 29

Contra-Flex 2 - 80

P. 30

Contra-Flex 100 - 1000

P. 31

Cubex 8 - 80

P. 32

Flexcon P 18 - 50

P. 33

Cubex R 12 - 18

P. 34

Flexcon M

P. 35

Flexcon VSV - 6.0 bar

P. 36

Flexcon VSV - 10.0 bar

P. 36

Flexcon V-B - 10.0 bar

P. 36

SELECTION FLEXCON EXPANSION VESSELS ACCORDING TO EN12828

Specified values have been calculated for a flow temperature of 80 °C.
Opening pressure of the safety valve: 3 bar.
Closed water-based heating systems according to EN 12828.

Water reserve: 0.5% of the installation volume with a minimum of 3 liters*.
* Flamco recommends to use a 6-liter minimum.

Selection Table

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

FLEXCON

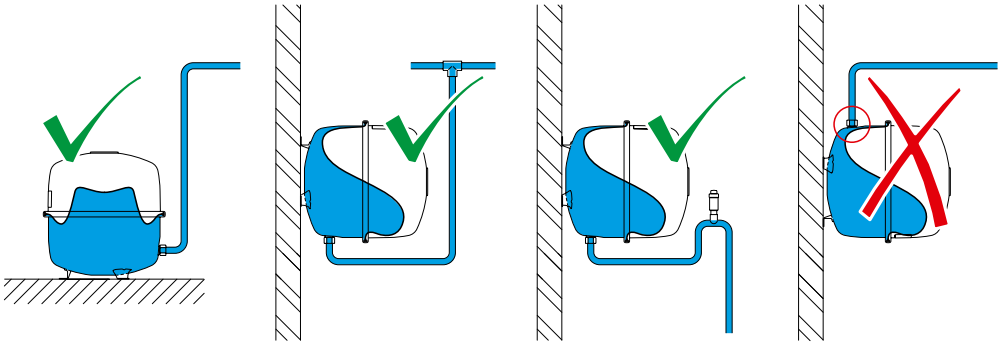
For sealed heating installations (acc. to EN12828) and chilled water (cooling) installations.

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

Flexcon advantages

- The best expansion vessels thanks to our groundbreaking technology.
- Extremely low permeability of the diaphragm ensures that pre-charge pressure is maintained for a long time.
- The flexible diaphragms with rolling action are preformed and, in contrast to a bag type bladder, prevent stretching so that their properties are preserved over the long term.
- The unique clench ring construction clamps the diaphragm between the two vessel halves. This not only ensures a perfect seal but also prevents mechanical damage of the diaphragm during use (load distribution over the entire clamping area and not at 1 suspension point).
- The gas side is filled with nitrogen, and not with air, so that corrosion is prevented and the pressure loss is even more limited.
- The ribbed profile on the diaphragm prevents it from sticking to the inside wall of the vessel and ensures inflow of expansion water at the slightest increase in pressure.
- Uncoated water connection thread ensures easy and water tight installation.
- Top quality steel and diaphragms.
- Finished with a gleaming epoxy-powder coating.
- Each vessel is factory tested.

- Expansion vessels 8 - 80 litres:
  - The two halves of the vessel are coated prior to assembly, not afterwards. Therefore there is no risk of corrosion on the clamp ring.
  - The nitrogen air valve is countersunk on the vessel to protect it from damage, it is in turn further protected by a plastic cover plate.

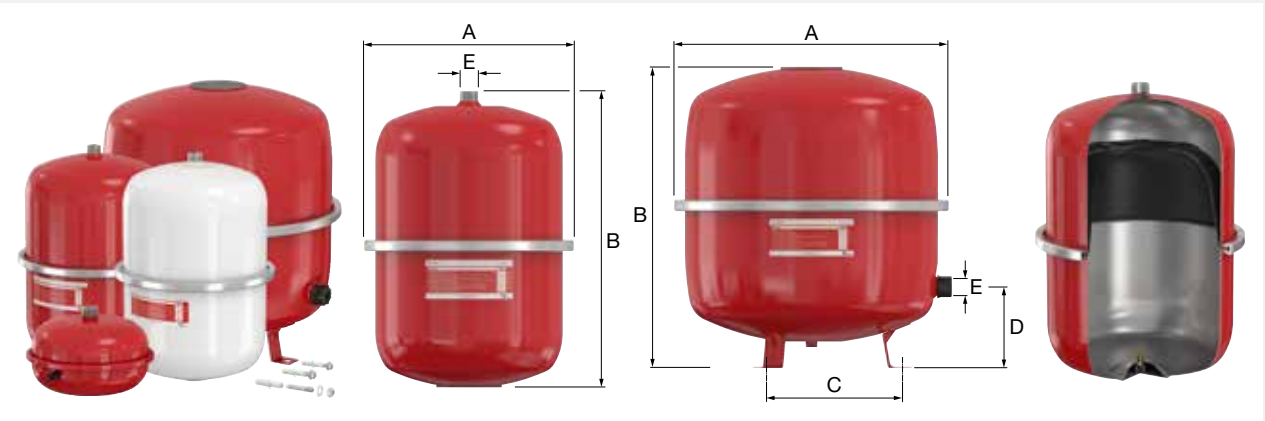


Flexcon 2 - 80

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

- Maximum working pressure: 3.0 or 6.0 bar.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Vessels in accordance with EN13831.
- Suitable for systems with a maximum flow temperature of 120 °C.
- Maximum temperature diaphragm: 70 °C.
- In accordance with Pressure Equipment Directive 2014/68/EU.
- Red (RAL 3002) epoxy powder coating (18 litre also available in white).
- Flexcon 35 - 80: With feet and including mounting kit.

Not available on stock in the U.K.

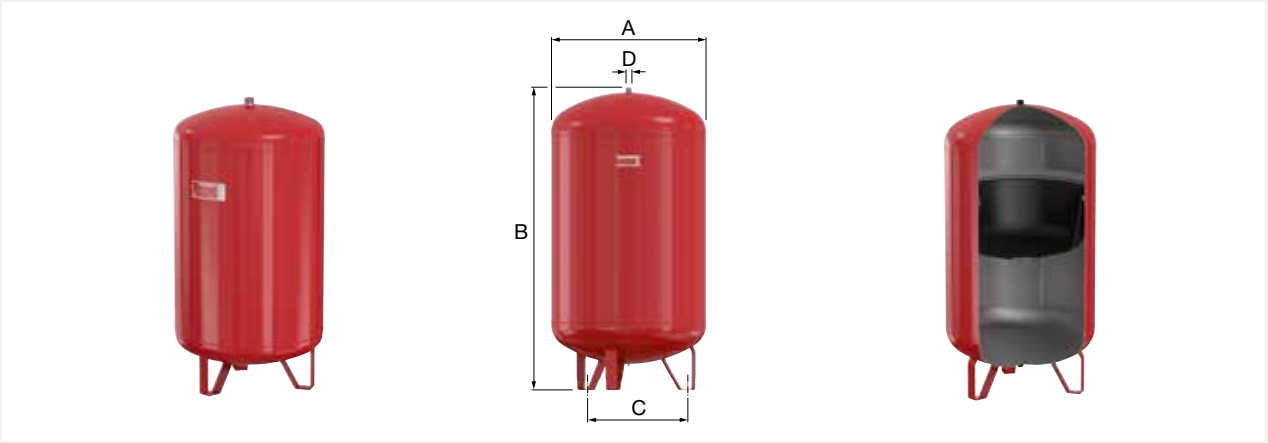


Type	Capacity [l]	Pre-charge [bar]	Max. working pressure [bar]	Dimensions A [mm]	B [mm]	Ø C [mm]	D [mm]	Syst. conn. (E)	Weight [kg]		Order Code
Flexcon 2	2	0.5	3.0	216	144	-	-	G 3/4" M	1.5	120	13221
Flexcon 2	2	1.0	3.0	216	144	-	-	G 3/4" M	1.5	120	13223
Flexcon 4	4	0.5	3.0	216	192	-	-	G 3/4" M	1.8	90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

Flexcon 110 - 300

- All welded construction.

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



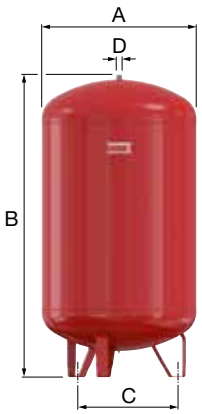
Type	Capacity [l]	Pre-charge [bar]	Dimensions A [mm]	B [mm]	Ø C [mm]	Syst. conn. (D)	Weight [kg]		Order Code
Flexcon 110	110	0.5	484	784	360	R 1"	19.1	8	16115
Flexcon 110	110	1.0	484	784	360	R 1"	19.1	8	16116
Flexcon 110	110	1.5	484	784	360	R 1"	19.1	8	16117
Flexcon 110	110	2.0	484	784	360	R 1"	19.1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

* Specify pre-charge pressure when ordering.

Flexcon 425 - 1000

- All welded construction.

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



Type	Capacity [l]	Pre-charge [bar]	Dimensions A [mm]	B [mm]	Ø C [mm]	Syst. conn. (D)	Weight [kg]		Order Code
Flexcon 425	425	0.5	790	1180	610	R 1"	57.4	1	16421
Flexcon 425	425	1.0	790	1180	610	R 1"	57.4	1	16422
Flexcon 425	425	1.5	790	1180	610	R 1"	57.4	1	16423
Flexcon 425	425	2.0	790	1180	610	R 1"	57.4	1	16424
Flexcon 425	425	2.5	790	1180	610	R 1"	57.4	1	16425
Flexcon 425	425	3.0	790	1180	610	R 1"	57.4	1	16426
Flexcon 425	425	*	790	1180	610	R 1"	57.4	1	16420
Flexcon 600	600	0.5	790	1540	610	R 1"	70.1	1	16601
Flexcon 600	600	1.0	790	1540	610	R 1"	70.1	1	16602
Flexcon 600	600	1.5	790	1540	610	R 1"	70.1	1	16603
Flexcon 600	600	2.0	790	1540	610	R 1"	70.1	1	16604
Flexcon 600	600	2.5	790	1540	610	R 1"	70.1	1	16605
Flexcon 600	600	3.0	790	1540	610	R 1"	70.1	1	16606
Flexcon 600	600	*	790	1540	610	R 1"	70.1	1	16600
Flexcon 800	800	0.5	790	1888	610	R 1"	88.0	1	16801
Flexcon 800	800	1.0	790	1888	610	R 1"	88.0	1	16802
Flexcon 800	800	1.5	790	1888	610	R 1"	88.0	1	16803
Flexcon 800	800	2.0	790	1888	610	R 1"	88.0	1	16804
Flexcon 800	800	2.5	790	1888	610	R 1"	88.0	1	16805
Flexcon 800	800	3.0	790	1888	610	R 1"	88.0	1	16806
Flexcon 800	800	*	790	1888	610	R 1"	88.0	1	16800
Flexcon 1000	1000	0.5	790	2268	610	R 1"	101.4	1	16901
Flexcon 1000	1000	1.0	790	2268	610	R 1"	101.4	1	16902
Flexcon 1000	1000	1.5	790	2268	610	R 1"	101.4	1	16903
Flexcon 1000	1000	2.0	790	2268	610	R 1"	101.4	1	16904
Flexcon 1000	1000	2.5	790	2268	610	R 1"	101.4	1	16905
Flexcon 1000	1000	3.0	790	2268	610	R 1"	101.4	1	16906
Flexcon 1000	1000	*	790	2268	610	R 1"	101.4	1	16900

* Specify pre-charge pressure when ordering.

Flexcon Top and Flexcon Solar: Now with butyl diaphragm

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

FLEXCON SOLAR

FLEXCON TOP

The maximum permissible diaphragm temperature has been increased to 90 °C for Flexcon Top and 110 °C for Flexcon Solar.

FLEXCON TOP

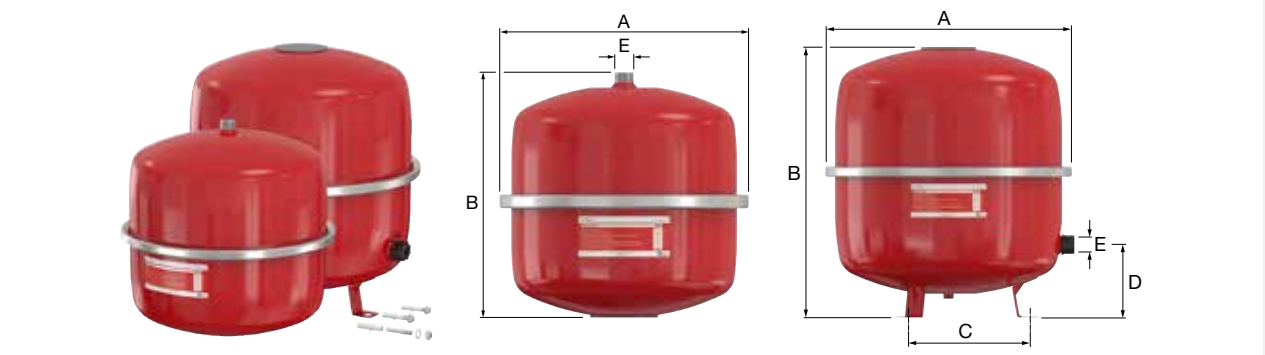
High pressure alternative for use in sealed heating installations (acc. to EN12828) and chilled water (cooling) installations.

- Diaphragm: butyl rubber.

Flexcon Top 2 - 80

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

- Maximum working pressure: 6.0 bar.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Vessels in accordance with EN13831.
- Suitable for systems with a maximum flow temperature of 120 °C.
- Maximum temperature diaphragm: 90 °C.
- In accordance with Pressure Equipment Directive 2014/68/EU.
- Red (RAL 3002) epoxy powder coating.
- Flexcon Top 35 - 80: With feet and including mounting kit.



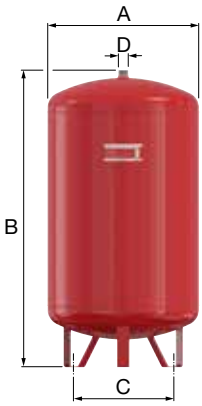
Type	Capacity [l]	Pre-charge [bar]	Dimensions A [mm]	B [mm]	Ø C [mm]	D [mm]	Syst. conn. (E)	Weight [kg]		Order Code
Flexcon Top 2	2	0.5	216	144	-	-	R ¾"	1.7	120	13202
Flexcon Top 2	2	2.5	216	144	-	-	R ¾"	1.7	120	13203
Flexcon Top 2	2	*	216	144	-	-	R ¾"	1.7	120	13204
Flexcon Top 4	4	0.5	216	192	-	-	R ¾"	2.1	90	13404
Flexcon Top 4	4	2.5	216	192	-	-	R ¾"	2.1	90	13405
Flexcon Top 4	4	*	216	192	-	-	R ¾"	2.1	90	13406
Flexcon Top 8	8	0.5	245	277	-	-	R ¾"	3.2	50	16008
Flexcon Top 8	8	2.5	245	277	-	-	R ¾"	3.2	50	16010
Flexcon Top 8	8	*	245	277	-	-	R ¾"	3.2	50	16011
Flexcon Top 12	12	0.5	286	309	-	-	R ¾"	4.5	36	16012
Flexcon Top 12	12	2.5	286	309	-	-	R ¾"	4.5	36	16014
Flexcon Top 12	12	*	286	309	-	-	R ¾"	4.5	36	16015
Flexcon Top 18	18	0.5	328	323	-	-	R ¾"	5.7	24	16018
Flexcon Top 18	18	2.5	328	323	-	-	R ¾"	5.7	24	16020
Flexcon Top 18	18	*	328	323	-	-	R ¾"	5.7	24	16017
Flexcon Top 25	25	0.5	358	356	-	-	R ¾"	7.3	24	16025
Flexcon Top 25	25	1.0	358	356	-	-	R ¾"	7.3	18	16026
Flexcon Top 25	25	1.5	358	356	-	-	R ¾"	7.3	18	16029
Flexcon Top 25	25	2.5	358	356	-	-	R ¾"	7.3	18	16027
Flexcon Top 25	25	*	358	356	-	-	R ¾"	7.3	18	16030
Flexcon Top 35	35	0.5	396	435	263	118	R ¾"	8.1	18	16035
Flexcon Top 35	35	1.5	396	435	263	118	R ¾"	8.1	18	16039
Flexcon Top 35	35	2.5	396	435	263	118	R ¾"	8.1	18	16037
Flexcon Top 35	35	*	396	435	263	118	R ¾"	8.1	18	16038
Flexcon Top 50	50	0.5	437	493	263	134	R ¾"	11.4	12	16051
Flexcon Top 50	50	1.5	437	493	263	134	R ¾"	11.4	12	16050
Flexcon Top 50	50	2.5	437	493	263	134	R ¾"	11.4	12	16053
Flexcon Top 50	50	*	437	493	263	134	R ¾"	11.4	12	16054
Flexcon Top 80	80	0.5	519	534	360	140	R 1"	15.0	12	16081
Flexcon Top 80	80	2.5	519	534	360	140	R 1"	15.0	12	16083
Flexcon Top 80	80	*	519	534	360	140	R 1"	15.0	12	16084
Flexcon Top 80	80	1.5	519	534	360	140	R 1"	15.0	12	16085

* Specify pre-charge pressure when ordering.

Flexcon Top 110 - 1000

- All welded construction.

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



Type	Capacity [l]	Pre-charge [bar]	Dimensions A [mm]	B [mm]	Ø C [mm]	Syst. conn. (D)	Weight [kg]		Order Code
Flexcon Top 110	110	1.5	484	784	360	R 1"	27.3	8	16103
Flexcon Top 110	110	3.0	484	784	360	R 1"	27.3	8	16106
Flexcon Top 110	110	3.5	484	784	360	R 1"	27.3	8	16090
Flexcon Top 110	110	*	484	784	360	R 1"	27.3	8	16100
Flexcon Top 140	140	1.5	484	950	360	R 1"	31.6	8	16133
Flexcon Top 140	140	3.0	484	950	360	R 1"	31.6	8	16136
Flexcon Top 140	140	3.5	484	950	360	R 1"	31.6	8	16091
Flexcon Top 140	140	*	484	950	360	R 1"	31.6	8	16130
Flexcon Top 200	200	1.5	600	960	450	R 1"	35.4	8	16193
Flexcon Top 200	200	3.0	600	960	450	R 1"	35.4	8	16196
Flexcon Top 200	200	3.5	600	960	450	R 1"	35.4	8	16092
Flexcon Top 200	200	*	600	960	450	R 1"	35.4	8	16190
Flexcon Top 300	300	1.5	600	1330	450	R 1"	57.1	6	16293
Flexcon Top 300	300	3.0	600	1330	450	R 1"	57.1	6	16296
Flexcon Top 300	300	3.5	600	1330	450	R 1"	57.1	6	16093
Flexcon Top 300	300	*	600	1330	450	R 1"	57.1	6	16290
Flexcon Top 425	425	1.5	790	1180	610	R 1"	84.9	1	16413
Flexcon Top 425	425	3.0	790	1180	610	R 1"	84.9	1	16416
Flexcon Top 425	425	3.5	790	1180	610	R 1"	84.9	1	16094
Flexcon Top 425	425	*	790	1180	610	R 1"	84.9	1	16410
Flexcon Top 600	600	1.5	790	1540	610	R 1"	105.8	1	16593
Flexcon Top 600	600	3.0	790	1540	610	R 1"	105.8	1	16596
Flexcon Top 600	600	3.5	790	1540	610	R 1"	105.8	1	16096
Flexcon Top 600	600	*	790	1540	610	R 1"	105.8	1	16590
Flexcon Top 800	800	1.5	790	1888	610	R 1"	133.7	1	16793
Flexcon Top 800	800	3.0	790	1888	610	R 1"	133.7	1	16796
Flexcon Top 800	800	3.5	790	1888	610	R 1"	133.7	1	16098
Flexcon Top 800	800	*	790	1888	610	R 1"	133.7	1	16790
Flexcon Top 1000	1000	1.5	790	2268	610	R 1"	155.1	1	16893
Flexcon Top 1000	1000	3.0	790	2268	610	R 1"	155.1	1	16896
Flexcon Top 1000	1000	3.5	790	2268	610	R 1"	155.1	1	16099
Flexcon Top 1000	1000	*	790	2268	610	R 1"	155.1	1	17294

* Specify pre-charge pressure when ordering.

FLEXCON SOLAR

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

- Diaphragm: butyl rubber.

Flexcon Solar 8 - 80

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

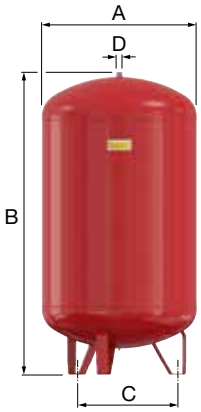
- Maximum working pressure: 8.0 bar.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Vessels in accordance with EN13831.
- Suitable for systems with a maximum flow temperature of 120 °C.
- Maximum temperature diaphragm: 110 °C.
- In accordance with Pressure Equipment Directive 2014/68/EU.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

Type	Capacity [l]	Pre-charge [bar]	Dimensions A [mm]	B [mm]	Ø C [mm]	D [mm]	Syst. conn. (E)	Weight [kg]		Order Code
Flexcon Solar 8	8	2.5	245	277	-	-	R ¾"	3.2	50	16060
Flexcon Solar 12	12	2.5	286	309	-	-	R ¾"	4.5	36	16061
Flexcon Solar 18	18	2.5	328	323	-	-	R ¾"	5.7	24	16062
Flexcon Solar 25	25	2.5	358	356	-	-	R ¾"	7.3	18	16063
Flexcon Solar 35	35	2.5	396	435	263	118	R ¾"	8.1	18	16064
Flexcon Solar 50	50	2.5	437	493	263	134	R ¾"	11.4	12	16065
Flexcon Solar 80	80	2.5	519	534	360	140	R 1"	15.0	12	16066

Flexcon Solar 110 - 1000

- All welded construction.

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



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

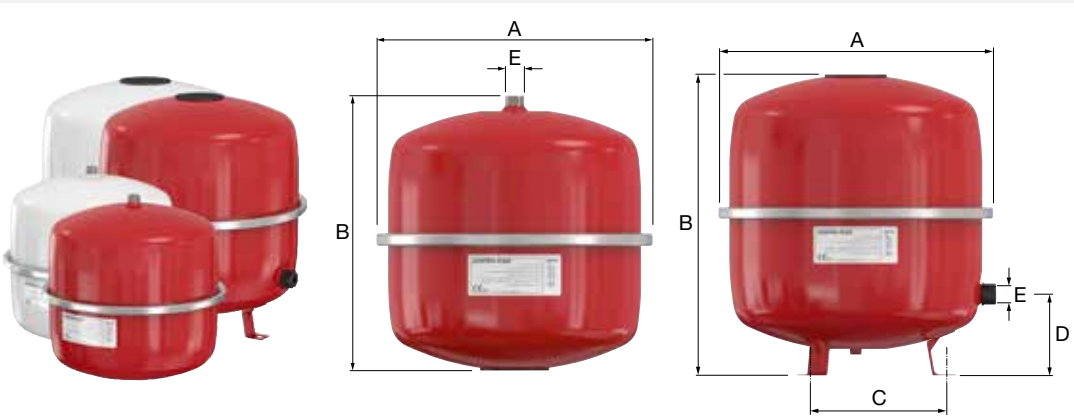
CONTRA-FLEX

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

Contra-Flex 2 - 80

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

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



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

Contra-Flex 100 - 1000

- All welded construction.

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

Type	Capacity [l]	Pre-charge [bar]	Dimensions A [mm]	B [mm]	Ø C [mm]	Syst. conn. (D)	Weight [kg]		Order Code
Contra-Flex 100	100	1.5	484	774	360	R 1"	19.0	8	26103
Contra-Flex 100	100	2.5	484	774	360	R 1"	19.0	8	26105
Contra-Flex 100	100	3.0	484	774	360	R 1"	19.0	8	17114
Contra-Flex 150	150	1.5	484	1014	360	R 1"	23.6	8	16153
Contra-Flex 150	150	2.5	484	1014	360	R 1"	23.6	8	26155
Contra-Flex 150	150	3.0	484	1014	360	R 1"	23.6	8	17119
Contra-Flex 200	200	1.5	484	1290	360	R 1"	27.5	8	26213
Contra-Flex 200	200	2.5	484	1290	360	R 1"	27.5	8	26215
Contra-Flex 200	200	3.0	484	1290	360	R 1"	27.5	8	17124
Contra-Flex 250	250	1.5	600	1138	450	R 1"	39.9	6	16253
Contra-Flex 250	250	2.5	600	1138	450	R 1"	39.9	6	26225
Contra-Flex 300	300	1.5	600	1315	450	R 1"	43.9	6	26303
Contra-Flex 300	300	2.5	600	1315	450	R 1"	43.9	6	26305
Contra-Flex 300	300	3.0	600	1315	450	R 1"	43.9	6	17134
Contra-Flex 400	400	1.5	790	1160	610	R 1"	57.1	1	26413
Contra-Flex 400	400	2.5	790	1160	610	R 1"	57.1	1	26415
Contra-Flex 400	400	3.0	790	1160	610	R 1"	57.1	1	17144
Contra-Flex 500	500	1.5	790	1310	610	R 1"	62.9	1	26523
Contra-Flex 500	500	2.5	790	1310	610	R 1"	62.9	1	26525
Contra-Flex 600	600	1.5	790	1518	610	R 1"	69.7	1	17162
Contra-Flex 600	600	2.5	790	1518	610	R 1"	69.7	1	26625
Contra-Flex 600	600	3.0	790	1518	610	R 1"	69.7	1	17164
Contra-Flex 800	800	1.5	790	1868	610	R 1"	87.5	1	17181
Contra-Flex 800	800	2.5	790	1868	610	R 1"	87.5	1	26825
Contra-Flex 800	800	3.0	790	1868	610	R 1"	87.5	1	17184
Contra-Flex 1000	1000	1.5	790	2248	610	R 1"	100.9	1	17190
Contra-Flex 1000	1000	2.5	790	2248	610	R 1"	100.9	1	26925
Contra-Flex 1000	1000	3.0	790	2248	610	R 1"	100.9	1	17194

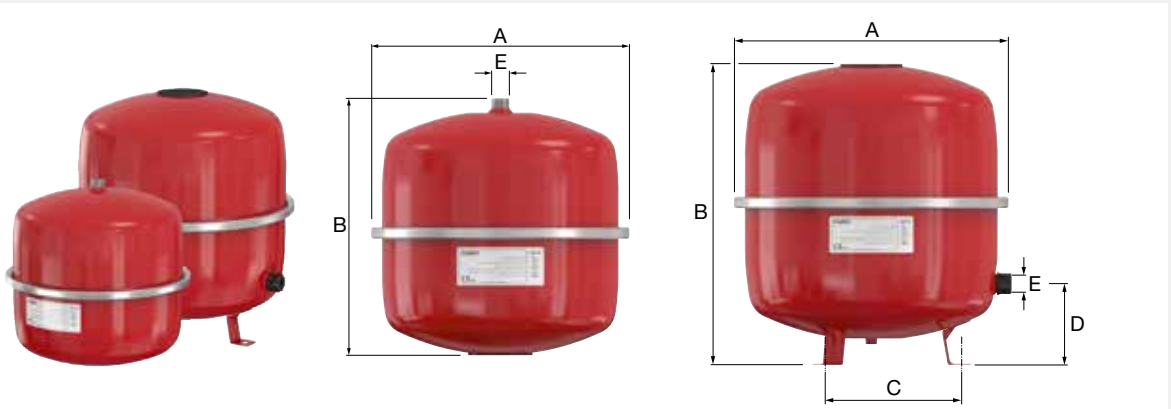
CUBEX

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

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

Cubex 8 - 80

- Maximum working pressure: 3.0 or 6.0 bar.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Vessels in accordance with EN13831.
- Suitable for systems with a maximum flow temperature of 120 °C.
- Maximum temperature diaphragm: 70 °C.
- In accordance with Pressure Equipment Directive 2014/68/EU.
- Red (RAL 3002) epoxy powder coating.
- Cubex 35 - 80: With feet.



Type	Capacity [l]	Pre-charge [bar]	Max. working pressure [bar]	Dimensions A [mm]	B [mm]	Ø C [mm]	D [mm]	Syst. conn. (E)	Weight [kg]		Order Code
Cubex 8	8	0.5	3.0	245	277	-	-	R ¾"	2.2	60	26075
Cubex 12	12	0.5	3.0	286	309	-	-	R ¾"	2.7	30	26135
Cubex 18	18	0.5	3.0	328	323	-	-	R ¾"	3.7	30	26175
Cubex 18	18	1.0	3.0	328	323	-	-	R ¾"	3.7	30	26176
Cubex 25	25	0.5	3.0	358	356	-	-	R ¾"	4.5	24	26245
Cubex 25	25	1.0	3.0	358	356	-	-	R ¾"	4.5	24	26246
Cubex 35	35	0.5	3.0	396	435	263	118	R ¾"	5.4	24	26345
Cubex 35	35	1.0	3.0	396	435	263	118	R ¾"	5.4	24	26346
Cubex 50	50	1.0	6.0	437	493	263	134	R ¾"	11.4	12	26515
Cubex 50	50	1.5	6.0	437	493	263	134	R ¾"	11.4	12	26516
Cubex 80	80	1.0	6.0	519	534	360	140	R 1"	15.0	12	26815
Cubex 80	80	1.5	6.0	519	534	360	140	R 1"	15.0	12	26816

FLEXCON P

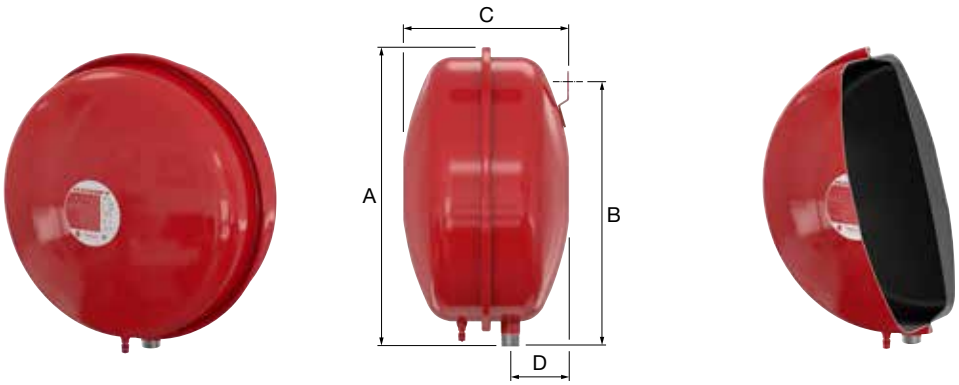
Oval shaped expansion vessels with reduced height and suspension eye. For use in sealed heating installations (acc. to EN12828) and chilled water (cooling) installations.

- Space-saving alternative for small installations.
- The oval shape combined with the practical suspension eye enables quick and easy mounting, optimising the use of space.
- Thanks to the design no stagnant water remains in the vessel.
- Diaphragm: butyl rubber.
- Deep drawn steel vessel halves with zinc plated steel clench ring (with red epoxy powder coating).

Not available on stock in the U.K.

Flexcon P 18 - 50

- Maximum working pressure: 3.0 bar.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Vessels in accordance with EN13831.
- Suitable for systems with a maximum flow temperature of 120 °C.
- Maximum temperature diaphragm: 90 °C.
- In accordance with Pressure Equipment Directive 2014/68/EU.
- Red (RAL 3002) epoxy powder coating.



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

CUBEX R

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

Cubex R 12 - 18

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

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

CE

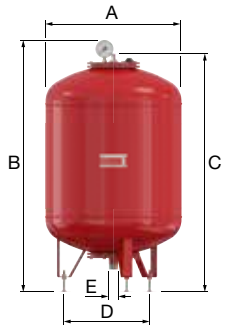
FLEXCON M

Expansion vessels with a replaceable bladder for use in sealed heating installations (acc. to EN12828) and chilled water (cooling) installations. Particular benefits of use are achieved in installations with large variations between static pressure and pre-set pressure of the safety valve.

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

Flexcon M

- Maximum working pressure: 6.0 or 10.0 bar (other working pressures available on request).
- Standard pre-charge: 3.0, 4.0 or 6.0 bar (other pre-charge pressures available on request).
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Vessels 100 - 1000 litres: in accordance with EN13831 / 1200 - 8000 litres: in accordance with AD2000.
- Suitable for systems with a flow temperature of 120 °C.
- Maximum temperature bladder: 70 °C.
- In accordance with Pressure Equipment Directive 2014/68/EU.
- Red (RAL 3002) epoxy powder coating.



Type	Capacity [l]	Pre-charge [bar]	Max. working pressure [bar]	Dimensions A [mm]	B [mm]	C [mm]	Ø D [mm]	Syst. conn. (E)	Weight [kg]		Order Code
Flexcon M 100	100	3.0	6.0	484	958	928	360	G 1 ¼" M	23	1	22000
Flexcon M 100	100	6.0	10.0	484	958	928	360	G 1 ¼" M	33	1	22010
Flexcon M 200	200	3.0	6.0	484	1500	1470	360	G 1 ¼" M	30	1	22001
Flexcon M 200	200	6.0	10.0	600	1132	1106	360	G 1 ¼" M	46	1	22011
Flexcon M 300	300	3.0	6.0	600	1505	1475	450	G 1 ¼" M	41	1	22002
Flexcon M 300	300	6.0	10.0	600	1505	1475	450	G 1 ¼" M	60	1	22012
Flexcon M 400	400	3.0	6.0	790	1348	1318	610	G 1 ¼" M	55	1	22003
Flexcon M 400	400	6.0	10.0	790	1348	1318	610	G 1 ¼" M	84	1	22013
Flexcon M 500	500	3.0	6.0	790	1498	1468	610	G 1 ¼" M	61	1	22004
Flexcon M 600	600	3.0	6.0	790	1708	1678	610	G 1 ¼" M	68	1	22005
Flexcon M 600	600	6.0	10.0	790	1708	1678	610	G 1 ¼" M	106	1	22014
Flexcon M 800	800	3.0	6.0	790	2055	2025	610	G 1 ¼" M	93	1	22006
Flexcon M 800	800	6.0	10.0	790	2055	2025	610	G 1 ¼" M	145	1	22015
Flexcon M 1000	1000	3.0	6.0	790	2404	2374	610	G 1 ¼" M	105	1	22007
Flexcon M 1000	1000	6.0	10.0	790	2404	2374	610	G 1 ¼" M	167	1	22016
Flexcon M 1200	1200	4.0	6.0	1000	-	1940	850	Rp 1 ½" *	285	1	22108
Flexcon M 1200	1200	6.0	10.0	1000	-	1940	850	Rp 1 ½" *	410	1	22148
Flexcon M 1600	1600	4.0	6.0	1000	-	2440	850	Rp 1 ½" *	340	1	22109
Flexcon M 1600	1600	6.0	10.0	1000	-	2440	850	Rp 1 ½" *	485	1	22149
Flexcon M 2000	2000	4.0	6.0	1200	-	2180	1050	Rp 2" *	425	1	22110
Flexcon M 2000	2000	6.0	10.0	1200	-	2180	1050	Rp 2" *	600	1	22150
Flexcon M 2800	2800	4.0	6.0	1200	-	2780	1050	Rp 2 ½" *	510	1	22118
Flexcon M 2800	2800	6.0	10.0	1200	-	2780	1050	Rp 2 ½" *	725	1	22158
Flexcon M 3500	3500	4.0	6.0	1200	-	3580	1050	Rp 2 ½" *	620	1	22111
Flexcon M 3500	3500	6.0	10.0	1200	-	3580	1050	Rp 2 ½" *	900	1	22151
Flexcon M 5200	5200	6.0	10.0	1500	-	3600	1142	Rp 2 ½" *	1330	1	22152
Flexcon M 6700	6700	6.0	10.0	1500	-	4480	1142	DN 100 **	1690	1	22153
Flexcon M 8000	8000	6.0	10.0	1500	-	5090	1142	DN 100 **	2140	1	22154

* Adapter with flange connection PN 16 available (see Flexcon M-K).
** Flanges as per EN 1092-1 PN 16.

CE

FLEXCON INTERMEDIATE VESSELS

Vessels to protect Flexcon expansion vessels on elevated temperature systems.

The vessels are fitted in between the expansion vessel and the system return.
System water flows from the installation into the top of the vessel. From the bottom of the vessel, significantly cooler water is fed into the expansion vessel.

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

Flexcon VSV - 6.0 bar

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

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

Flexcon VSV - 10.0 bar

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

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

Flexcon V-B - 10.0 bar

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

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

Expansion Automats and Pressurisation Equipment

2

For sealed systems with large volumes or static height traditional expansion vessels are not the most efficient solution in terms of operational pressure or physical footprint. Flamco Expansion Automats balance the system pressure using a highly efficient vessel design and control equipment.
We produce a comprehensive range of models that offer high-quality performance and versatility which may be further enhanced by the addition of numerous optional accessories. This makes the Flamco expansion automats suitable for use in a variety of situations.
As demands and preferences differ worldwide, Flamco has opted for an adaptable, modular range to suit every client's requirements.

Flexcon M-K/U - internal coating

P. 44

Flexcon M-K/U

P. 45

Flexcon M-K - internal coating

P. 46

Flexcon M-K Connecting Kit (pneumatic)

P. 47

Flange Connection

P. 47

Second Compressor Unit

P. 47

Flexcon M-K/C

P. 48

Single Pump Control

P. 50

Double Pump Control

P. 51

Flamcomat FG Main Vessels

P. 54

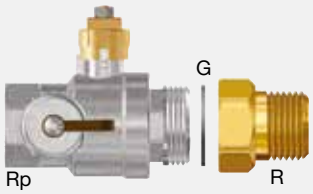
Flamcomat FB Auxiliary Vessels

P. 55

Flamcomat drain sets

P. 55

Ball Valve



P. 56

Flexible Connecting Kit (set of 2)

P. 56

Gas Sensor Connecting Group

P. 56

Auxiliary vessel connection Flamcomat

P. 57

T-piece

P. 57

Rotating Connection, Face Sealed

P. 57

Prescor BFP BA

P. 58

Backflow preventer BA

P. 58

Pressure Safety Switch

P. 58

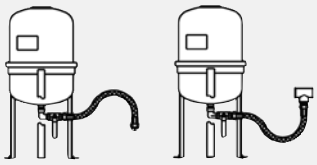
Bimetallic Temperature Switch

P. 59

Impulse Output Water Meter

P. 59

Surge Vessel (PN 6)



P. 59

Easycontact

P. 59

Diaphragm Rupture Sensor

P. 59

Analogue Signalling

P. 60

SD Card Module

P. 60

SPC Extension module

P. 60

MVE 1 Direct Pressurisation Control

P. 61

MVE 2 Solenoid Valve Unit

P. 61

NFE 1 Top-up Unit

P. 61

NFE 2 Top-up Unit

P. 61

NFE 3 Top-up Unit

P. 62

Flamco-Fill PE Top-up Unit (pressurisation)

P. 62

Flamco-Fill P

P. 63

Feet for Flamco-Fill PE / P

P. 63

Flexfiller

P. 74

Flexfiller Mini Digital

P. 75

Flexfiller Midi

P. 76

Flexfiller IP66

P. 77

Digifiller

P. 79

Flexfiller Twin System

P. 81

PressDS

P. 82

Flexfiller Plus & Midifill Plus

P. 84

PressDS Plus

P. 85

FLEXCON M-K/U COMPRESSOR EXPANSION AUTOMAT

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

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

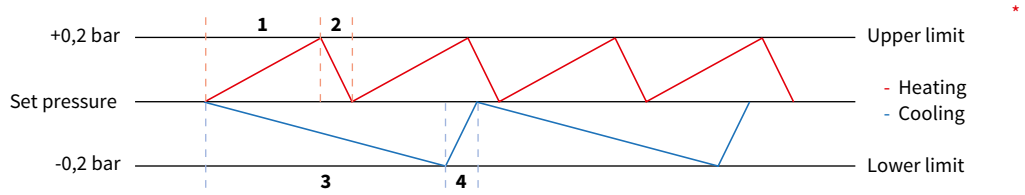
The benefits of the Flexcon M-K/U

- Stable system pressure and a large working vessel volume.
- Compact, space saving unit, which has a low noise, oil free compressor.
- Replaceable butyl bladder.
- Intuitive SPC controller. This is a 'plug and play' control system, with operating values, clear on-screen instructions, intuitive and easy to use and with economic energy-save mode.
- 20 languages to choose from.
- Easy to install and commission.
- For single or master/slave operation (failure changeover operation available on request).
- Connectivity for pressurisation unit and Building Management System or system monitoring device.
- Operation with one or two compressors possible.
- Delivered with oil free compressor, flexible connecting hose, weight-capacity sensor and height adjustable feet.
- As an option, the Flexcon M-K/U can be fitted with a Flexvent Super automatic air vent.
- With RS 485 interface.

- Suitable for addition of glycol-based anti-freeze up to 50%.
- Vessels 400 - 1,000 litres: in accordance with EN13831 / 1,200 - 10,000 litres: in accordance with AD2000.
- Suitable for systems with a maximum flow temperature of 120 °C.
- Maximum temperature bladder: 70 °C.
- In accordance with European Pressure Equipment Directive 2014/68/EU and Machinery Directive 2006/42/EC.
- Electricity supply: 230 v ~ 50 Hz.
- Maximum heating capacity: 12 MW.
- Maximum cooling capacity: 24 MW.
- Red (RAL 3002) epoxy powder coating.

Accurate pressure monitoring

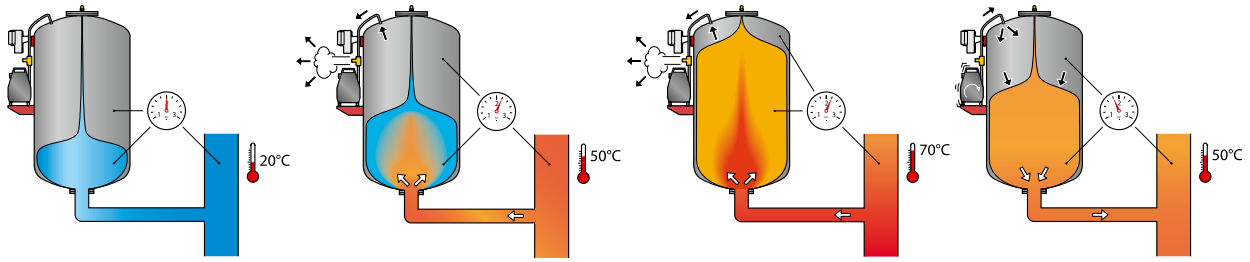
- **When the temperature rises:**
  Pressure rises and reaches the upper limit (**1**):
The solenoid valve blows off air =>
Pressure drops to the set pressure (**2**).
- **When the temperature drops:**
  Pressure drops and reaches the lower limit (**3**):
The compressor pumps in air =>
Pressure rises to the set pressure (**4**).



* Graph concerns a heating system.

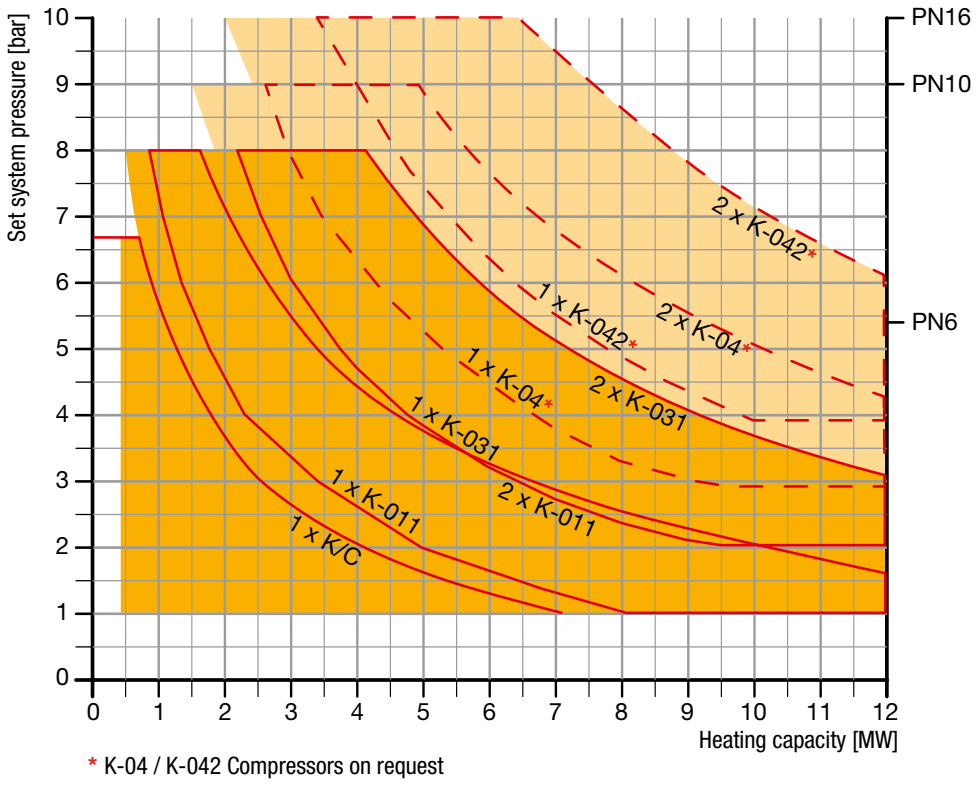
How a Flexcon M-K/U works

(1) Cold
The automat contains a small amount of water. The automat is at rest.
(2) Warming up
The volume of water, and thus the system pressure, increases. The controller responds to this by discharging air from the vessel and, as a result, the expansion water flows into the bladder.
(3) Full power
By storing increasing amounts of water in the vessel the controller keeps the system pressure at a constant level. When the system has warmed up completely, the vessel will be almost full to capacity.
(4) Cooling down
When the volume of water and thus the system pressure decreases, the controller will respond by increasing the airpressure in the vessel with displacement of water back into the system as a result. This restores equilibrium in the system pressure.



Flexcon M-K compressor curves

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



* K-04 / K-042 Compressors on request

Flexcon M-K/U - internal coating

- With internal coating.

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

CE

Flexcon M-K/U

- Without internal coating.

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

CE

FLEXCON M-K AUXILIARY VESSELS

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

- Without control unit and compressor.
- Replaceable butyl bladder.
- Delivered with height adjustable feet.
- Accessories to be ordered separately.
- As an option, the Flexcon M-K can be fitted with a Flexvent Super automatic air vent.

- Suitable for addition of glycol-based anti-freeze up to 50%.
- Vessels 400 - 1,000 litres: in accordance with EN13831 / 1,200 - 10,000 litres: in accordance with AD2000.
- Suitable for systems with a maximum flow temperature of 120 °C.
- Max. temperature bladder: 70 °C.
- In accordance with European Pressure Equipment Directive 2014/68/EU and Machinery Directive 2006/42/EC.
- Red (RAL 3002) epoxy powder coating.

Flexcon M-K - internal coating

- With internal coating.

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

CE

Flexcon M-K Connecting Kit (pneumatic)

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

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

Flange Connection

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

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

EXTRA COMPRESSORS

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

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

Second Compressor Unit

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

FLEXCON M-K/C COMPRESSOR EXPANSION AUTOMAT

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

- Delivered completely pre-assembled and ready for operation.
- With oil free compressor, flexible connecting hose, weight-capacity sensor, height adjustable feet and diaphragm rupture sensor.
- Connectivity for pressurisation unit and Building Management System or system monitoring device.
- Intuitive and programmable SCU controller with graphic display and 17 languages to choose from.
- Easy to install and commission.
- Diaphragm: Fixed flexible rubber diaphragm with rolling action (not replaceable).
- With RS 485 interface.
- Accessories to be ordered separately.

- Suitable for addition of glycol-based anti-freeze up to 50%.
- Vessels in accordance with EN13831.
- Suitable for systems with a maximum flow temperature of 120 °C.
- Maximum temperature diaphragm: 70 °C.
- Minimum temperature at (heating) outlet: -10 °C.
- Electricity supply: 230 v ~ 50 Hz.
- Maximum heating capacity: 7 MW.
- Maximum cooling capacity: 11 MW.
- In accordance with European Pressure Equipment Directive 2014/68/EU and Machinery Directive 2006/42/EC.
- Red (RAL 3002) epoxy powder coating.

For stand-alone applications only.

Flexcon M-K/C

Type	Capacity [l]	Max. working pressure [bar]	Design pressure [PN]	Dimensions Ø [mm]	Dimensions H. [mm]	Syst. conn.	Weight [kg]		Order Code
Flexcon M-K/C 110	110	5.4	6.0	509	1215	G 1" F	37	1	23225
Flexcon M-K/C 200	200	5.4	6.0	600	1391	G 1" F	71	1	23226
Flexcon M-K/C 350	350	5.4	6.0	790	1459	G 1" F	81	1	23227
Flexcon M-K/C 425	425	5.4	6.0	790	1612	G 1" F	91	1	23228

CE

FLAMCOMAT - PUMP UNITS

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

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

- Automatically performs volumetric control and automatic topping-up during the heating or cooling cycles.
- Integrated turbo degassing allows for very rapid degassing.
- The degassing function allows for continuous degassing if desired.
- The user-friendly control unit displays all operating and error conditions in a comprehensible and convenient way.
- Advanced technology ensures low power consumption, long service life and easy maintenance.
- Operating modes: single (mono), automatic change-over or load dependent (duo) and combined operation.
- Microprocessor control, self-learning, with graphical display and RS 485 interface.
- 20 languages can be selected in the menu of the SPC controller (eg: D, GB, NL and F).
- Due to the hydraulic design of the Flamcomat G3 and the connection sets the vessel can be positioned anywhere around the Flamcomat.
- Beams are fitted to the Flamcomat G3 for protection of components and easy transport into hard to reach places.
- The position of the second pump on a double pump Flamcomat G3 can positioned on either side of the Flamcomat.
- The Flamcomat G3 pump units require approximately 50% less surface area compared to the previous model.
- Deaeration modes: fast, normal or off.

- Suitable for addition of glycol-based anti-freeze up to 50%.
- Working temperature: 3 °C / 70 °C.
- In accordance with Machinery Directive 2006/42/EC.

Flamcomat pump units - Technical specifications

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

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

Single Pump Control

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

Type*	Design pressure [PN]	Pump orienta-tion	For boiler output [kW]	Working pressure [bar]	Dimensions L. x W. x H. [mm]	Connection to				Order Code
						Vessel	System conn.	Water supply		
MM / G3	PN 6	hor.	100 - 200	1.2 - 3.0	506 x 227 x 922	G 1" M	G 1 ¼" F	Rp ½"	1	17940
M02 / G3	PN 10	hor.	500 - 2300	1.2 - 3.5	540 x 227 x 922	G 1" M	G 1 ¼" F	Rp ½"	1	17943
M10 / G3	PN 10	hor.	900 - 4700	2.0 - 5.0	513 x 227 x 922	G 1" M	G 1 ¼" F	Rp ½"	1	17944
M20 / G3	PN 10	hor.	1600 - 8400	2.0 - 5.0	553 x 227 x 922	G 1" M	G 1 ¼" F	Rp ½"	1	17945
M60 / G3	PN 10	vert.	1400 - 4700	3.5 - 8.5	561 x 227 x 922	G 1" M	G 1 ¼" F	Rp ½"	1	17946
M80 / G3	PN 16	vert.	1400 - 4900	4.7 - 10.0	593 x 299 x 937	G 1" M	G 1 ¼" F	Rp ½"	1	17947
M100	PN 16	vert.	1300 - 5200	5.9 - 14.1	540 x 605 x 1030	G 1 ½" F	G 1 ½" F	Rp ½"	1	17884
M130	PN 16	vert.	3300 - 5300	8.0 - 14.4	540 x 605 x 1190	G 1 ½" F	G 1 ½" F	Rp ½"	1	17886

* For larger, more powerful systems please contact Flamco.

Double Pump Control

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

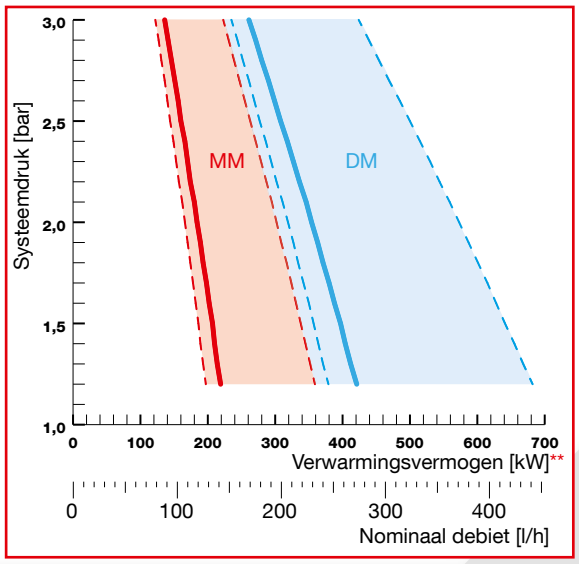
Type*	Design pressure [PN]	Pump orientation	For boiler output [kW]	Working pressure [bar]	Dimensions L. x W. x H. [mm]	Connection to				Order Code
						Vessel	System conn.	Water supply		
DM / G3	PN 6	hor.	100 - 400	1.2 - 3.0	506 x 267 x 942	G 1" M	G 1 ¼" F	Rp ½"	1	17948
D02 / G3	PN 10	hor.	500 - 4400	1.2 - 3.5	603 x 452 x 974	G 1" M	G 1 ¼" F	Rp ½"	1	17949
D10 / G3	PN 10	hor.	900 - 9200	2.0 - 5.0	583 x 452 x 974	G 1" M	G 1 ¼" F	Rp ½"	1	17950
D20 / G3	PN 10	hor.	1600 - 10000	2.0 - 5.0	620 x 446 x 974	G 1" M	G 1 ¼" F	Rp ½"	1	17951
D60 / G3	PN 10	vert.	1400 - 9400	3.5 - 8.5	594 x 444 x 974	G 1" M	G 1 ¼" F	Rp ½"	1	17952
D80 / G3	PN 16	vert.	1400 - 9400	4.7 - 10.0	594 x 515 x 975	G 1" M	G 1 ¼" F	Rp ½"	1	17953
D100	PN 16	vert.	1300 - 10000	5.9 - 14.1	930 x 530 x 1030	G 1 ½" F	G 1 ½" F	Rp ½"	1	17885
D130	PN 16	vert.	3300 - 10000	8.0 - 14.4	930 x 530 x 1190	G 1 ½" F	G 1 ½" F	Rp ½"	1	17887

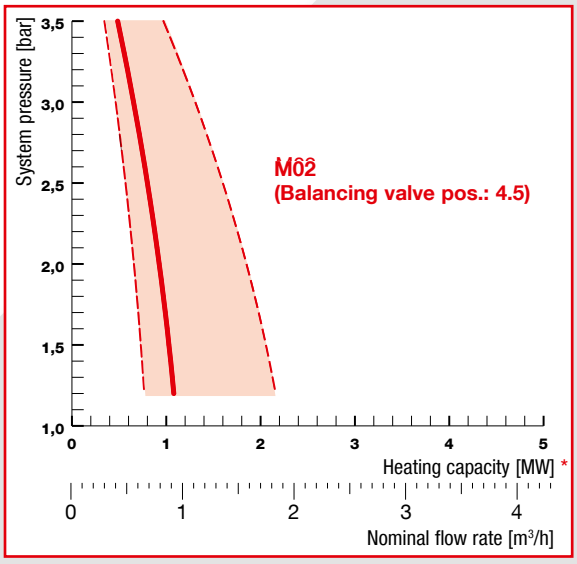
* For larger, more powerful systems please contact Flamco.

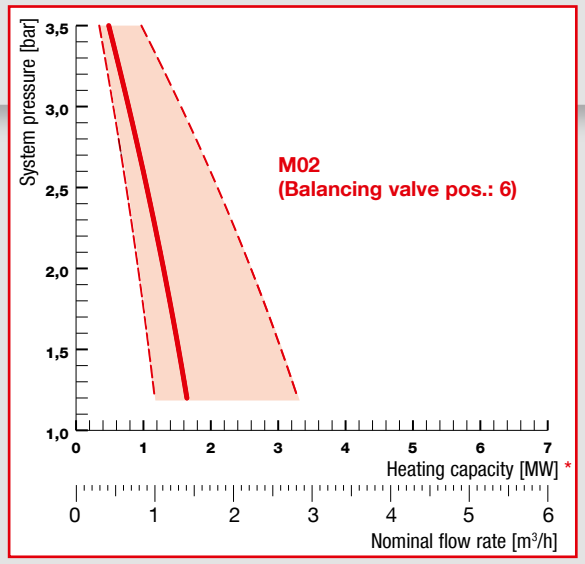
Flamcomat Pump Selection Graphs

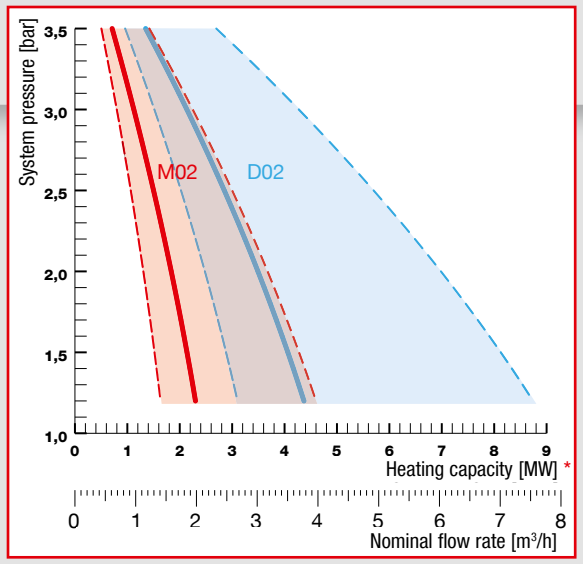
The Flamco calculation program for expansion automats determines the flow according to the exact contraction flow factor (VDI4708-2). You can find the calculation program for expansion automats at www.flamcogroup.com.

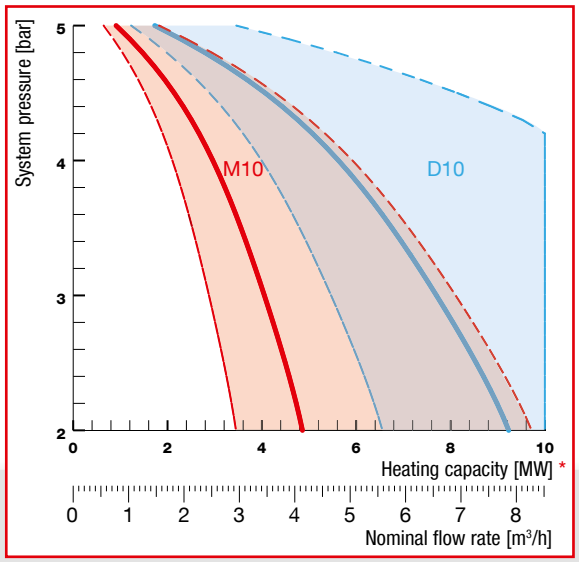
* based on 0.85 l/(kW*h)
** based on 0.65 l/(kW*h)

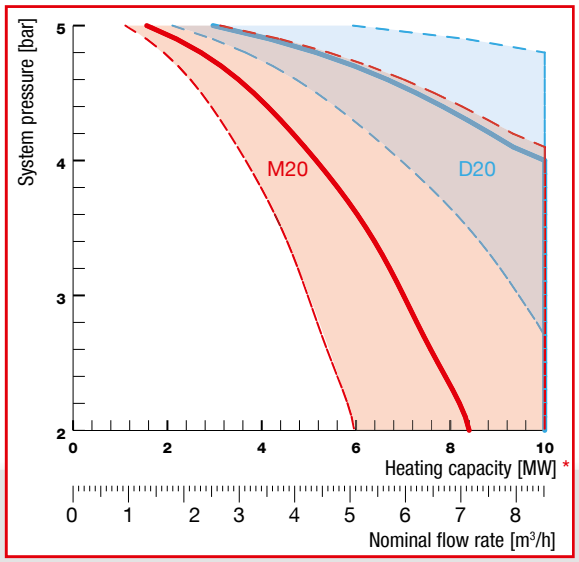


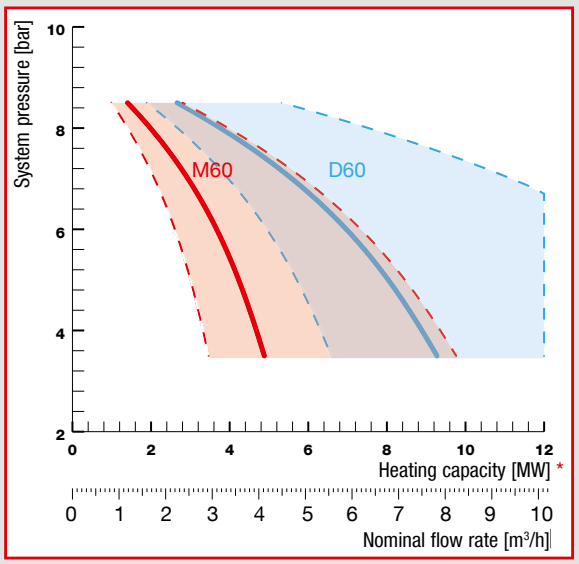


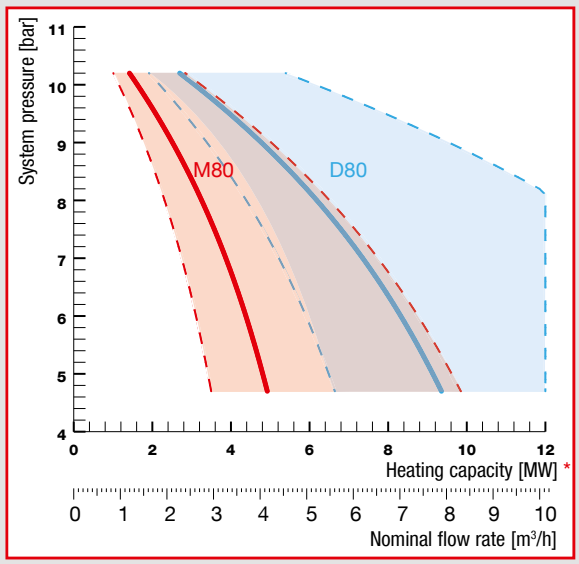


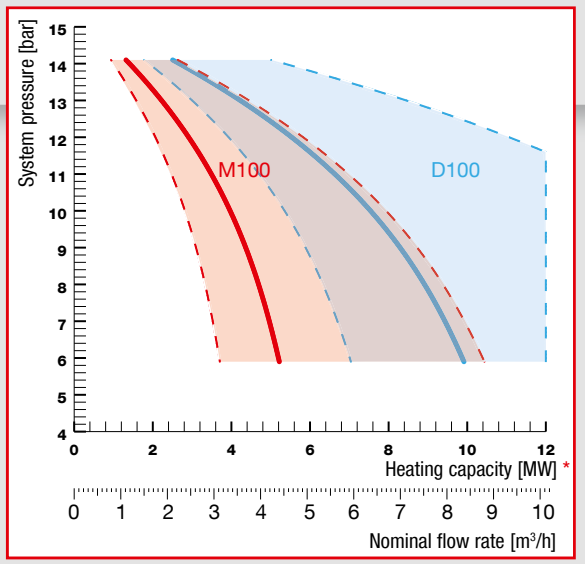


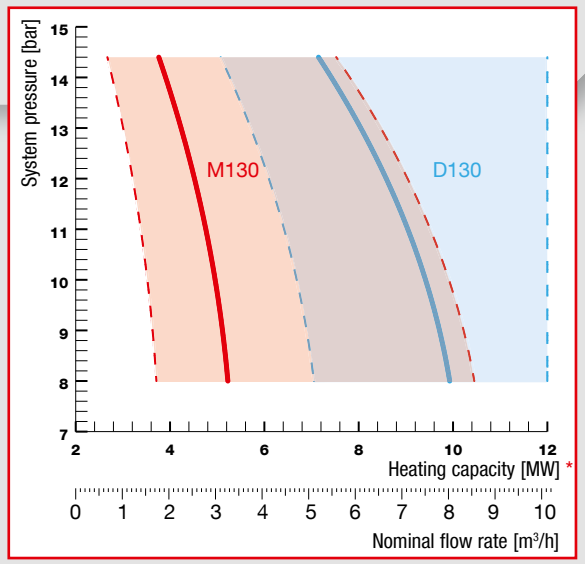












FLAMCOMAT VESSELS

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

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

- Unique pressure step degassing process, even when the system is in equilibrium, by combination of pressure drop and application of patented PALL-ring technology.
- Replaceable butyl bladder.
- Expansion fluid is stored at atmospheric pressure in the bladder.

- Flexible connections and hoses between pump unit and vessel to be ordered separately.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Vessels 100 - 1,000 litres: in accordance with EN13831 / 1,200 - 10,000 litres: in accordance with AD2000.
- Suitable for systems with a maximum flow temperature of 120 °C.
- Maximum temperature bladder: 70 °C.
- In accordance with European Pressure Equipment Directive 2014/68/EU and Machinery Directive 2006/42/EC.
- Red (RAL 3002) epoxy powder coating.

Flamcomat FG Main Vessels

Pressureless vessel without automat for the Flamcomat pump units.

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

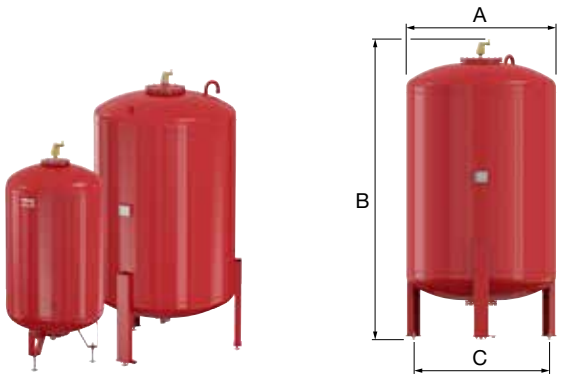
Type	Capacity [l]	Design pressure [PN]	Dimensions A [mm]	B [mm]	C [mm]	D [mm]	Syst. conn.	Weight [kg]		Order Code
FG 100	100	PN 6	484	1050	360	150	G 1 ½" M	35	1	17828
FG 200	200	PN 6	484	1560	360	150	G 1 ½" M	31	1	17820
FG 300	300	PN 6	600	1596	450	185	G 1 ½" M	41	1	17821
FG 400	400	PN 6	790	1437	610	185	G 1 ½" M	62	1	17822
FG 500	500	PN 6	790	1587	610	185	G 1 ½" M	70	1	17823
FG 600	600	PN 6	790	1737	610	185	G 1 ½" M	77	1	17824
FG 800	800	PN 6	790	2144	610	185	G 1 ½" M	92	1	17825
FG 1000	1000	PN 6	790	2493	610	185	G 1 ½" M	106	1	17826
FG 1200	1200	PN 3	1000	2210	1060	170	G 1 ½" M	291	1	17717
FG 1600	1600	PN 3	1000	2710	1060	170	G 1 ½" M	346	1	17718
FG 2000	2000	PN 3	1200	2440	1265	220	G 1 ½" M	431	1	17719
FG 2800	2800	PN 3	1200	3040	1265	225	G 1 ½" M	516	1	17720
FG 3500	3500	PN 3	1200	3840	1265	225	G 1 ½" M	626	1	17721
FG 5000	5000	PN 3	1500	3570	1570	225	G 1 ½" M	1241	1	17722
FG 6500	6500	PN 3	1800	3500	1885	225	G 1 ½" M	1711	1	17723
FG 8000	8000	PN 3	1900	3650	1985	225	G 1 ½" M	1831	1	17724
FG 10000	10000	PN 3	2000	4050	2085	225	G 1 ½" M	2026	1	17725

CE

Flamcomat FB Auxiliary Vessels

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

- Delivered with Flexvent Super and height adjustable feet.



Type	Capacity [l]	Design pressure [PN]	Dimensions A [mm]	B [mm]	C [mm]	Syst. conn.	Weight [kg]		Order Code
FB 100	100	PN 6	484	1050	360	G 1 ½" M	35	1	17829
FB 200	200	PN 6	484	1560	360	G 1 ½" M	31	1	17830
FB 300	300	PN 6	600	1596	450	G 1 ½" M	41	1	17831
FB 400	400	PN 6	790	1437	610	G 1 ½" M	62	1	17832
FB 500	500	PN 6	790	1587	610	G 1 ½" M	70	1	17833
FB 600	600	PN 6	790	1737	610	G 1 ½" M	77	1	17834
FB 800	800	PN 6	790	2144	610	G 1 ½" M	92	1	17835
FB 1000	1000	PN 6	790	2493	610	G 1 ½" M	106	1	17836
FB 1200	1200	PN 3	1000	2210	1060	G 1 ½" M	290	1	17767
FB 1600	1600	PN 3	1000	2710	1060	G 1 ½" M	345	1	17768
FB 2000	2000	PN 3	1200	2440	1265	G 1 ½" M	430	1	17769
FB 2800	2800	PN 3	1200	3040	1265	G 1 ½" M	515	1	17770
FB 3500	3500	PN 3	1200	3840	1265	G 1 ½" M	625	1	17771
FB 5000	5000	PN 3	1500	3570	1570	G 1 ½" M	1240	1	17772
FB 6500	6500	PN 3	1800	3500	1885	G 1 ½" M	1710	1	17773
FB 8000	8000	PN 3	1900	3650	1985	G 1 ½" M	1830	1	17774
FB 10000	10000	PN 3	2000	4050	2085	G 1 ½" M	2025	1	17775

CE

ACCESSORIES FOR FLAMCOMAT

Flamcomat drain sets

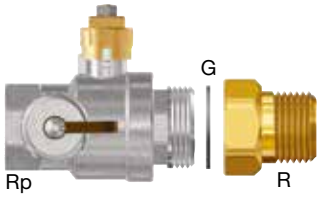
Drain off module for Flamcomat with SPC controller. Prevents against overfilling of main vessel when the expansion volume is temporarily larger than the volume of the vessel.
Available with water meter or pulse water meter for a flow (Kvs) of 16 or 20 m^3/h. The versions with a pulse water meter allow the monitoring of the flow rate by the SPC controller.

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

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

Ball Valve

With drain connection, PN 16, 120 °C.



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

Flexible Connecting Kit (set of 2)

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

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

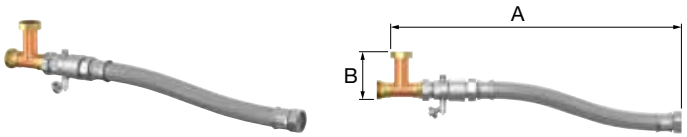
Gas Sensor Connecting Group

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

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

Auxiliary vessel connection Flamcomat

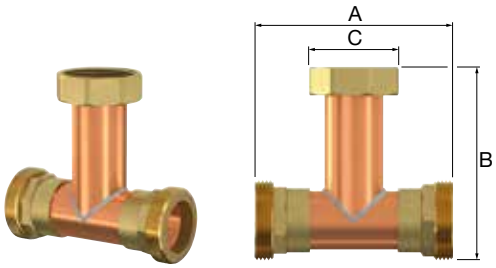
Connection set including T-piece PN10, hose and a block & bleed valve for easy installation of a Flamcomat FB auxiliary vessel. Use the pump connection from the FG main vessel for installing a FB auxiliary vessel with the connection set.



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

T-piece

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



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

Rotating Connection, Face Sealed

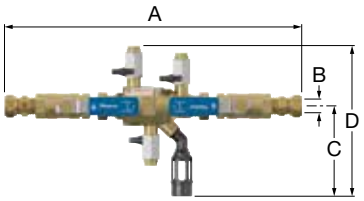
Type	Suitable for		Connection to		Weight [kg]		Order Code
	Pump	Nom.	Vessel	Pump			
Vessel connection type 4	MM - M80 (G3), DM - D80 (G3)	DN 25	G 1 1/2" F	R 1"	0.4	1	17730
Vessel connection type 5	M100 - M130, D100 - D130	DN 32	G 1 1/2" F	R 1 1/4"	0.5	1	17731

Prescor BFP BA

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

- Low pressure drop.
- Lowest sound class: ≤ 20 dB(A) according to DIN-52 218 Group I.
- Easy to install both horizontally and vertically.
- Provided with strainer.
- Smallest in its class.
- Complete set.

- Material: brass, SST, plastic and EPDM.
- Working temperature: 1 °C / 65 °C.
- Nominal design pressure: PN 10.



Type	DN (syst.)	Connection (B)	Dimensions A [mm]	C [mm]	D [mm]	Vessel capacity [l]	Ball valves (2x)	Weight [kg]		Order Code
Prescor BFP BA ½ M	15	G ½" M	171	105	175	≤ 3500	-	0.83	1	27400
Prescor BFP BA G ¾ M Unit	15	G ¾" M	288	105	175	≤ 3500	•	1.46	1	27402
Prescor BFP BA K15 Unit	15	K 15	351	105	175	≤ 3500	•	1.52	1	27406

Backflow preventer BA

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

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

Type	Connection	Vessel capacity [l]	K_{vs} [m³/h]	Weight [kg]		Order Code
Backflow preventer	Rp ½" - R ½"	> 3500	3.5	0.6	1	17736

Pressure Safety Switch

Type	Connection ["]		Order Code
Minimum pressure switch	G ½"	1	27459
Maximum pressure switch	G ½"	1	27458

Bimetallic Temperature Switch

Electromechanical switch with fixed switching temperature of 70 °C.
Flamcomat: Reaching 70 °C is detected as an error and is stored in the error memory. When this temperature is reached the temperature switch prevents the system from degassing until the temperature falls below 70 °C again.
M-K automats: Reaching 70 °C is detected as an error and is stored in the error memory.

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

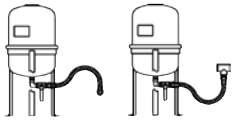
Type		Order Code
Bimetallic Temperature Switch	1	17659

Impulse Output Water Meter

- PN 10, 90 °C.
- 50 Hz.

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

Surge Vessel (PN 6)



Type	Capacity [l]	Dimensions Ø [mm]	Dimensions H. [mm]	Syst. conn.	Weight [kg]		Order Code
Surge vessel type M	18	286	600	½"	8.5	1	17732
Surge vessel type D	18	286	600	1 ¼"	10	1	17733

OPTIONAL CONTROL UNITS

Easycontact

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

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

Diaphragm Rupture Sensor

Remote monitoring.

- Can be integrated at a later date.

Type	Control unit		For automat				Order Code
	SCU	SPC	M-K/C	M-K/U	Flamco-mat		
Diaphragm rupture sensor	-	✔	-	✔	✔	1	22386

Analogue Signalling

For analogue signalling (0-10 V) of vessel volume (0-100%) and system pressure (0-16 bar).
- Internal.
- Build-in afterwards is possible.
- Setting up data processing and visualisation is the responsibility of the installer.

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

SD Card Module

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

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

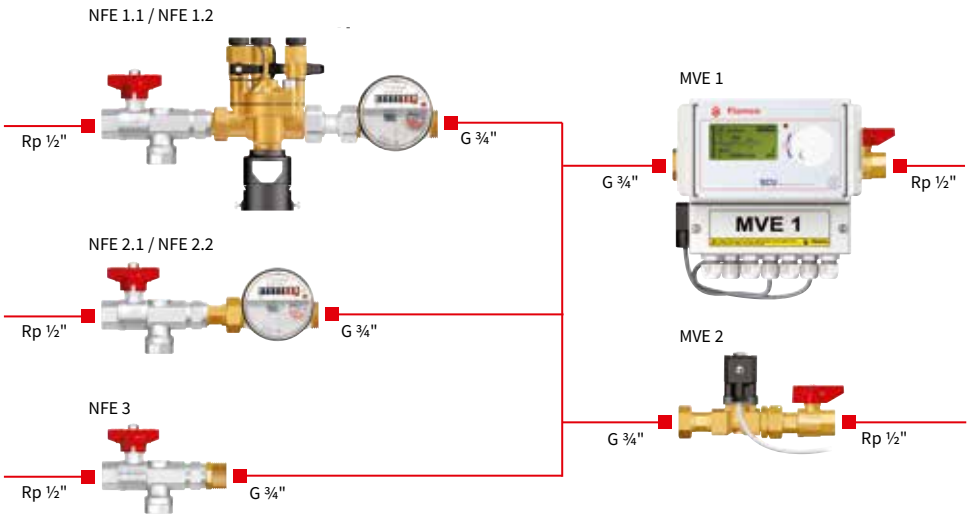
SPC Extension module

Connection module for communication between two controls.
- For SPC control.
- Makes linked operating options possible (Configuration and Commissioning by Flamco Service Only).

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

ACCESSORIES FOR FILLING

For heating and chilled water (cooling) installations.



MVE 1 Direct Pressurisation Control

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

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

Type	L. [mm]	Connection to		Weight [kg]		Order Code
		Potable water	System			
MVE 1	300	G ¾"	Rp ½"	9	1	23785

MVE 2 Solenoid Valve Unit

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

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

Type	L. [mm]	Connection to		Weight [kg]		Order Code
		Potable water	System			
MVE 2	175	G ¾"	Rp ½"	2	1	23786

NFE 1 Top-up Unit

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

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

Type	L. [mm]	Connection to		K_{vs} (Backflow-preventer) [m³/h]	Weight [kg]		Order Code
		Potable water	System				
NFE 1.1	355	Rp ½"	G ¾"	2	3	1	23780
NFE 1.2 *	355	Rp ½"	G ¾"	2	3	1	23781

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

NFE 2 Top-up Unit

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

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

Type	L. [mm]	Connection to		Weight [kg]		Order Code
		Potable water	System			
NFE 2.1	200	Rp ½"	G ¾"	2	1	23782
NFE 2.2 *	200	Rp ½"	G ¾"	2	1	23783

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

NFE 3 Top-up Unit

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

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

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

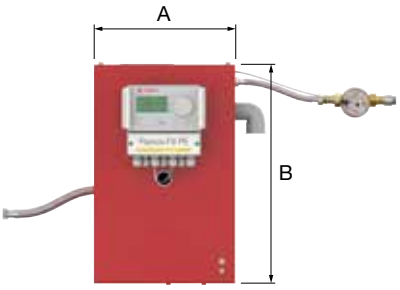
* NFE 3 is not necessary if the top-up water is free from impurities > 0.2 mm, the system has not been filled from a district-heating system and sufficient filters have been fitted for the solenoid valve (MVE).

Flamco-Fill PE Top-up Unit (pressurisation)

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

- Particularly suitable for small feed pressures for medium and large heating and cooling systems.
- For separating potable water supply and the closed system a break tank is used which does not require any backflow preventer.
- With impulse water meter for monitoring the amount of water added.
- Any malfunctions will result in a visible alarm and may be made visible automatically in the malfunction log, even via remote control (dead socket).
- Convenient operation with constant display of all important operating parameters.
- Active process menu (active diagram with the status of switching elements and sensors).
- Topping-up according to DIN EN 1717 and DIN 1988.
- Control unit can also be used in water preparation systems.
- 17 languages can be selected in the menu (eg: D, GB, NL and F)
- RS 485 interface.

- Electricity supply: 230 V / 50-60 Hz.
- Mains water pressure (potable water inlet): 1 - 10 bar.
- Nominal system pressure: 1 - 9 bar (PN 10).
- Working temperature (inlet side): 3 °C / 30 °C.
- Maximum flow rate: 210 l/h.
- In accordance with European Pressure Equipment Directive 2014/68/EU and Machinery Directive 2006/42/EC.



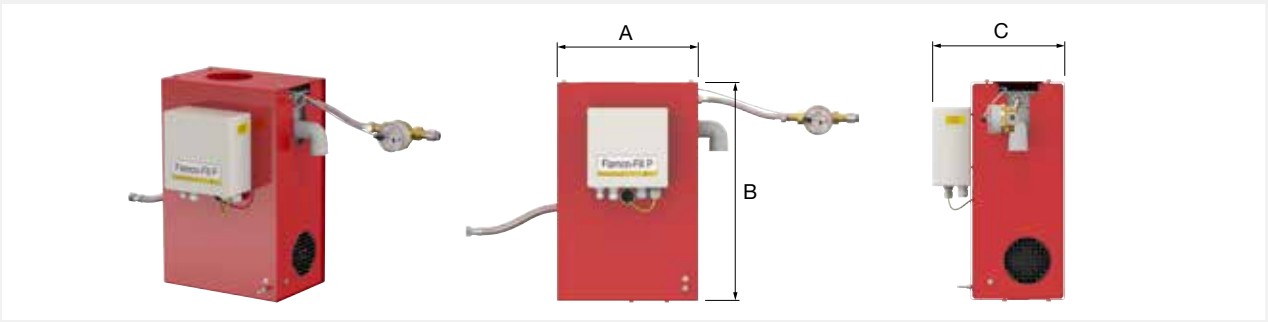
Type	Dimensions			Connection to		Weight [kg]		Order Code
	A [mm]	B [mm]	C [mm]	Potable water	System			
Flamco-Fill PE	400	495	320	G 1/2"	G 1/2"	25	1	23757

kiwa

Flamco-Fill P

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

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



Type	Dimensions			Connection to		Weight [kg]		Order Code
	A [mm]	B [mm]	C [mm]	Potable water	System			
Flamco-Fill P	400	495	305	G ½"	G ½"	24	1	17665

Feet for Flamco-Fill PE / P

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

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

Flamco pressurisation equipment

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

Digital pressurisation equipment including:

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

Selection Essentials

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

Flexfiller Standard

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

Flexfiller Midi / IP66

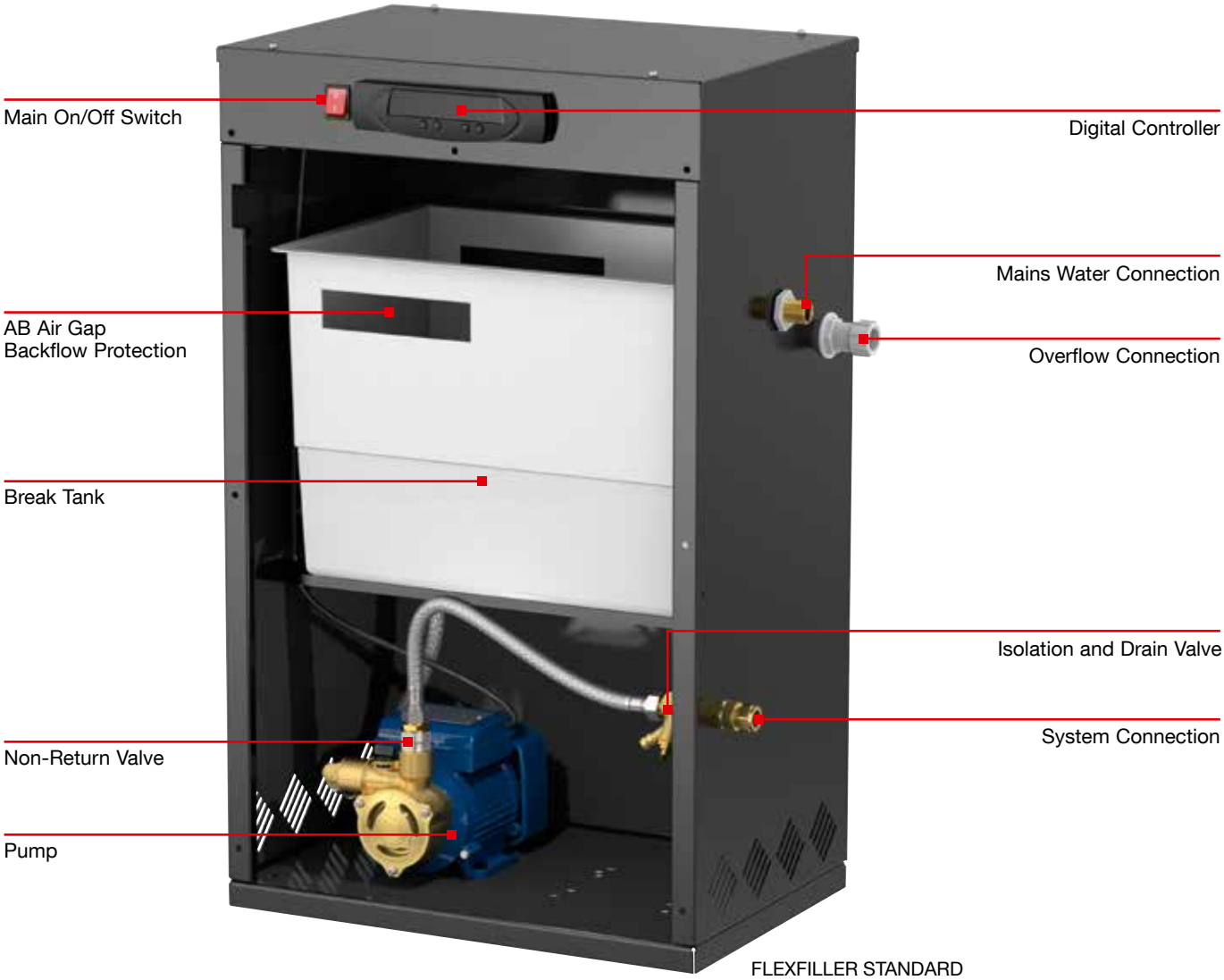
- Wall mounted, <12 l/min flow rate top-up pressurisation unit.
- 4 litre break tank.
- IP66: With IP66 rated cabinet.

PressDS

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

Flexfiller Twin System

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



FLEXFILLER STANDARD

Digifiller

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

Flexfiller Plus & Midifill Plus

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

Flexfiller Mini Digital

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

PressDS Plus

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

Pressurisation Units Features & Options

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

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

General Technical Data and System Limits

Materials & Technical:

Housing: Mild Steel CR4.
Finish: Powder Coating.
Break Tank: WRAS Approved material.
Pump: See pump details.
Fluid Category Protection: Type AB Weir Overflow gap / Category 5.
Controller: MODBUS.
Directive: PED 2014/68/EU.
Required Supply Voltage: 230V/1/50Hz (2160D: 415V/3/50Hz).

System:

International Protection Marking: IP 54.
Ambient Temperature: 5 - 40 °C.
Operating Temperature: 5 - 85 °C.
Noise rating : <75 dBA.
Pressure rating: PN10 (2160D: PN16).
Nominal Operating Pressure Range: 1-16 bar.

Type		Function			Number of Pumps	Pressure Rating [PN]	Max. Delivery Pressure [bar]	Max. Delivery Flow Rate [l/min]	Floor Standing / Wall Mounted	Break Tank Capacity [l]	System Volume (guide) [l]
		Pressu-risation	De-gasser	Dosing							
Flexfiller + Flexfiller 60Hz	125D	•			1	10	2.5	18	floor	18	< 60000
	225D	•			2	10	2.5	18	floor	18	< 60000
	150D	•			1	10	5.0	18	floor	18	< 60000
	250D	•			2	10	5.0	18	floor	18	< 60000
	180D	•			1	16	8.0	18	floor	18	< 60000
	280D	•			2	16	8.0	18	floor	18	< 60000
	2160D	•			2	16	16.0	18	floor	18	< 60000
Midi + IP66	125D	•			1	10	2.5	12	wall	4	< 16000
	225D	•			2	10	2.5	12	wall	4	< 16000
	150D	•			1	10	5.0	12	wall	4	< 16000
	250D	•			2	10	5.0	12	wall	4	< 16000
Mini Digital	130D	•			1	10	3.0	0.4	wall	2	< 2600
	230D	•			2	10	3.0	0.4	wall	2	< 2600
Digifiller	0.5	•			1	10	2.5	12	wall	4	< 16000
	1.0	•			1	10	2.5	12	wall	4	< 16000
	1.5	•			1	10	2.5	12	wall	4	< 16000
	2.0	•			1	10	2.5	12	wall	4	< 16000
Twin System	2x125D	•			2 *	10	2.5	18	floor	18	< 60000
	2x225D	•			4 **	10	2.5	18	floor	18	< 60000
	2x250D	•			4 **	10	5.0	18	floor	18	< 60000
PressDS	225	•			2	10	2.5	18	floor	4	< 60000
	250	•			2	10	5.0	18	floor	4	< 60000
	280	•			2	16	8.0	18	floor	4	< 60000
Flexfiller Plus	Midifill Plus 150D	•	•		1	10	5.0	12	wall	4	< 50000
	250D	•	•		2	10	6.0	12	floor	18	< 300000
	280D	•	•		2	10	8.0	12	floor	18	< 300000
	2160D	•	•		2	16	16.0	12	floor	18	< 300000
PressDS Plus	250	•	•	•	2	10	6.0	18	floor	4	< 300000
	280	•	•	•	2	10	8.0	18	floor	4	< 300000
	2160	•	•	•	2	16	16.0	18	floor	4	< 300000

* = 1 pump for each system
** = 2 pumps for each system.

Features and Options

Type		Mechanical Features																	Electrical Features																													Volt Free Contacts								
		Cabinet	IP66 rated Cabinet	Wall mounted	Floor mounted	Duty pump	Vacuum Cylinder	Duty / Standby pumps	Pump inlet Strainer	Pump Non return valve	Category 5 A/B air gap to BS13077	WRAS approved float	Additive Tank	Break Tank	Cold fill pressure 0-3.5 bar	Cold fill pressure 3.5-6.0 bar	Cold fill pressure 6.0-8.0 bar	Cold fill pressure 8.0-16.0 bar	Pressure switch control	Microprocessor control with LED display	Cabinet heater	Pressure transducer control	Password protection	pump trip and fail monitoring	Pump check routine	System quick-fill mode	System flood detection	Service due reminder	Adjustable differential	Cascade - duty / assist	Manuel run	Turbo Mode	Perge Seconds	Low water alarm	High water alarm	Excessive starts alarm	Hours run	Pump activation counter	Pump interrupted counter	Alarm logging	Audible alarm	Anti seize run (60 days)	Automatic duty rotation (twin pumps units)	MODBUS	BACnet	RS485 Connectivity	Mechanical high/low pressure switch with VFC (N/C)	Boiler interlock (N/C)	Common alarm (N/C)	Fail safe	Low pressure (N/O)	High pressure (N/O)	Sensor Health (N/O)	Pump trip with VF contacts (N/O)	High/low alarm set points with auto reset with VF contacts (N/O)
Flexfiller + Flexfiller 60Hz	125D	•			•	•			•	•	•	•		•	•					•		•	•	•	•	•	•	•	•		•			•	o	•	•	•	•	•	•	•		•	o	•		•	•	•	•	•	•	•	•
	225D	•			•	•		•	•	•	•	•		•	•					•		•	•	•	•	•	•	•	•	o	•			•	o	•	•	•	•	•	•	•	•	•	o	•		•	•	•	•	•	•	•	•
	150D	•			•	•		•	•	•	•	•		•		•				•		•	•	•	•	•	•	•	•		•			•	o	•	•	•	•	•	•	•		•	o	•		•	•	•	•	•	•	•	•
	250D	•			•	•		•	•	•	•	•		•		•				•		•	•	•	•	•	•	•	•	o	•			•	o	•	•	•	•	•	•	•	•	•	o	•		•	•	•	•	•	•	•	•
	180D	•			•	•			•	•	•	•		•			•			•		•	•	•	•	•	•	•	•		•			•	o	•	•	•	•	•	•	•		•	o	•		•	•	•	•	•	•	•	•
	280D	•			•	•		•	•	•	•	•		•			•			•		•	•	•	•	•	•	•	•	o	•			•	o	•	•	•	•	•	•	•	•	•	o	•		•	•	•	•	•	•	•	•
	2160D	•			•	•		•	•	•	•	•		•				•		•		•	•	•	•	•	•	•	•	o	•			•	o	•	•	•	•	•	•	•	•	•	o	•		•	•	•	•	•	•	•	•
Midi	125D	•		•		•			•	•	•	•		•	•					•		•	•	•	•	•	•	•	•		•			•	o	•	•	•	•	•	•	•		•	o	•		•	•	•	•	•	•	•	•
	225D	•		•		•		•	•	•	•	•		•	•					•		•	•	•	•	•	•	•	•	o	•			•	o	•	•	•	•	•	•	•	•	•	o	•		•	•	•	•	•	•	•	•
	150D	•		•		•		•	•	•	•	•		•		•				•		•	•	•	•	•	•	•	•		•			•	o	•	•	•	•	•	•	•		•	o	•		•	•	•	•	•	•	•	•
	250D	•		•		•		•	•	•	•	•		•		•				•		•	•	•	•	•	•	•	•	o	•			•	o	•	•	•	•	•	•	•	•	•	o	•		•	•	•	•	•	•	•	•
Midi IP66	125D	•	•	•		•			•	•	•	•		•	•					•	•	•	•	•	•	•	•	•	•		•			•	o	•	•	•	•	•	•	•		•	o	•		•	•	•	•	•	•	•	•
	225D	•	•	•		•		•	•	•	•	•		•	•					•	•	•	•	•	•	•	•	•	•	o	•			•	o	•	•	•	•	•	•	•	•	•	o	•		•	•	•	•	•	•	•	•
	150D	•	•	•		•		•	•	•	•	•		•		•				•	•	•	•	•	•	•	•	•	•		•			•	o	•	•	•	•	•	•	•		•	o	•		•	•	•	•	•	•	•	•
	250D	•	•	•		•		•	•	•	•	•		•		•				•	•	•	•	•	•	•	•	•	•	o	•			•	o	•	•	•	•	•	•	•	•	•	o	•		•	•	•	•	•	•	•	•
Mini Digital	130D	•		•		•				•	•	•		•	•					•		•	•	•	•		•	•	•		•			•	o	•	•	•	•	•	•	•		•	o	•		•	•	•	•	•	•	•	•
	230D	•		•		•		•		•	•	•		•	•					•		•	•	•	•		•	•	•	o	•			•	o	•	•	•	•	•	•	•		•	o	•		•	•	•	•	•	•	•	•
Digifiller	0.5	•		•		•			•	•	•	•		•	•	•				•		•	•	•	•	•	•	•	•		•			•	o	•	•	•	•	•	•	•		•	o	•		•	•	•	•	•	•	•	•
	1.0	•		•		•			•	•	•	•		•						•		•	•	•	•	•	•	•	•		•			•	o	•	•	•	•	•	•	•		•	o	•		•	•	•	•	•	•	•	•
	1.5	•		•		•			•	•	•	•		•						•		•	•	•	•	•	•	•	•		•			•	o	•	•	•	•	•	•	•		•	o	•		•	•	•	•	•	•	•	•
	2.0	•		•		•			•	•	•	•		•						•		•	•	•	•	•	•	•	•		•			•	o	•	•	•	•	•	•	•		•	o	•		•	•	•	•	•	•	•	•
Twin System	2x125D	•			•	•			•	•	•	•		•	•					•		•	•	•	•	•	•	•	•		•			•	o	•	•	•	•	•	•	•		•	o	•		•	•	•	•	•	•	•	•
	2x225D	•			•	•		•	•	•	•	•		•	•					•		•	•	•	•	•	•	•	•	o	•			•	o	•	•	•	•	•	•	•	•	•	o	•		•	•	•	•	•	•	•	•
	2x250D	•			•	•		•	•	•	•	•		•		•				•		•	•	•	•	•	•	•	•	o	•			•	o	•	•	•	•	•	•	•	•	•	o	•		•	•	•	•	•	•	•	•
PressDS	225	•			•	•		•	•	•	•	•	•	•	•					•		•	•	•	•	•	•	•	•	o	•			•		•	•	•	•	•	•	•	•	•	o	•		•	•	•	•	•	•	•	•
	250	•			•	•		•	•	•	•	•	•	•		•				•		•	•	•	•	•	•	•	•	o	•			•		•	•	•	•	•	•	•	•	•	o	•		•	•	•	•	•	•	•	•
	280	•			•	•		•	•	•	•	•	•	•			•			•		•	•	•	•	•	•	•	•	o	•			•		•	•	•	•	•	•	•	•	•	o	•		•	•	•	•	•	•	•	•
Flexfiller Plus	Midi	•		•		•	•		•	•	•	•		•		•				•		•	•	•	•	•	•	•	•		•	•	•	•	o	•	•	•	•	•	•	•		•	o	•		•	•	•	•	•	•	•	•
	250D	•			•	•	•	•	•	•	•	•		•		•				•		•	•	•	•	•	•	•	•	o	•	•	•	•	o	•	•	•	•	•	•	•	•	•	o	•		•	•	•	•	•	•	•	•
	280D	•			•	•	•	•	•	•	•	•		•			•			•		•	•	•	•	•	•	•	•	o	•	•	•	•	o	•	•	•	•	•	•	•	•	•	o	•		•	•	•	•	•	•	•	•
	2160D	•			•	•	•	•	•	•	•	•		•				•		•		•	•	•	•	•	•	•	•	o	•	•	•	•	o	•	•	•	•	•	•	•	•	•	o	•		•	•	•	•	•	•	•	•
PressDS Plus	250	•			•	•	•	•	•	•	•	•	•	•		•				•		•	•	•	•	•	•	•	•	o	•	•	•	•	o	•	•	•	•	•	•	•	•	•	o	•		•	•	•	•	•	•	•	•
	280	•			•	•	•	•	•	•	•	•	•	•			•			•		•	•	•	•	•	•	•	•	o	•	•	•	•	o	•	•	•	•	•	•	•	•	•	o	•		•	•	•	•	•	•	•	•
	2160	•			•	•	•	•	•	•	•	•	•	•				•		•		•	•	•	•	•	•	•	•	o	•	•	•	•	o	•	•	•	•	•	•	•	•	•	o	•		•	•	•	•	•	•	•	•

N/O = Normally Open
N/C = Normally Closed
o = Option

Installation and Schematic Layouts

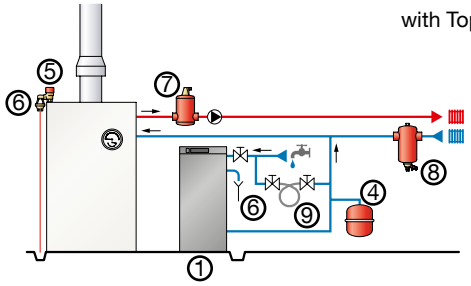
Installation and Placement

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

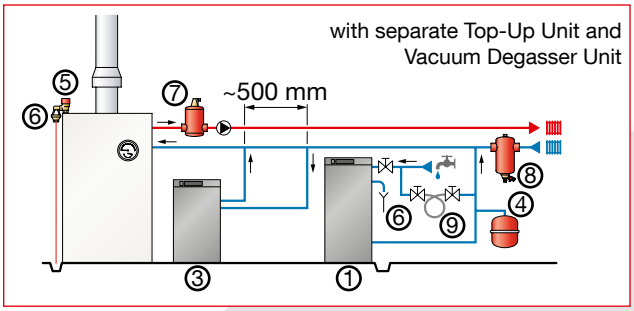
Connected to the system return pipe, to provide a neutral pressure reading. With combined units the two system connections must be installed on the return pipe approximately 0.5 metre apart.

System Schematics

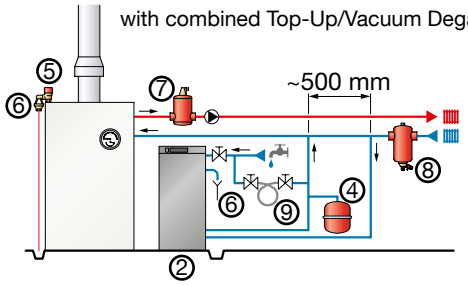
with Top-Up Unit



with separate Top-Up Unit and Vacuum Degasser Unit



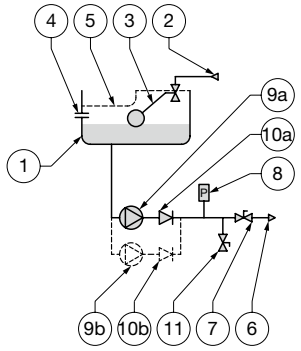
with combined Top-Up/Vacuum Degasser Unit



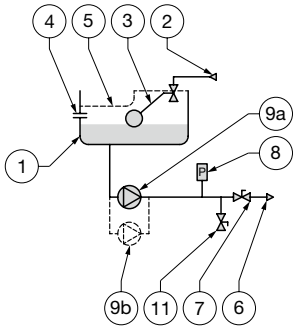
Nr	Description
1	Flexfiller Top-Up Unit
2	Flexfiller Plus / PressDS Plus Combined Unit
3	PSD Pressure Step Degasser
4	Flexcon Expansion Vessel
5	Prescor Safety Valve
6	Tundish
7	Flamcovent Smart Deaerator
8	Flamco Clean Smart Dirt Separator
9	Filling Loop (Optional)

Product Schematics

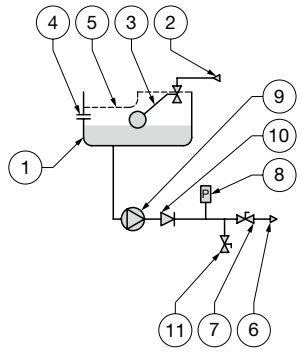
Flexfiller / Midi / IP66



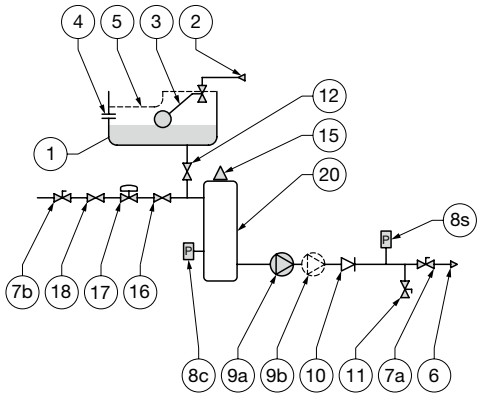
Flexfiller Mini Digital



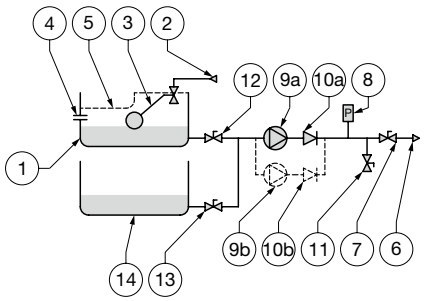
Digifiller



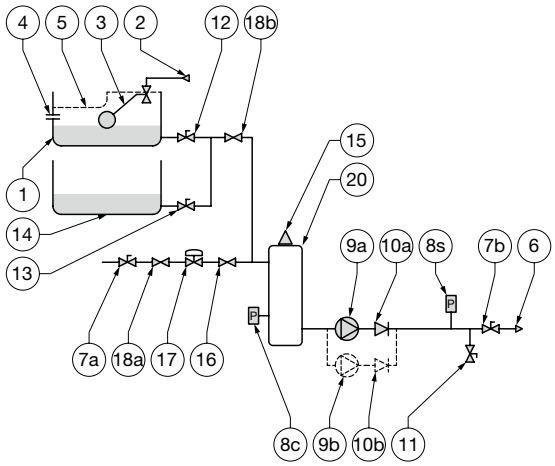
Flexfiller Plus



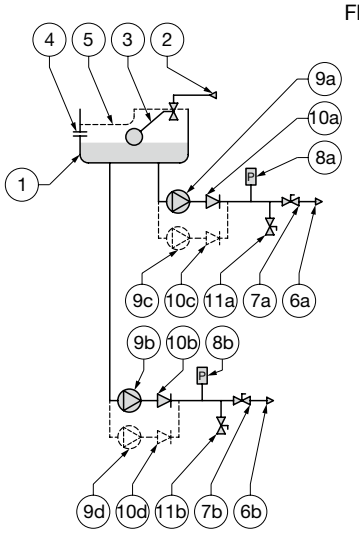
PressDS



PressDS Plus



Flexfiller Twin



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

Pressurization Units Pump Details

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

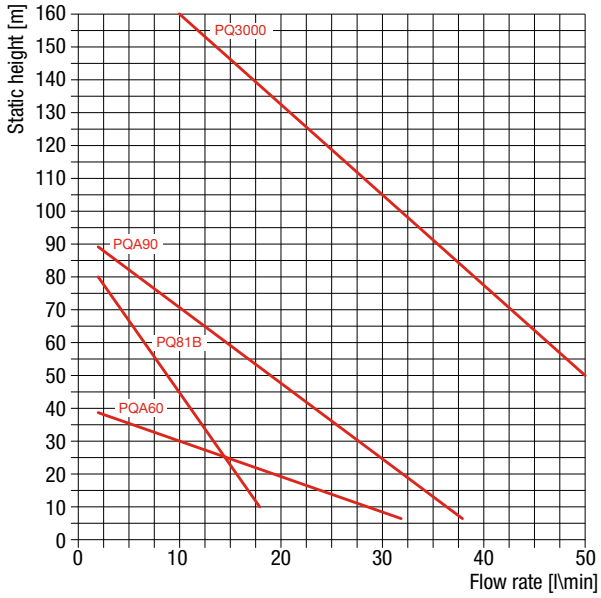
Pump Characteristics

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

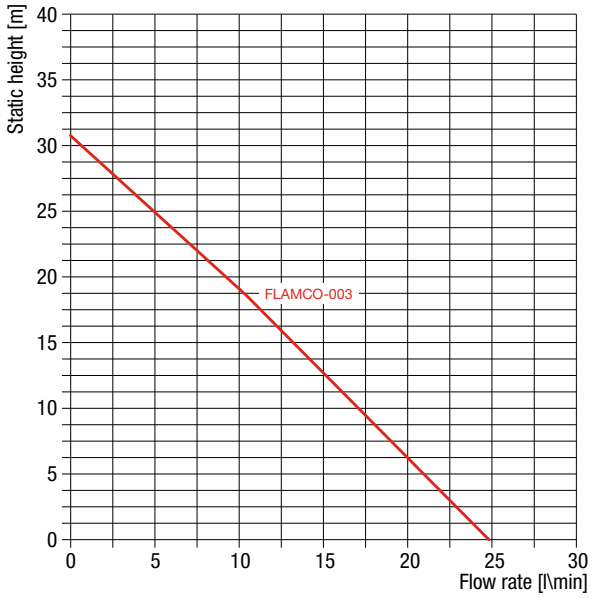
Pump Graphs

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

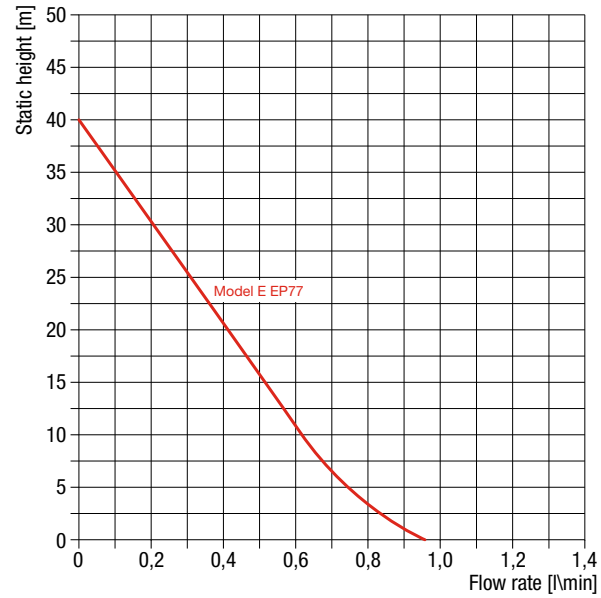
Pedrollo



Watermill



Ulka



Spare Parts Pressurisation Units

Type		Spare Part																																																							
		Controller	Mini Transformer	Rocker switch	Pressure Transducer (0-10 Bar, 1-6V)	Pressure Sensor 16b (1-6V)	Combined Isolation & Drain Valve	½" Non-Return Valve	½" x 15mm C x MI Coupling	Float Valve	Mini Float Valve	Overflow Connection	Float Switch L90 cm wire	Float Switch L55 cm wire	Float switch for glycol tank	Mesh Strainer	¼" Brass Locking Nut	¼" BSP M x 8mm Push-Fit	Flanged Tank Connector 15 mm	Extended Tank Connector ½" x 15 mm	¼" BSP F Tee	¼" Ball Valve	40 mm Pressure Gauge c/w Capillary	8mm Push-Fit Tee	Pump Control Pressure Switch	High/Low Pressure Switch	Fused Terminal Block	6mm x 8mm Push-Fit Manifold	DN15 Balancing Valve - Glycol / Water	½" Tee Brass	Pump Elbow 4mm	Tank Elbow 4mm	4mm Tube	½" x 15 mm MI Elbow	Flexible Pump Support	6 mm Poly-tube	8 mm Hose Tail	8 mm Poly-tube	PSD Controller	Vacuum Cylinder 4.8ltr	Vacuum Cylinder Midi	Vacuum Pressure Sensor	Solenoid Valve ½" (Slam shut)	Solenoid Valve ½" 1mm Hole (Bypass)	AC Solenoid Coil Clip-on BB240AS	RSF86Y100R Cynergy3	Pressure Reducing Valve	PSD & SPC Air Vent With Air Intake Preventor	Gauze	22 mm x ½" F Coupling	Prescor B 6 bar ¾" Inlet 1" Outlet	Prescor ½" 3 Bar Safety Relief Valve	Flexible Hose	Pump Pedrollo PQA60	Pump Pedrollo PQ81B	Pump Pedrollo PQA90	Pump Pedrollo PQ3000	Pump Flamco 003 2.5 bar	Pump UKLA EP77 Model E
		Article number																																																							
		Micro Control	EL-TRANS-001	BSS F014	1-6V TRANSDUCER	060G3853	FCCG NO	FC SC1	BSS F16	BSS P33	BSS M003	BSS M021	EL-TK-FSW-L90	EL-TK-FSW-L55	FLOAT SWT GLYCOL	N/A	BSS M006	BSS M007	BSS F18	BSS F11	BSS P62	BSS M005	BSS M004	BSS M008	FC TBV BOSS	FC TBV TWIN	BSS R002	FC MANIFOLD 8X6	FC044	BSS P61	FC384	FC545	FC392	BSS F12	BSS M022	BSS M014	BSS M023	BSS M015	PSD Controller	PSD SS Cylinder	MIDI CYLINDER	Vac Transducer	PSD S001A	PSD S001A Mod	PSD S001B/C	PSD Float Switch	FC PRV 050WG	FC Ventsuper AIV	FC336	FC361	FCBP 75	FCSV050	BSS Flexhose	BSS PQA 60	BSS PQ81b	FC039	FC042	Flamco 003	BSS M024
Flexfiller + Flexfiller 60Hz	125D	•	•	•	•		•	•	•	•		•	•			•				•		•												•																			•	•					
	225D	•	•	•	•		•	•	•	•		•	•			•				•		•												•																			•	•					
	150D	•	•	•	•		•	•	•	•		•	•			•				•		•												•																			•		•				
	250D	•	•	•	•		•	•	•	•		•	•			•				•		•												•																			•		•				
	180D	•	•	•	•		•	•	•	•		•	•			•				•		•												•																			•			•			
	280D	•	•	•	•		•	•	•	•		•	•			•				•		•												•																			•			•			
	2160D	•	•	•		•	•	•	•	•		•	•			•				•		•												•																			•				•		
Flexfiller Midi + Flexfiller IP66	125D	•	•	•	•		•	•	•		•	•		•		•			•															•																			•	•					
	225D	•	•	•	•		•	•	•		•	•		•		•			•															•																			•	•					
	150D	•	•	•	•		•	•	•		•	•		•		•			•															•																			•		•				
	250D	•	•	•	•		•	•	•		•	•		•		•			•															•																			•		•				
Digifiller	0.5	•	•	•	•		•	•			•	•		•					•												•	•	•																				•					•	
	1.0	•	•	•	•		•	•			•	•		•					•												•	•	•																				•					•	
	1.5	•	•	•	•		•	•			•	•		•					•												•	•	•																				•					•	
	2.0	•	•	•	•		•	•			•	•		•					•												•	•	•																				•					•	
Flexfiller Mini Digital	130D	•	•	•	•						•	•		•			•	•			•	•		•											•		•	•																					•
	230D	•	•	•	•						•	•		•			•	•			•	•		•											•		•	•																					•
PressDS	225D	•	•	•	•		•	•	•	•	•	•	•		•				•										•	•				•																			•	•					
	250D	•	•	•	•		•	•	•	•	•	•	•		•				•										•	•				•																			•		•				
	280D	•	•	•	•		•	•	•	•	•	•	•		•				•										•	•				•																			•			•			
Flexfiller Twin System	2 x 125D	•	•	•	•		•	•	•	•		•	•			•						•												•																			•	•					
	2 x 225D	•	•	•	•		•	•	•	•		•	•			•						•												•																			•	•					
	2 x 250D	•	•	•	•		•	•	•	•		•	•			•						•												•																			•		•				
Flexfiller Plus	Midifill	•	•	•	•		•	•	•		•	•		•		•			•															•					•		•	•	•	•	•	•	•	•	•	•		•	•		•				
	250D	•	•	•	•		•	•	•	•		•	•			•				•														•					•	•		•	•	•	•	•	•	•	•	•	•		•		•				
	280D	•	•	•	•		•	•	•	•		•	•			•				•														•					•	•		•	•	•	•	•	•	•	•	•	•		•			•			
	2160D	•	•	•		•	•	•	•	•		•	•			•				•														•					•	•		•	•	•	•	•	•	•	•	•	•		•				•		
PressDS Plus	250D	•	•	•	•		•	•	•		•	•			•	•			•										•	•				•					•	•		•	•	•	•	•	•	•	•	•	•		•		•				
	280D	•	•	•	•		•	•	•		•	•			•	•			•										•	•				•					•	•		•	•	•	•	•	•	•	•	•	•		•			•			
	2160D	•	•	•		•	•	•	•		•	•			•	•			•										•	•				•					•	•		•	•	•	•	•	•	•	•	•	•		•				•		

STANDARD DIGITAL PRESSURISATION PRODUCT RANGE

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

Application:
- Commercial.
- Industrial.
- Residential.

System Volume (Guide): < 300,000 litres - Flexfiller
System Volume (Guide): < 50,000 litres - Flexfiller Midi
System Volume (Guide): < 2,600 litres - Flexfiller Mini Digital

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

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

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

Flexfiller

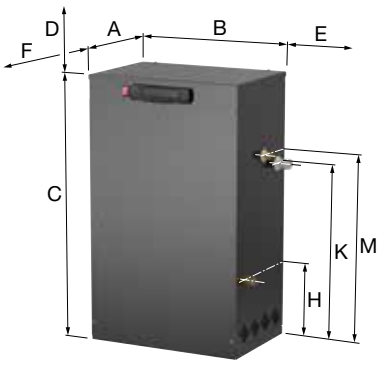
The Flexfiller is a floor standing, high flow rate (<18 l/min) top-up pressurisation unit with 18 litre break tank.

Product Features:

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

Factory fit options:

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



Type	Pump quantity	Connections			Max. Delivery Pressure [bar]	Power Consumption [kW]	Full Load Current [A]	Weight [kg]		Order Code
		System [mm]	Mains Supply [mm]	Overflow [mm]						
Flexfiller 125D	1	15 (1/2" M)	15 (1/2" M)	22	2.5	0.37	2.6	29	1	17395
Flexfiller 150D	1	15 (1/2" M)	15 (1/2" M)	22	5	0.5	3.4	31	1	17396
Flexfiller 225D	2	15 (1/2" M)	15 (1/2" M)	22	2.5	0.37	2.6	35	1	17397
Flexfiller 250D	2	15 (1/2" M)	15 (1/2" M)	22	5	0.5	3.4	39	1	17398
Flexfiller 180D	2	15 (1/2" M)	15 (1/2" M)	22	8	0.75	5.6	34	1	45049
Flexfiller 280D	2	15 (1/2" M)	15 (1/2" M)	22	8	0.75	5.6	45	1	17394
Flexfiller 2160D	2	15 (1/2" M)	15 (1/2" M)	22	16	2.2	6.6	67	1	17393

kiwa

Dimensions Flexfiller

Type	Dimensions								
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	H [mm]	K [mm]	M [mm]
Flexfiller 125D - 280D	470	320	800	500	150	800	225	550	590
Flexfiller 2160D	600	390	800	500	150	800	225	550	590

Flexfiller Mini Digital

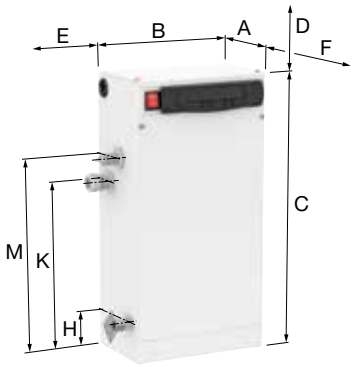
The Flexfiller Mini Digital is a narrow wall mounted, low flow rate (0.4 l/min) top-up pressurisation unit with 2 litre break tank. Ideal for large residential or small commercial application. For use on heating systems utilising a 300 litre expansion vessel or less, or chilled systems utilising a 50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

Product Features:

- For system volumes up to 2,600 litres.
- Break Tank: 2 litre break tank with type AB Air Gap Fluid Cat 5.
- MODBUS Communication output.
- System quick-fill mode.
- Password protection for parameter entry.
- Pressure settings in 0.1 bar increments.
- Service reminder option (12 months).
- Pump pulse option (2 second pulse if inactive for 60 days).
- Flood protection options.
- Flow applications (0.4 l/min).
- Event logging for pump start, individual pump run hours counter, electrical interruption and common alarm.
- Volt free contacts for common fault, high pressure, low pressure, pump fault, pressure transducer fault.
- Electric pump, 230V 50Hz 1ph.
- Colour: White (RAL 9910).

Factory fit options:

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



Type	Pump quantity	Connections			Max. Delivery Pressure [bar]	Power Consumption [kW]	Full Load Current [A]	Weight [kg]		Order Code
		System [mm]	Mains Supply [mm]	Overflow [mm]						
Flexfiller Mini 130D	1	8 (¼" M)	15 (½" M)	22	3	0.035	0.3	7	1	17455
Flexfiller Mini 230D	2	8 (¼" M)	15 (½" M)	22	3	2 x 0.035	2 x 0.3	8	1	17456

kiwa

Dimensions Flexfiller Mini Digital

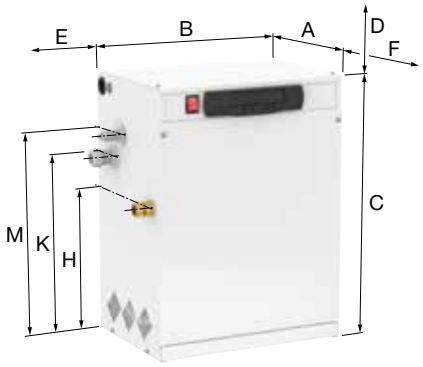
Type	Dimensions								
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	H [mm]	K [mm]	M [mm]
Flexfiller Mini 130D/230D	150	240	480	500	150	800	70	305	345

Flexfiller Midi

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

Product Features:
- For system volumes up to 50,000 litres.
- Break Tank: 4 litre break tank with type AB Air Gap Fluid Cat 5.
- MODBUS Communication output.
- System quick-fill mode.
- Password protection for parameter entry.
- Pressure settings in 0.1 bar increments.
- Service reminder option (12 months).
- Pump pulse option (2 second pulse if inactive for 60 days).
- Flood protection options.
- High flow applications (12.0 l/min).
- Event logging for pump start, individual pump run hours counter, electrical interruption and common alarm.
- Volt free contacts for common fault, high pressure, low pressure, pump fault, pressure transducer fault.
- Electric pump, 230V 50Hz 1ph.
- Colour: White (RAL 9910).

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



Type	Pump quantity	Connections			Max. Delivery Pressure [bar]	Power Consumption [kW]	Full Load Current [A]	Weight [kg]		Order Code
		System [mm]	Mains Supply [mm]	Overflow [mm]						
Flexfiller Midi 125D	1	15 (1/2" M)	15 (1/2" M)	22	2.5	0.37	2.6	17	1	17460
Flexfiller Midi 150D	1	15 (1/2" M)	15 (1/2" M)	22	5	0.5	3.4	32.5	1	17461
Flexfiller Midi 225D	2	15 (1/2" M)	15 (1/2" M)	22	2.5	2 x 0.37	2 x 2.6	25.5	1	17462
Flexfiller Midi 250D	2	15 (1/2" M)	15 (1/2" M)	22	5	2 x 0.5	2 x 3.4	42	1	17463

kiwa

Dimensions Flexfiller Midi

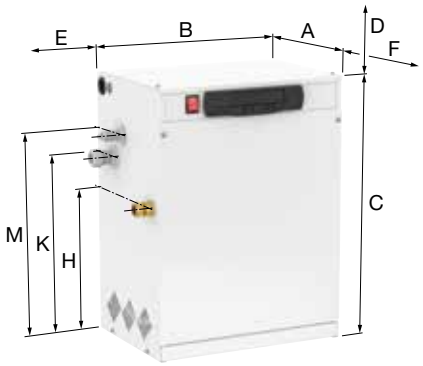
Type	Dimensions								
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	H [mm]	K [mm]	M [mm]
Flexfiller Midi 125D	230	240	480	500	150	800	330	335	380
Flexfiller Midi 150D - 250D	260	360	485	500	150	800	330	335	380

Flexfiller IP66

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

Product Features:

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



Type	Pump quantity	Connections			Max. Delivery Pressure [bar]	Power Consumption [kW]	Full Load Current [A]	Weight [kg]		Order Code
		System [mm]	Mains Supply [mm]	Overflow [mm]						
Flexfiller IP66 125D	1	15 (1/2" M)	15 (1/2" M)	22	2.5	0.37	2.6	28	1	45090
Flexfiller IP66 150D	1	15 (1/2" M)	15 (1/2" M)	22	5	0.5	3.4	28	1	45123
Flexfiller IP66 225D	2	15 (1/2" M)	15 (1/2" M)	22	2.5	2 x 0.37	2 x 2.6	34	1	45091
Flexfiller IP66 250D	2	15 (1/2" M)	15 (1/2" M)	22	5	2 x 0.5	2 x 3.4	36	1	45124

Dimensions Flexfiller IP66

Type	Dimensions								
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	H [mm]	K [mm]	M [mm]
Flexfiller IP66 125D	230	240	480	500	150	800	330	335	380
Flexfiller IP66 150D - 250D	260	360	485	500	150	800	330	335	380

DIGIFILLER PRESSURISATION PRODUCT RANGE

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

Application:
- Commercial.
- Industrial.
- Residential.

System Volume (Guide): < 50,000 litres

Certifications and Standards Applied:
- PED 2014/68/EU Sound Engineering Practice.
- IEE - Electrical Safety Guidance.
- EMC 2004/108/EC.
- BS 7074 Parts 1 to 3.
- Machinery Directive 95/16/EC.
- Electronic components have been tested and comply with the EMC Directives.
- EN 61000-6-2: Generic Standards – Immunity standard for industrial environments.
- EN 61000-6-3: Generic Standards – Emission standard for residential, commercial and light industrial environment.
- CE marked components, where applicable.
- WRAS approved float valve to BS1212.
- IP54 (BS EN 60529) rated controller.
- IPX2 (BS EN60529) rated pump.

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

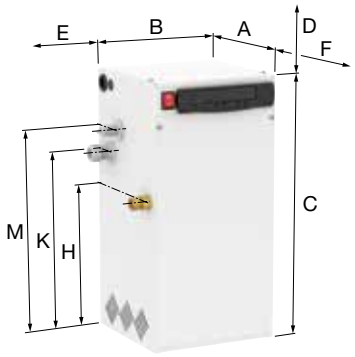
Material of Construction:
- Cabinet: Mild steel CR4.
- Float: WRAS Approved Torbeck Side Entry.
- Break Tank: Stainless Steel 304.
- Pump: Watermill Flamco-003 (See pump details for more information).
- Connection: Brass / Polypropylene.
- Pipework: Braided flexihose / EPDM.
- Finish: Powder coated.

Digifiller

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

Product Features:

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



Type	Pump quantity	Connections			Max. Delivery Pressure [bar]	Power Consumption [kW]	Full Load Current [A]	Weight [kg]	Preset Settings				Order Code
		System [mm]	Mains Supply [mm]	Overflow [mm]					Cold Fill	Low Alarm	High Alarm		
Digifiller 0.5	1	15 (1/2" M)	15 (1/2" M)	22	2.5	0.37	2.6	0.5	0.2	2.7	17	1	45115
Digifiller 1.0	1	15 (1/2" M)	15 (1/2" M)	22	2.5	0.37	2.6	1.0	0.5	2.7	17	1	45034
Digifiller 1.5	1	15 (1/2" M)	15 (1/2" M)	22	2.5	0.37	2.6	1.5	1.0	2.7	17	1	45035
Digifiller 2.0	1	15 (1/2" M)	15 (1/2" M)	22	2.5	0.37	2.6	2.0	1.5	2.7	17	1	45036

Dimensions Digifiller 0.5 - 2.0

Type	Dimensions								
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	H [mm]	K [mm]	M [mm]
Digifiller 0.5 - 2.0	230	240	480	500	150	800	330	335	380

OTHER PRESSURISATION PRODUCT RANGE

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

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

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

System Volume (Guide): < 300,000 litres

Application:
- Commercial.
- Industrial.
- Residential.

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

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

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

Flexfiller Twin System

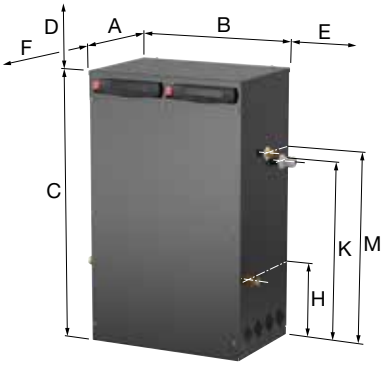
The Twin system is a floor standing unit, ideal where space restrictions make it beneficial to locate two systems in a single enclosure. The system combines two high flow rate (<18 l/min) top-up pressurisation units and two controllers with a single 18 litre break tank.

Product Features:

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

Factory fit options:

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



Type	Pump quantity	Connections			Max. Delivery Pressure [bar]	Power Consumption [kW]	Full Load Current [A]	Weight [kg]		Order Code
		System [mm]	Mains Supply [mm]	Drain [mm]						
Twin System 2 x 125D	2 *	2 x 15 (1/2" M)	15 (1/2" M)	22	2.5	2 x 0.37	2 x 2.6	29	1	17425
Twin System 2 x 225D	4 **	2 x 15 (1/2" M)	15 (1/2" M)	22	2.5	2 x 0.37	2 x 2.6	35	1	45062
Twin System 2 x 150D	2 *	2 x 15 (1/2" M)	15 (1/2" M)	22	5	2 x 0.5	2 x 3.4	31	1	17426
Twin System 2 x 250D	4 **	2 x 15 (1/2" M)	15 (1/2" M)	22	5	2 x 0.5	2 x 3.4	39	1	45063

* 1 pump for each system.
** 2 pumps for each system.

kiwa

Dimensions Flexfiller Twin System 125D - 250D

Type	Dimensions								
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	H [mm]	K [mm]	M [mm]
Twin System 2 x 125D - 2 x 250D	320	470	800	500	150	800	225	549	590

PressDS

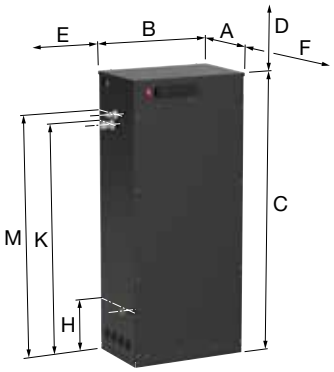
The PressDS (Pressurisation/Dosing System) is a floor standing, high flow rate (<18 l/min) additive top-up mixing pressurisation unit with a 4 litre break tank. 18 litre tank for additive top-up. Each time the unit tops-up the system with water, it also automatically adds additive from a dedicated tank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

Product Features:

- For system volumes up to 300,000 litres.
- Break Tank: 4 litre water break tank with type AB Air Gap Fluid Cat 5.
- MODBUS communication output.
- System quick-fill mode.
- Password protection for parameter entry.
- Pressure settings in 0.1 bar increments.
- Service reminder option (12 months).
- Pump pulse option (2 second pulse if inactive for 60 days).
- Flood protection options.
- Event logging for pump start, individual pump run hours counter, electrical interruption and common alarm.
- Volt free contacts for common fault, high pressure, low pressure, pump fault, pressure transducer fault.
- 18 litre additive tank.
- Mix ratios from 1% to 50% user configurable balancing valves.
- Top-up pressurisation unit (<18.0 l/min).
- Electric pump, 230V 50Hz 1ph.
- Colour: Black (RAL 9005)

Factory fit options:

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



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

Dimensions PressDS 225 - 280

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

COMBINED PRESSURISATION AND DEGASSING PRODUCT RANGE

Flexfiller Plus & Midifill Plus

Compact, totally enclosed combined digital pressurisation unit with vacuum degasser for use on sealed systems in order to provide a minimum system pressure requirement and effective dissolved gas removal.
Available with single pump (Midifill Plus) or double pump (for duty/standby configuration).

PressDS Plus

Compact, totally enclosed combined digital pressurisation unit with vacuum degasser and additive tank for use on sealed systems in order to provide a minimum system pressure requirement and effective dissolved gas removal and adding additive to system. The correct fluid mix is blended on demand at the time of system top-up.
Available with double pump (for duty/standby configuration).

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

Application:
- Commercial.
- Industrial.
- Residential.

Certifications and Standards Applied:
- PED 2014/68/EU Sound Engineering Practice.
- IEE - Electrical Safety Guidance.
- EMC 2004/108/EC.
- BS7074 Parts 1 to 3.
- Machinery Directive 95/16/EC.
- Electronic Components have been tested and comply with the EMC Directives.
- EN61000-6-2: Generic Standards – Immunity standard for industrial environments.
- EN61000-6-3: Generic Standards – Emission standard for residential, commercial and light industrial environment.
- CE marked components, where applicable.
- WRAS approved float valve to BS1212 part 2.
- IP54 (BS EN60529) rated controller.

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

Flexfiller Plus & Midifill Plus

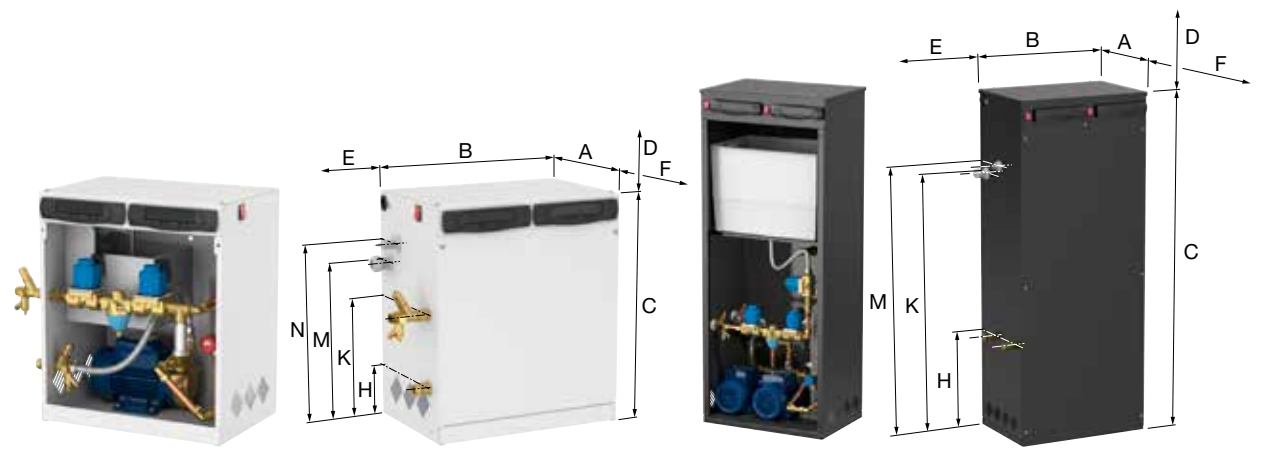
The Flexfiller Plus and Midifill Plus are compact, totally enclosed combined digital pressurisation units with vacuum degasser for use on sealed systems in order to provide a minimum system pressure requirement and effective dissolved gas removal.

Product Features:

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

Operating Conditions:

- System Temperature Range: 0 - 90 °C.
- Ambient Temperature Range: 0 - 45 °C.
- Maximum system temperature at the Point of connection: 70 °C.
- Safety Rating: IP 54.
- Maximum Turbo Runtime: 168 hours (1 week).
- Maximum Normal Downtime: 180 minutes (3 hours).
- Relative humidity 95% non-condensing.
- Noise Rating Data: < 75 dBA.



Type	Pump quantity	Mounting	Dimensions System [mm]	Dimensions Overflow [mm]	Pressure Rating [PN]	Operating Pressure [bar]	Power Consumption [kW]	Full Load Current [A]		Order Code
Midifill Plus 150D	1	Wall	2 x 15 (½")	22	10	1 - 5	0.5	3.4	1	45053
Flexfiller Plus 250D	2	Floor	2 x 15 (½")	22	10	1 - 6	2 x 0.52	2 x 3.4	1	45045
Flexfiller Plus 280D	2	Floor	2 x 15 (½")	22	10	1 - 8	2 x 0.75	2 x 5.6	1	45121
Flexfiller Plus 2160D	2	Floor	2 x 15 (½")	22	16	8 - 16	2 x 2.2	2 x 2.2	1	45043

Dimensions Flexfiller Plus & Midifill Plus

Type	Dimensions A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	H [mm]	K [mm]	M [mm]	N [mm]
Midifill Plus 150D	280	410	480	500	150	800				
Flexfiller Plus 250D	320	470	1160	500	150	800	455	915	955	-
Flexfiller Plus 280D	320	600	1160	500	150	800	455	915	955	-
Flexfiller Plus 2160D	320	600	1160	500	150	800	455	915	955	-

PressDS Plus

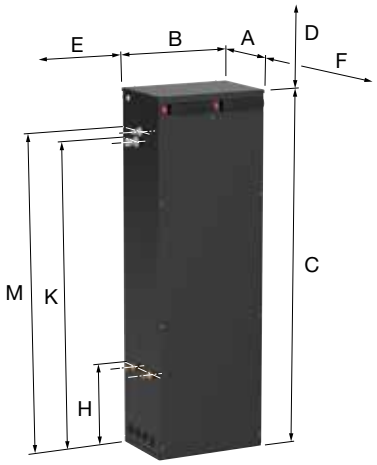
The PressDS Plus (Pressurisation/Degassing/Dosing System) is a compact, totally enclosed combined digital pressurisation unit with vacuum degasser and additive tank for use on sealed systems in order to provide a minimum system pressure requirement, effective dissolved gas removal and adding additives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

Product Features:

- For system volumes up to 300,000 litres.
- Break Tank: 4 litre break tank with type AB Air Gap Fluid Cat 5.
- MODBUS Communication output.
- System quick-fill mode.
- Password protection for parameter entry.
- Pressure settings in 0.1 bar increments.
- Service reminder option (12 months).
- Pump pulse option (2 second pulse if inactive for 60 days).
- Flood protection options.
- Event logging for pump start, individual pump run hours counter, electrical interruption and common alarm.
- Volt free contacts for common fault, high pressure, low pressure, pump fault, pressure transducer (Top-up controller only).
- Individual controllers for pressurisation and degassing function.
- Vacuum degassing, turbo and normal interval modes.
- 18 litre additive tank.
- Mix ratios from 1% to 50% user configurable balancing valves.
- Top-up pressurisation unit (<18.0 l/min).
- Electric pump, 230V 50Hz 1ph (2160D: 415V 50Hz 3ph).

Operating Conditions:

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



Type	Pump quantity	Connections		Pressure Rating [PN]	Operating Pressure [bar]	Power Rating [kW]	Full Load Current [A]	Nom. Weight [kg]		Order Code
		System [mm]	Overflow [mm]							
PressDS Plus 250D	2	2 x 15 (½")	22	10	1 - 6	2 x 0.52	2 x 3.4	62.7	1	45102
PressDS Plus 280D	2	2 x 15 (½")	22	10	1 - 8	3 x 0.52	3 x 3.4	71.5	1	45119
PressDS Plus 2160D	2	2 x 15 (½")	22	16	8 - 16	4 x 0.52	4 x 3.4	91.3	1	45120

Dimensions PressDS Plus

Type	Dimensions								
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	H [mm]	K [mm]	M [mm]
PressDS Plus 250D	470	320	1475						
PressDS Plus 280D	600	320	1475						
PressDS Plus 2160D	600	320	1475						

Accessories for Heating and Cooling Installations

3

Flamco has a complete range of products for safeguarding chilled and heating systems. The various models of Flamco Prescor safety relief valves are used around the world to prevent overpressure in sealed systems. The FlexBalance and FlexBalance Plus are an excellent solution for preventing hydraulic imbalance in sealed systems. Pressure gauges and filling assemblies of various types are also available.

Prescor

P. 93

Prescor Solar

P. 94

Prescor S

P. 95

Full-stroke safety valve

P. 119

Safety valve

P. 98

Tundish

P. 99

Prescomano

P. 98

Flexcon PA AutoFill pressurisation assistant

P. 101

Flexcon PA pressurisation assistant

P. 100

Prescofiller

P. 102

Manofiller

P. 102

Flexcon KSG

P. 102

Safety Set ¾

P. 102

Safety Set SG

P. 103

Safety set 1 ¼

P. 103

Safety Set Armature

P. 103

Pressure Gauges

P. 104

Thermo Pressure Gauges

P. 105

Shut-off Valves

P. 105

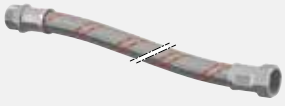
FlexControl

P. 106

Flexfast ¾

P. 107

Braided hose SST



P. 107

Flexcon Connection Group ½ - with pressure gauge

P. 108

Flexcon Connection Group 1

P. 108

Flexconsole ¾

P. 109

Flexconsole NPT

P. 109

Flexconsole S 20

P. 111

Flamconsole S 25

P. 111

Flexconsole Plus

P. 110

Flexconsole Plus S 20

P. 110

MB

P. 112

Cubex R Bracket

P. 112

FlexBalance EcoPlus C

P. 114

FlexBalance S

P. 117

FlexBalance F

P. 118

Spare vent cap L

P. 119

FlexBalance Plus S

P. 121

FlexBalance Plus F

P. 122

Spare vent cap L

P. 123

Mild Steel Dosing Pots

P. 113

WMS Low Water Level Protection Device

P. 124

WMS-E Low Water Level Protection Device

P. 125

Vessel Carrier

P. 125

Flexcon Drain Tub

P. 126

Flexcon DT

P. 126

Flexcon GVA 90

P. 126

Precharge Pressure Tester

P. 126

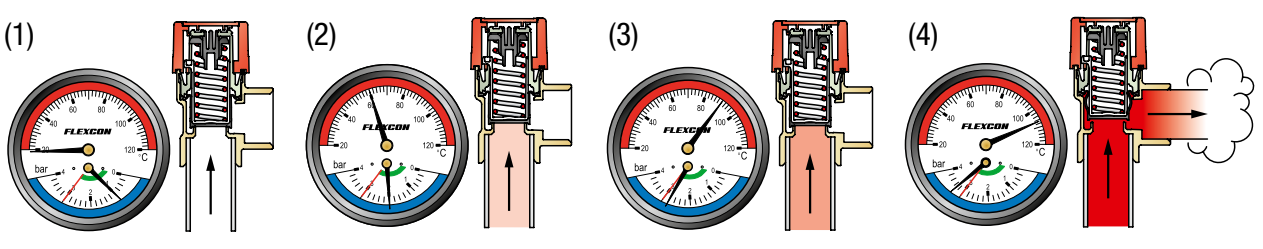
SAFETY VALVES

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

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

How a Prescor works

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

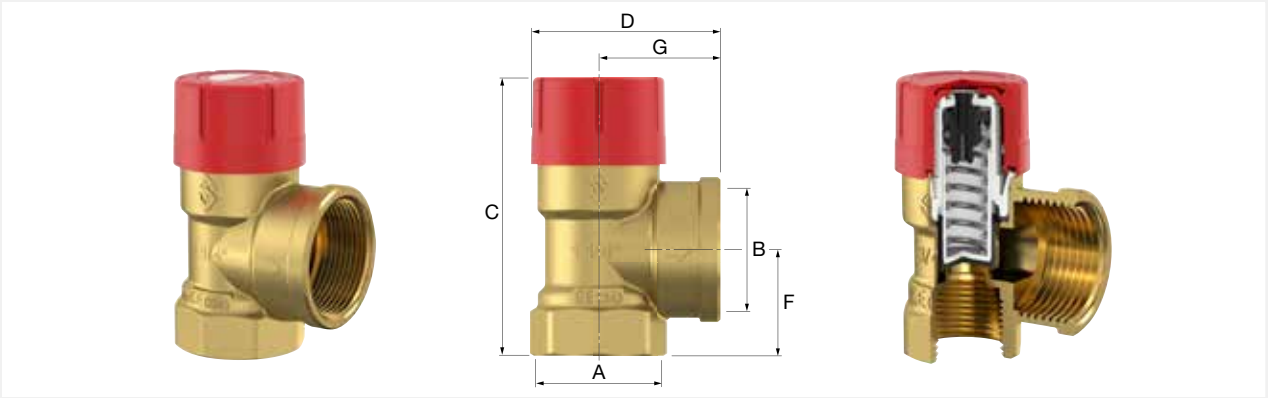


Prescor

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

- Specially designed pop action for full discharge at opening pressure to reduce the pressure quickly.
- High quality materials and state-of-the-art design features guarantee a high degree of safety.
- CE-conformity mark (PED 2014/68/EU), for application areas according to Pressure Equipment Directive.
- The opening pressure of all valves is individually tested.

- Suitable for addition of glycol-based anti-freeze up to 50%.
- Minimum/Maximum working temperature: -10 °C / 120 °C.
- Peak load: 140 °C.



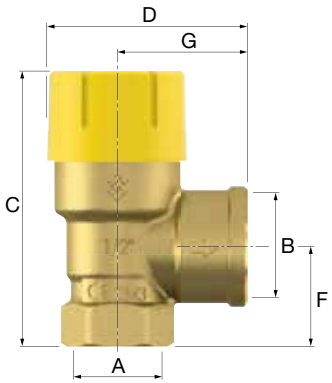
Type	Set pressure [bar]	Connection A	Connection B	Dimensions C [mm]	Dimensions D [mm]	Dimensions F [mm]	Dimensions G [mm]	Heating capacity [kW]		Order Code
Prescor 1/2	1.5	Rp 1/2"	Rp 1/2"	68.7	47.2	21.5	28.5	85	50	27608
Prescor 1/2	1.8	Rp 1/2"	Rp 1/2"	68.7	47.2	21.5	28.5	95	50	27602
Prescor 1/2	3.0	Rp 1/2"	Rp 1/2"	68.7	47.2	21.5	28.5	125	50	27665
Prescor 1/2	4.0	Rp 1/2"	Rp 1/2"	68.7	47.2	21.5	28.5	155	50	27606
Prescor 1/2 M	3.0	R 1/2"	Rp 1/2"	81.2	47.2	19	28.5	125	50	27675
Prescor 1/2 *	2.5	Rp 1/2"	Rp 3/4"	74.7	53.2	26.5	34.5	50	50	27630
Prescor 1/2 *	3.0	Rp 1/2"	Rp 3/4"	74.7	53.2	26.5	34.5	50	50	27634
Prescor 1/2 M x K 15	1.5	R 1/2"	K 15	81.2	60.5	34	42	80	40	28225
Prescor 1/2 M x K 15	2.5	R 1/2"	K 15	81.2	60.5	34	42	105	40	28227
Prescor 1/2 NF	3.0	Rp 1/2"	Rp 1/2"	68.7	47.2	21.5	28.5	125	50	27609
Prescor 1/2 M NF	3.0	R 1/2"	Rp 1/2"	81.2	47.2	19	28.5	125	100	27618
Prescor 3/4	1.5	Rp 3/4"	Rp 3/4"	70.9	49.2	23.5	30.5	115	50	27023
Prescor 3/4	1.8	Rp 3/4"	Rp 3/4"	70.9	49.2	23.5	30.5	125	50	27021
Prescor 3/4	2.5	Rp 3/4"	Rp 3/4"	70.9	49.2	23.5	30.5	150	50	27026
Prescor 3/4	3.0	Rp 3/4"	Rp 3/4"	70.9	49.2	23.5	30.5	165	50	27025
Prescor 3/4	4.0	Rp 3/4"	Rp 3/4"	70.9	49.2	23.5	30.5	200	50	27028
Prescor 3/4 *	3.0	Rp 3/4"	Rp 1"	76.8	55.2	29.5	36.5	100	40	27024
Prescor 3/4 *	2.5	Rp 3/4"	Rp 1"	76.8	55.2	29.5	36.5	100	40	27020
Prescor DN 20- 2,0 bar	2.0	Rp 3/4"	Rp 3/4"	70.9	49.2	23.5	30.5	135	50	28280
Prescor 3/4 M x K 22	1.5	R 3/4"	K 22	85.4	58.6	38	40	105	40	28330
Prescor 3/4 M x K 22	2.0	R 3/4"	K 22	85.4	58.6	38	40	120	40	28331
Prescor 3/4 M x K 22	2.5	R 3/4"	K 22	85.4	58.6	38	40	135	40	28332
Prescor 3/4 M x K 22	3.0	R 3/4"	K 22	85.4	58.6	38	40	150	40	28333
Prescor 3/4 M x K 22	3.5	R 3/4"	K 22	85.4	58.6	38	40	170	40	28334
Prescor 1	1.5	Rp 1"	Rp 1 1/4"	100.5	73.2	36	47	275	16	27042
Prescor 1	2.0	Rp 1"	Rp 1 1/4"	100.5	73.2	36	47	320	16	27043
Prescor 1	3.0	Rp 1"	Rp 1 1/4"	100.5	73.2	36	47	395	16	27045
Prescor 1	3.5	Rp 1"	Rp 1 1/4"	100.5	73.2	36	47	445	16	27047
Prescor 1	4.0	Rp 1"	Rp 1 1/4"	100.5	73.2	36	47	485	16	27040
Prescor 1	5.0	Rp 1"	Rp 1 1/4"	100.5	73.2	36	47	580	16	27049
Prescor 1 *	3.0	Rp 1"	Rp 1 1/4"	100.5	73.2	36	47	200	16	27048
Prescor 1 *	2.5	Rp 1"	Rp 1 1/4"	100.5	73.2	36	47	200	16	27044
Prescor DN 25 - 2,5 bar	2.5	Rp 1"	Rp 1 1/4"	100.5	73.2	36	47	355	16	27034
Prescor 1 1/4	3.0	Rp 1 1/4"	Rp 1 1/2"	108.5	73.5	41	47	580	16	27056
Prescor 1 1/4	4.0	Rp 1 1/4"	Rp 1 1/2"	108.5	73.5	41	47	710	16	27037
Prescor 1 1/4	5.0	Rp 1 1/4"	Rp 1 1/2"	108.5	73.5	41	47	845	16	27039
Prescor 1 1/4 *	2.5	Rp 1 1/4"	Rp 1 1/2"	108.5	73.5	41	47	350	16	27055
Prescor 1 1/4 *	3.0	Rp 1 1/4"	Rp 1 1/2"	108.5	73.5	41	47	350	16	27057

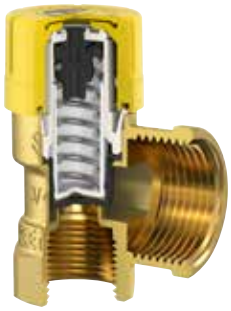
* Manufactured according to TRD directives.

Prescor Solar

Specially designed for sealed solar installations.

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





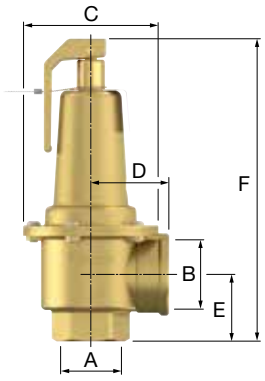
Type	Set pressure [bar]	Connection A	Connection B	Dimensions C [mm]	Dimensions D [mm]	Dimensions F [mm]	Dimensions G [mm]	Heating capacity [kW]		Order Code
Prescor Solar ½	3.0	Rp ½"	Rp ¾"	75	54	26.5	34.5	50	40	28310
Prescor Solar ½	6.0	Rp ½"	Rp ¾"	75	54	26.5	34.5	50	40	28311
Prescor Solar ½	8.0	Rp ½"	Rp ¾"	75	54	26.5	34.5	50	40	28312
Prescor Solar ¾	6.0	Rp ¾"	Rp 1"	77	56	29.5	36.5	100	40	28316
Prescor Solar ¾	8.0	Rp ¾"	Rp 1"	77	56	29.5	36.5	100	40	28317
Prescor Solar 1	6.0	Rp 1"	Rp 1 ¼"	101	74	36.0	47	200	16	28321
Prescor Solar 1	8.0	Rp 1"	Rp 1 ¼"	101	74	36.0	47	200	16	28322
Prescor Solar 1	10.0	Rp 1"	Rp 1 ¼"	101	74	36.0	47	200	16	28323

Prescor S

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

- Ideal safeguard for larger systems.
- More than one Prescor S safety valve may be fitted to a system so that it can meet the required capacity if the applicable regulations allow.
- With diaphragm that protects the spring, preventing water leakage via the spindle.

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



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

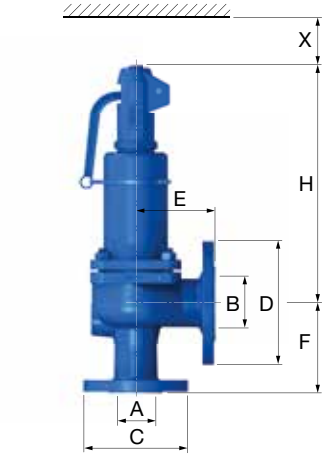
* Produced according to TRD directives.

CE

Full-stroke safety valve

For heating installations according to DIN EN 12828.

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



Selection Table for full-stroke safety valve

Set-pressure [bar]	Connection (A)									
	DN 20 [kW]	DN 25 [kW]	DN 32 [kW]	DN 40 [kW]	DN 50 [kW]	DN 65 [kW]	DN 80 [kW]	DN 100 [kW]	DN 125 [kW]	DN 150 [kW]
1.0	124	193	321	495	774	1310	1980	3095	3680	5120
1.5	164	257	427	658	1030	1740	2630	4110	4870	6770
2.0	183	285	474	731	1140	1930	2920	4570	6060	8430
2.5	217	340	565	870	1360	2300	3480	5440	7120	9900
3.0	250	391	649	1000	1560	2640	4000	6250	8190	11400
3.5	283	442	735	1130	1770	2990	4530	7070	9150	12700
4.0	312	488	810	1250	1950	3300	5000	7800	10200	14200
4.5	341	533	885	1350	2130	3600	5460	8520	11100	15600
5.0	370	578	960	1480	2310	3900	5910	9240	12100	16900
5.5	398	622	1030	1590	2490	4200	6370	9950	13000	18200
6.0	426	666	1100	1700	2660	4500	6820	10600	14000	19400
6.5	454	709	1180	1810	2840	4790	7260	11300	14900	20700
7.0	481	752	1250	1930	3000	5080	7700	12000	15800	22000
7.5	509	795	1320	2030	3180	5370	8140	12700	16700	23200
8.0	536	837	1390	2140	3350	5660	8580	13400	17600	24500
9.0	590	921	1630	2360	3685	6230	9435	14740	19340	26900
10.0	643	1000	1670	2570	4010	6790	10300	16000	21100	29300

Full-stroke safety valve

Type	Set pressure [bar]	Connection A [DN]	Connection B [DN]	Dimensions C [mm]	D [mm]	E [mm]	F [mm]	H [mm]	X [mm]	Weight [kg]		Order Code
Full-stroke safety valve 20	2.5	20	32	105	140	85	95	270	150	8.5	1	29541
Full-stroke safety valve 20	3.0	20	32	105	140	85	95	270	150	8.5	1	29542
Full-stroke safety valve 20	3.5	20	32	105	140	85	95	270	150	8.5	1	29543
Full-stroke safety valve 20	4.0	20	32	105	140	85	95	270	150	8.5	1	29544
Full-stroke safety valve 20	4.5	20	32	105	140	85	95	270	150	8.5	1	29545
Full-stroke safety valve 20	5.0	20	32	105	140	85	95	270	150	8.5	1	29546
Full-stroke safety valve 20	5.5	20	32	105	140	85	95	270	150	8.5	1	29547
Full-stroke safety valve 20	6.0	20	32	105	140	85	95	270	150	8.5	1	29548
Full-stroke safety valve 20	*	20	32	105	140	85	95	270	150	8.5	1	27080
Full-stroke safety valve 25	2.5	25	40	115	150	100	105	280	150	9.5	1	29551
Full-stroke safety valve 25	3.0	25	40	115	150	100	105	280	150	9.5	1	29552
Full-stroke safety valve 25	3.5	25	40	115	150	100	105	280	150	9.5	1	29553
Full-stroke safety valve 25	4.0	25	40	115	150	100	105	280	150	9.5	1	29554
Full-stroke safety valve 25	4.5	25	40	115	150	100	105	280	150	9.5	1	29555
Full-stroke safety valve 25	5.0	25	40	115	150	100	105	280	150	9.5	1	29556
Full-stroke safety valve 25	5.5	25	40	115	150	100	105	280	150	9.5	1	29557
Full-stroke safety valve 25	6.0	25	40	115	150	100	105	280	150	9.5	1	29558
Full-stroke safety valve 25	*	25	40	115	150	100	105	280	150	9.5	1	27081
Full-stroke safety valve 32	2.5	32	50	140	165	110	115	330	200	13.5	1	29561
Full-stroke safety valve 32	3.0	32	50	140	165	110	115	330	200	13.5	1	29562
Full-stroke safety valve 32	3.5	32	50	140	165	110	115	330	200	13.5	1	29563
Full-stroke safety valve 32	4.0	32	50	140	165	110	115	330	200	13.5	1	29564
Full-stroke safety valve 32	4.5	32	50	140	165	110	115	330	200	13.5	1	29565
Full-stroke safety valve 32	5.0	32	50	140	165	110	115	330	200	13.5	1	29566
Full-stroke safety valve 32	5.5	32	50	140	165	110	115	330	200	13.5	1	29567
Full-stroke safety valve 32	6.0	32	50	140	165	110	115	330	200	13.5	1	29568
Full-stroke safety valve 32	*	32	50	140	165	110	115	330	200	13.5	1	27082
Full-stroke safety valve 40	2.5	40	65	150	185	115	140	390	250	20	1	29571
Full-stroke safety valve 40	3.0	40	65	150	185	115	140	390	250	20	1	29572
Full-stroke safety valve 40	3.5	40	65	150	185	115	140	390	250	20	1	29573
Full-stroke safety valve 40	4.0	40	65	150	185	115	140	390	250	20	1	29574
Full-stroke safety valve 40	4.5	40	65	150	185	115	140	390	250	20	1	29575
Full-stroke safety valve 40	5.0	40	65	150	185	115	140	390	250	20	1	29576
Full-stroke safety valve 40	5.5	40	65	150	185	115	140	390	250	20	1	29577
Full-stroke safety valve 40	6.0	40	65	150	185	115	140	390	250	20	1	29578
Full-stroke safety valve 40	*	40	65	150	185	115	140	390	250	20	1	27083
Full-stroke safety valve 50	2.5	50	80	165	200	120	150	435	300	26	1	29581
Full-stroke safety valve 50	3.0	50	80	165	200	120	150	435	300	26	1	29582
Full-stroke safety valve 50	3.5	50	80	165	200	120	150	435	300	26	1	29583
Full-stroke safety valve 50	4.0	50	80	165	200	120	150	435	300	26	1	29584
Full-stroke safety valve 50	4.5	50	80	165	200	120	150	435	300	26	1	29585
Full-stroke safety valve 50	5.0	50	80	165	200	120	150	435	300	26	1	29586
Full-stroke safety valve 50	5.5	50	80	165	200	120	150	435	300	26	1	29587
Full-stroke safety valve 50	6.0	50	80	165	200	120	150	435	300	26	1	29588
Full-stroke safety valve 50	*	50	80	165	200	120	150	435	300	26	1	27084
Full-stroke safety valve 65	2.5	65	100	185	220	140	170	545	350	39	1	29591
Full-stroke safety valve 65	3.0	65	100	185	220	140	170	545	350	39	1	29592
Full-stroke safety valve 65	3.5	65	100	185	220	140	170	545	350	39	1	29593
Full-stroke safety valve 65	4.0	65	100	185	220	140	170	545	350	39	1	29594
Full-stroke safety valve 65	4.5	65	100	185	220	140	170	545	350	39	1	29595
Full-stroke safety valve 65	5.0	65	100	185	220	140	170	545	350	39	1	29596
Full-stroke safety valve 65	5.5	65	100	185	220	140	170	545	350	39	1	29597
Full-stroke safety valve 65	6.0	65	100	185	220	140	170	545	350	39	1	29598
Full-stroke safety valve 65	*	65	100	185	220	140	170	545	350	39	1	27085
Full-stroke safety valve 80	*	80	125	200	250	160	195	610	400	53	1	27086
Full-stroke safety valve 100	*	100	150	220	285	180	220	690	500	82	1	27087
Full-stroke safety valve 125	*	125	200	250	340	200	250	845	500	125	1	27088
Full-stroke safety valve 150	*	150	200	285	405	225	285	890	500	165	1	27089

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

Safety valve

For closed refrigeration, cooling and air conditioning systems.

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

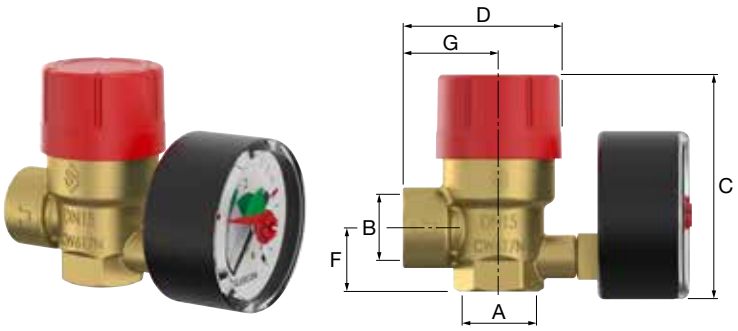
Type	Actuation pressure [bar]	Connection		Order Code
Safety valve 1/2	1.0	1/2" F	1	29491
Safety valve 1/2	1.5	1/2" F	1	29489
Safety valve 1/2	2.0	1/2" F	1	29492
Safety valve 1/2	2.5	1/2" F	1	29479
Safety valve 1/2	3.0	1/2" F	1	29494
Safety valve 1/2	3.5	1/2" F	1	29493
Safety valve 1/2	4.0	1/2" F	1	29496
Safety valve 1/2	4.5	1/2" F	1	29497
Safety valve 1/2	5.0	1/2" F	1	29498
Safety valve 1/2	5.5	1/2" F	1	29499
Safety valve 1/2	6.0	1/2" F	1	29490
Safety valve 1/2	6.5	1/2" F	1	29440
Safety valve 1/2	7.0	1/2" F	1	29441
Safety valve 1/2	7.5	1/2" F	1	29442
Safety valve 1/2	8.0	1/2" F	1	29484
Safety valve 1/2	*	1/2" F	1	29495

* Specify set-pressure when ordering between 1.0 bar and 16.0 bar.

Prescomano

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

- Suitable for addition of glycol-based anti-freeze up to 50%.
- Minimum/Maximum working temperature: -10 °C / 120 °C.
- Peak load: 140 °C.

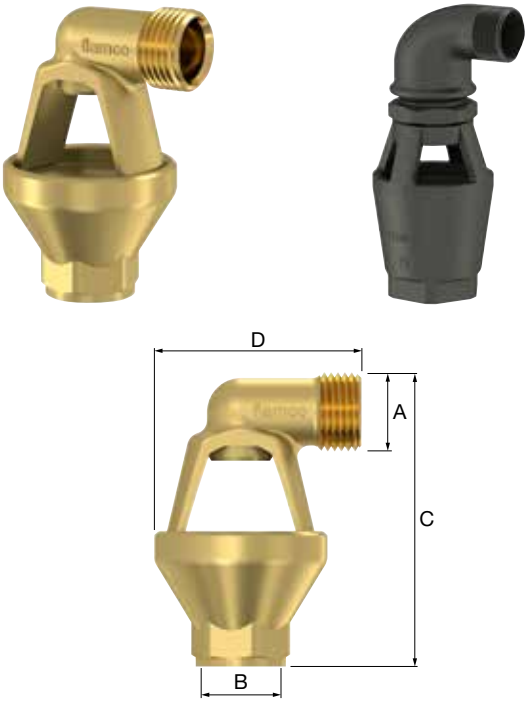


Type	Set pressure [bar]	Connection A	Connection B	Dimensions C [mm]	Dimensions D [mm]	Dimensions F [mm]	Dimensions G [mm]	Heating capacity [kW]		Order Code
Prescomano 1/2 *	2.5	Rp 1/2"	Rp 3/4"	74.7	87.8	26.5	34.5	50	20	27687
Prescomano 1/2 *	3.0	Rp 1/2"	Rp 3/4"	74.7	87.8	26.5	34.5	50	20	27686
Prescomano 1/2	3.0	Rp 1/2"	Rp 1/2"	68.7	86.0	21.5	28.5	125	20	27683
Prescomano 1/2 NF	3.0	Rp 1/2"	Rp 1/2"	68.7	86.0	21.5	28.5	125	20	27684
Prescomano 3/4	3.0	Rp 3/4"	Rp 3/4"	70.9	88.0	23.5	30.5	165	20	27090

* Produced according to TRD directives.

Tundish

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



Type	Connection		Application	Dimensions			Order Code
	A	B		C [mm]	D [mm]		
Tundish 1/2 (brass)	1/2" M	1/2" F	Prescor 1/2", Prescomano 1/2", Prescor B 1/2"	80	55	1	27350
Tundish 3/4 (brass)	3/4" M	1" F	Prescor B 1/2", Prescor 3/4", Prescomano 3/4", Prescor Solar 1/2"	94	76	1	27360
Tundish 1 (cast iron)	1" M	1 1/2" F	Prescor 3/4" TRD, Prescor Solar 3/4"	185	95	1	27325
Tundish 1 1/4 (cast iron)	1 1/4" M	1 1/2" F	Prescor 1", Prescor Solar 1"	195	100	1	27330
Tundish 1 1/2 (cast iron)	1 1/2" M	1 1/2" F	Prescor 1 1/4", Prescor S 1 1/4"	205	105	1	27340

FILLING DEVICES

Flexcon PA pressurisation assistant

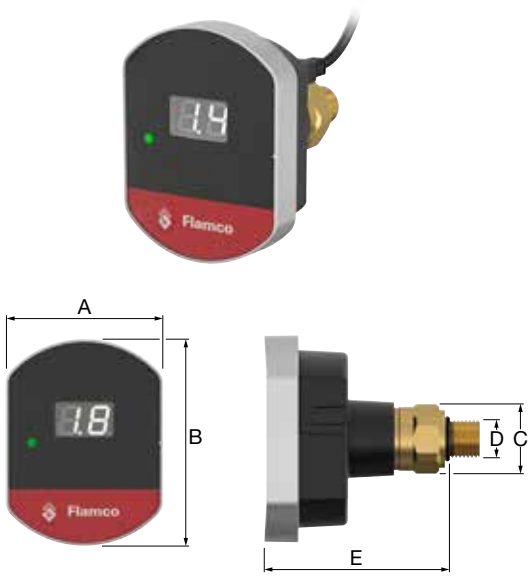
The Flamco Flexcon PA pressurisation assistant is used to monitor heating systems and to assist the installer and end-user with pressure maintenance. The Flexcon PA logs and alerts when pressurisation problems occur and assists in (or control) topping-up the heating system to the correct working pressure.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

Advantages:

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

Specifications:

- Suitable for heating systems up to 40000 l and for addition of glycol-based anti-freeze up to 50%.
- Power supply: 5V AC/DC adapter.
- Working system temperature: 0 °C / 90 °C.
- Working ambient temperature: 0 °C / 40 °C.
- Working system pressure: 0.2 - 4 bar.



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

Flexcon PA AutoFill pressurisation assistant

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

Advantages:

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

Specifications:

- Suitable for heating systems up to 40,000 l and for addition of glycol-based anti-freeze up to 50%.
- Power supply: 12V AC/DC adapter.
- Working system temperature: 0 °C / 90 °C.
- Working ambient temperature: 0 °C / 40 °C.
- Working system pressure: 0.2 - 4 bar.

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

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

Prescofiller

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

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

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

Manofiller

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

- Filling device suitable for mounting on one of the radiator connections.
- Especially interesting for situations where the pressure gauge is mounted on or at the boiler, but the filling of the installation is done in another place.
- Mounting in all positions possible.

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

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

SAFETY SETS

Flexcon KSG

Suitable for sealed heating and cooling systems.

- Minimum/Maximum working temperature: -10 °C / 90 °C.
- Maximum boiler capacity: 70 kW.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Safety valve: ½" x ¾", 2.5 bar (110 kW).
- Flexvent 3/8" with shut-off valve.
- Pressure gauge: Ø 61mm, 6.0 bar with shut-off valve.
- Insulation: material EPP - color: black.

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

Safety Set ¾

Type	Set pressure [bar]	Connection	Heating capacity [kW]		Order Code
Safety Set 3/4	2.5	3/4"	60	1	27926

Safety Set SG

Including pressure gauge, safety valve and air remove screw.

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

Safety set 1 ¼

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

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

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

Safety Set Armature

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

PRESSURE GAUGES

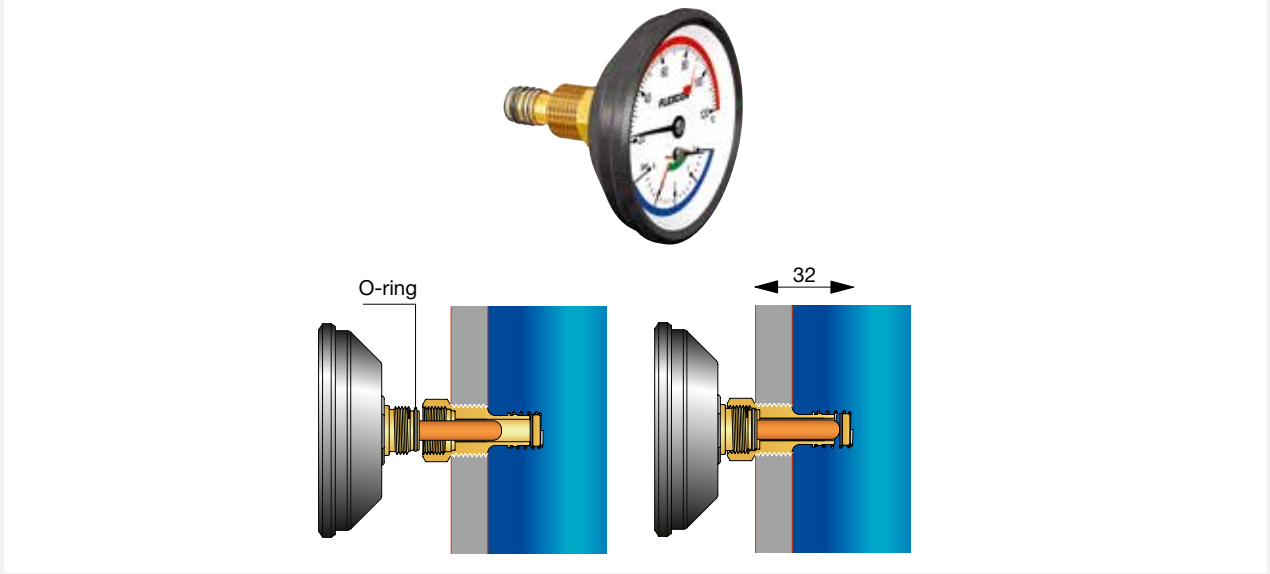
Pressure Gauges

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

Type	Connection	Pressure range [bar]	Marking [bar]	Shut-off valve		Order Code
Pr. gauge Ø 40 ax. for Prescomano	1/4 ax.	0 - 4	1.5 - 3.0	no	1	27264
Pr. gauge Ø 40 ax. for Prescomano	DN 10 (1/8) ax.	0 - 4	1.5 - 2.5	no	1	27260
Pr. gauge Ø 63 rad. / 4.0b.	1/4 rad.	0 - 4	1.5 - 3.0	no	1	27205
Pr. gauge Ø 63 rad. / 3.0b.	3/8 rad.	0 - 4	1.5 - 3.0	no	1	27200
Pr. gauge Ø 63 rad. / 1.5 - 4.0b.	3/8 rad.	0 - 4	1.5 - 4.0	no	1	27203
Pr. gauge Ø 63 ax. / 6.0 b.	1/4 ax.	0 - 6	2.5 - 6.0	no	1	27211
Pr. gauge Ø 63 rad. / 2.0 - 4.0b.	3/8 rad.	0 - 4	2.0 - 4.0	no	1	27208
Pr. gauge Ø 63 rad. / 2.5 - 4.0b.	3/8 rad.	0 - 4	2.5 - 4.0	no	1	27204
Pr. gauge Ø 63 rad. / 3.0 - 4.0b.	3/8 rad.	0 - 4	3.0 - 4.0	no	1	27202
Pr. gauge Ø 63 rad. / 2.5b.	3/8 rad.	0 - 4	1.5 - 2.5	no	1	27201
Pr. gauge Ø 63 ax. / 1.5 - 4.0b.	3/8 ax.	0 - 4	1.5 - 4.0	no	1	27213
Pr. gauge Ø 63 ax. / 3.0b.	1/4 ax.	0 - 4	1.5 - 3.0	no	1	27210
Pr. gauge Ø 80 rad. / 3.0b.	1/4 rad.	0 - 4	1.5 - 3.0	1/4" x 1/2"	1	27220
Pr. gauge Ø 80 ax. / 3.0b.	1/4 ax.	0 - 4	1.5 - 3.0	1/4" x 1/2"	1	27230
Pr. gauge Ø 80 rad. / 3.0b.	1/2 rad.	0 - 4	1.5 - 3.0	no	1	27222
Pr. gauge Ø 100 0 - 10 bar rad.	3/8" rad.	0 - 10	6.0	no	1	27243
Manometer Ø 50 exc.	1/8" ax. not central	0 - 4	1.5 - 3.0	no	1	27267
Manometer Ø 50 exc.	1/8" ax. not central	0 - 12	variable	no	1	27263
Manometer 40 mm 1 mtr capillair	1/4" ax. cap. conn.	0 - 6	Flexibel capillair 2mm à 1 mtr	no	1	27269

Thermo Pressure Gauges

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



Type	Connection	Range	Marking [bar]	Ø [mm]		Order Code
Thermo pressure gauge ax. (with shut-off valve)	R $^1/_2$" M	20 - 120 °C / 0 - 4 bar	3	80	20	27250
Thermo pressure gauge ax.	M 18 x 1"	20 - 120 °C / 0 - 4 bar	3	63	20	27247
Thermo pressure gauge ax. (with shut-off valve)	R $^1/_2$"	20 - 120 °C / 0 - 4 bar	3	63	1	27248

Shut-off Valves

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

Type	Connection		Order Code
Shut-off valve $^1/_4$ x $^1/_2$	$^1/_4$" x $^1/_2$"	150	27912
Shut off valve M18 x $^1/_2$	M 18 x $^1/_2$"	1	27905

CONNECTION SETS AND ISOLATING UNIONS

FlexControl

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

- Saves a considerable amount of time when servicing a Flexcon vessel.
- Enables you to check the pre-charge pressure without having to disconnect the vessel.
- Enables you to change the vessel or check the pre-charge pressure without having to release the system pressure or drain the system.
- With integrated ball valve and hose connection.
- Flexcontrol ¾" F / 1" F: With swivel nut connection for easy mounting of the expansion vessel.

- Suitable for addition of glycol-based anti-freeze up to 50%.
- Maximum working pressure: 10 bar.
- Maximum working temperature (design): 130 °C.

FlexControl ¾ M

FlexControl ¾ / FlexControl 1

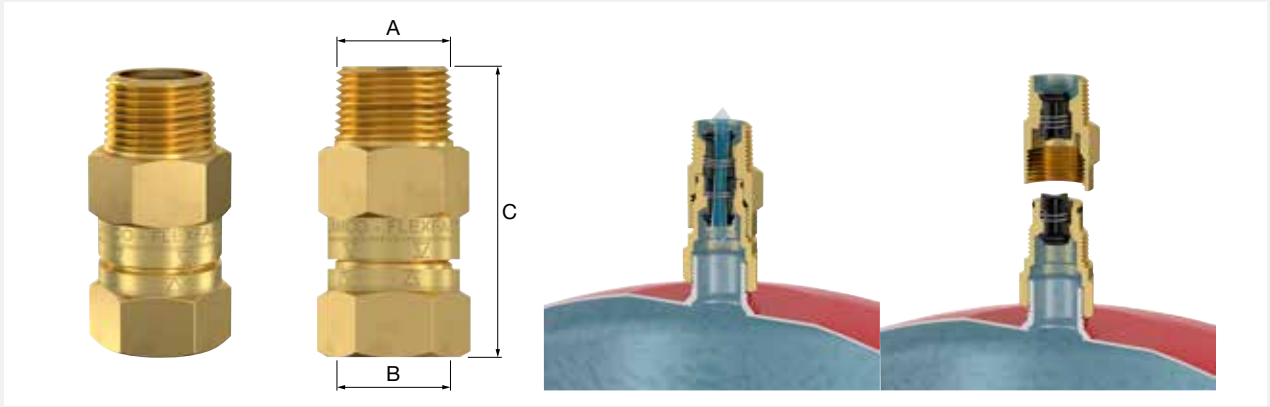
Type	Connection		Dimension C [mm]	Weight [kg]		Order Code
	A	B				
FlexControl ³/₄ M	R ³/₄"	Rp ³/₄"	60	0.24	1	28925
FlexControl ³/₄	Rp ³/₄"	G ³/₄" F	92	0.31	1	28920
FlexControl 1	Rp 1"	G 1" F	100	0.36	1	22390

Flexfast ¾

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

- Easy to assemble with the right tools; then just screw in the components by hand.
- Enable you to change the vessel without having to release pressure or drain the system.
- Saves a considerable amount of time when servicing a Flexcon vessel.

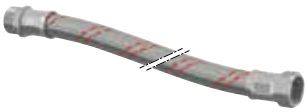
- Material: Brass.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Minimum/Maximum working temperature: -10 °C / 90 °C (continuous).
- Working pressure: 0 - 10 bar.



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

Braided hose SST

For easy connection of the expansion vessel to the central heating system.

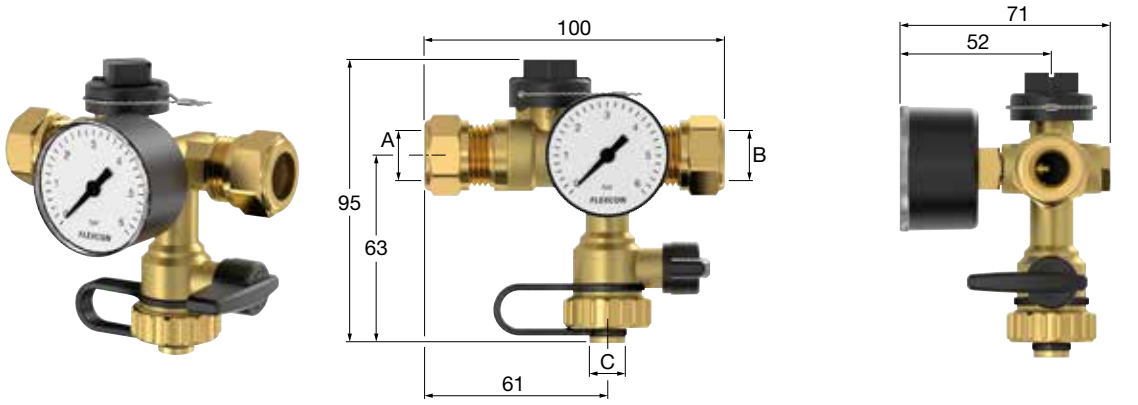


Type	Connection	Length [mm]	Internal Ø [mm]	Weight [kg]		Order Code
Braided hose SST ³/₄	³/₄" F x ³/₄" M	700	19	0.4	25	22383
Braided hose SST 1	1" F x 1" M	700	25	0.6	25	22384

Flexcon Connection Group ½ - with pressure gauge

The Flexcon connection group ½" is used for draining and/or filling the system and disconnecting an expansion vessel in heating and cooling installations.

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

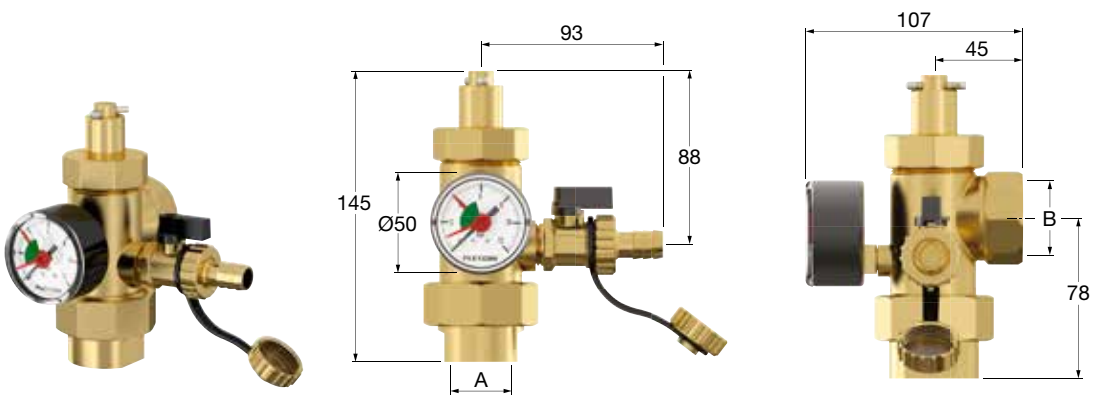


Type	Connection			With pressure gauge		Order Code
	A	B	C			
Flexcon connection group ½	R ½" / K15 *	R ½" / K15*	¾"	yes	1	27290

* Compression connection.

Flexcon Connection Group 1

Block and bleed valve for Flexcon 110 - 1000 litre expansion vessels.
The set consists of a shut-off valve, a fill/drain tap with hose nipple and pressure gauge (0 - 12 bar).



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

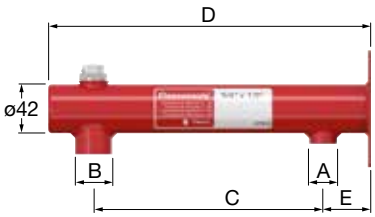
WALL MOUNTING

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

Flexconsole ¾

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

- Equipped with a wall plate with two slots for accurate wall mounting.
- Supplied with a ½" radiator cap plus manual deaerator.

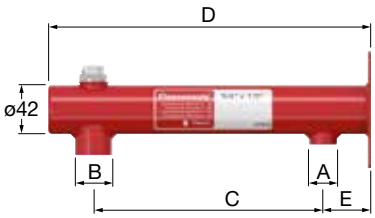


Type	Connection		Dimensions				Order Code
	A	B	C [mm]	D [mm]	E [mm]		
Flexconsole ³/₄ x ¹/₂	Rp ¹/₂"	Rp ³/₄"	195	275	41	1	27910
Flexconsole ³/₄ x ¹/₂ white	Rp ¹/₂"	Rp ³/₄"	195	275	41	1	27989
Flexconsole ³/₄ x ³/₄ D	Rp ³/₄"	Rp ³/₄"	195	275	41	10	27911

Flexconsole NPT

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

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

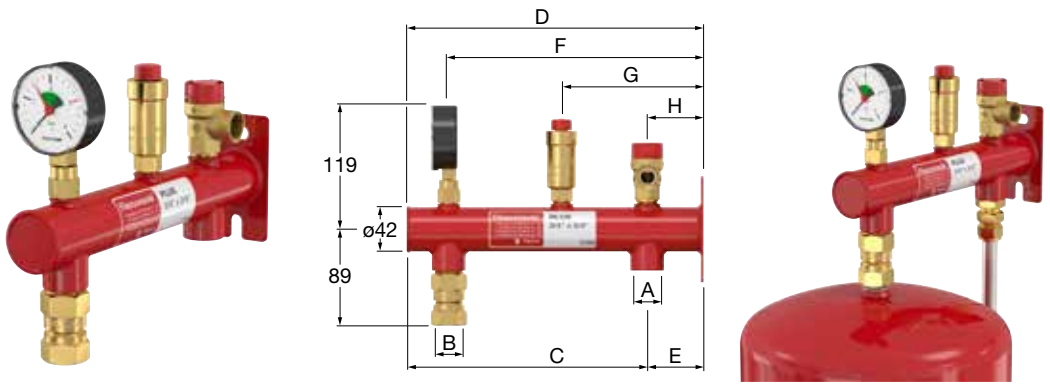


Type	Connection		Dimensions				Order Code
	A	B	C ["]	D ["]	E ["]		
Flexconsole ¹/₂ NPT x ¹/₂ NPT	¹/₂" NPT	¹/₂" NPT	7.67	10.83	1.61	1	97975
Flexconsole ³/₄ NPT x ¹/₂ NPT - SST	¹/₂" NPT	³/₄" NPT	7.67	10.83	1.61	1	97976

Flexconsole Plus

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

- Supplied with:
  Flexcon pressure gauge (0 - 4 bar) with shut off valve,
  Flexvent 3/8 floatvent with shut off valve,
  Safety valve ½" (set pressure: 3 bar),
  Flexfast quick-release coupling,
  Fixing set.

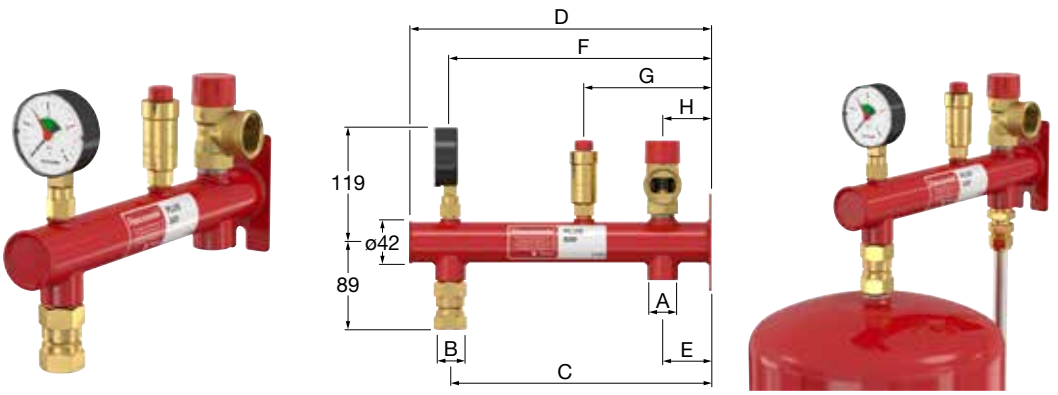


Type	Connection		Dimensions							Order Code
	A	B	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]		
Flexconsole Plus - 3 bar	Rp 3/4"	Rp 3/4"	234	275	41	236	130	50	1	27996
Flexconsole Plus - without Flexfast - 3 bar	Rp 3/4"	Rp 3/4"	225	275	41	236	130	50	1	27988

Flexconsole Plus S 20

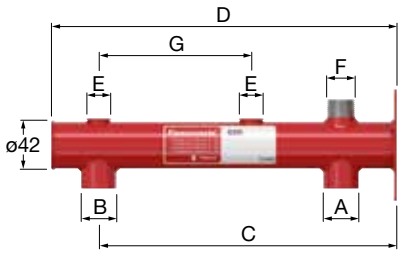
A complete product for hanging expansion vessels up to 25 litres attached to the water supply and to the wall. As the conventional Flexconsole S 20 but including accessories.

- Supplied with:
  Flexcon pressure gauge with shut off valve,
  Flexvent floatvent with shut off valve,
  Safety valve (set pressure: 1.5 bar / 2.5 bar),
  Flexfast quick-release coupling.



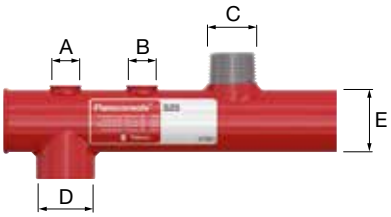
Type	Connection		Dimensions							Order Code
	A	B	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]		
Flexconsole S 20 Plus - 1.5 bar	Rp 3/4"	Rp 3/4"	255	305	50	266	130	50	1	27994
Flexconsole S 20 Plus - 2.5 bar	Rp 3/4"	Rp 3/4"	255	305	50	266	130	50	1	27993

Flexconsole S 20



Type	Connection				Dimensions				Order Code
	A	B	E	F	C [mm]	D [mm]	G [mm]		
Flexconsole S 20	Rp 3/4"	Rp 3/4"	Rp 3/8"	R 3/4"	216	305	136	1	27992

Flamconsole S 25



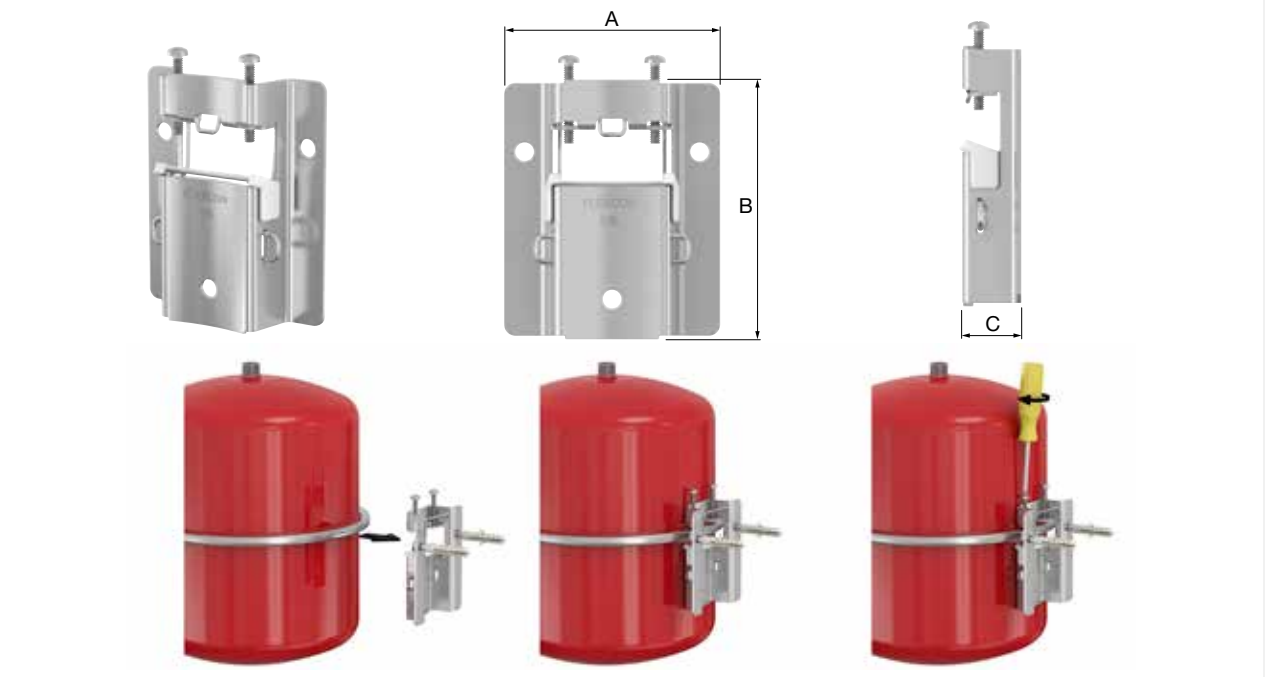
Type	Connection						Order Code
	A	B	C	D	E		
Flamconsole S 25	Rp 3/8"	Rp 3/8"	R 1"	Rp 1"	G 1"	1	27991

MB

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

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

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

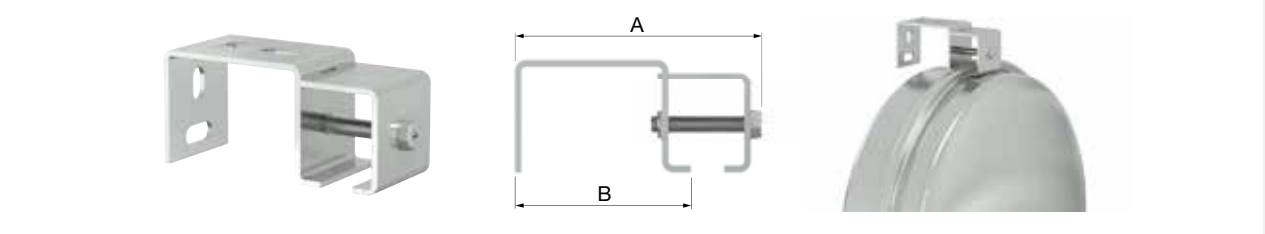


Type	Dimensions A [mm]	B [mm]	C [mm]		Order Code
Flexcon vessel support MB 2	94	113	26	25	27913
Flexcon vessel support MB 3	94	113	26	25	27903

Cubex R Bracket

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

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



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

DOSING POTS

Mild Steel Dosing Pots

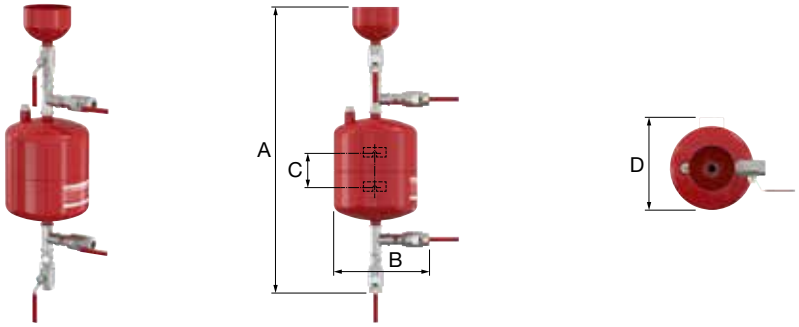
Most heating and chilled water systems require chemical dosing and the dosing pot provides a controlled method of achieving this. Dosing pots are of a mild steel welded construction, supplied fully assembled for easy installation. The unit comes complete with tundish, vessel, air vent, inlet, outlet and drain valves.

Product features:
- Supplied fully assembled.
- Simple operations.
- Increases energy efficiency.
- Extends the life of the system.
- Internally uncoated to guarantee chemical compatibility with standard installations.

- Minimum/Maximum working temperature: 5 °C / 95 °C.
- Maximum working pressure: 16 bar.

Certifications and standards applied:
- PED 2014/68/EU Article 4 Paragraph 3 Sound Engineering Practice.
- Welding BS EN281-1.
- Fitting to BS21/ISO 7-1.

Material of construction:
- Cylinder: EN/ISO S235JRG2.
- Dished ends: EN/ISO S235JRG2.
- Fittings: Galvanised steel.
- T-piece: Galvanised steel.
- Tundish: EN/ISO S235JRG2.
- Valves: Chrome plated brass.
- Exterior finishing: Epoxy powder coating – Red (RAL 3002).



Type	Dimensions			Bolt Spacing (C)	System connections	Weight [kg]		Order Code
	A [mm]	B [mm]	D [mm]					
Dosing pot 3.5 l	565	225	220	40	G ¾" F	4.9	1	17701
Dosing pot 6 l	670	225	220	90	G ¾" F	5.9	1	17702
Dosing pot 11 l	935	215	200	279	G ¾" F	9.1	1	17703
Dosing pot 15 l	1120	215	200	455	G ¾" F	9.8	1	17704
Dosing pot 18 l	1250	215	200	587	G ¾" F	10.9	1	17705
Dosing pot 25 l	937	270	295	224	G ¾" F	12.6	1	17706
Dosing pot 35 l	1122	270	295	405	G ¾" F	15.6	1	17707

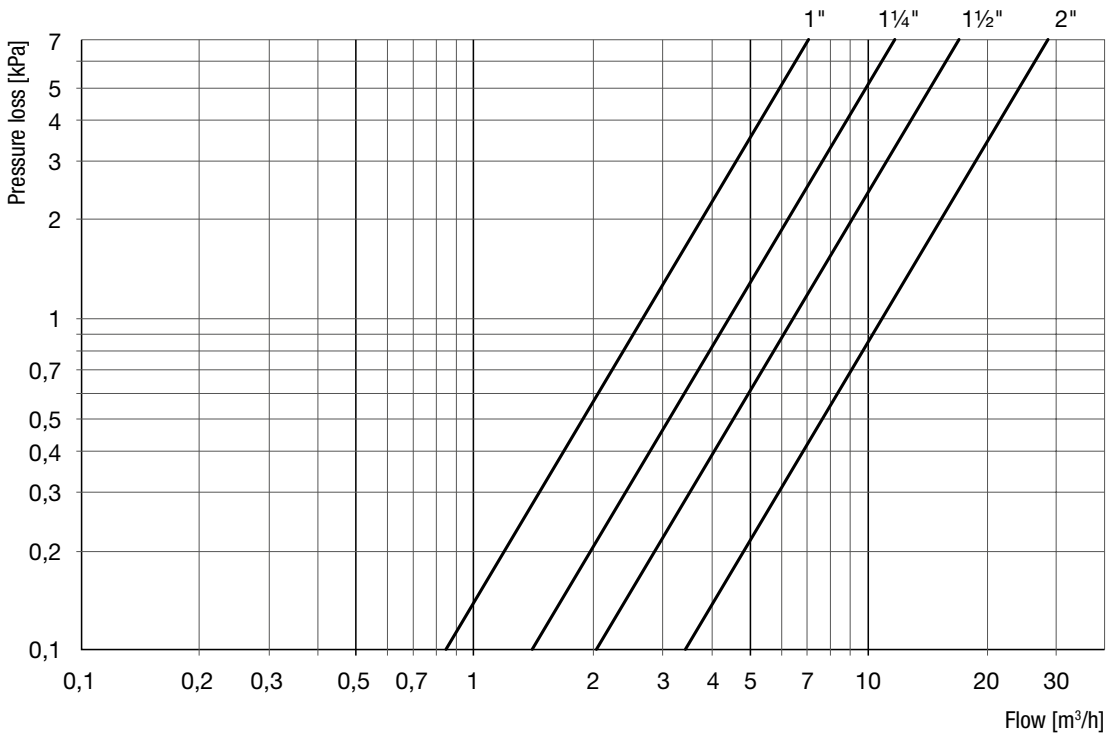
FLEXBALANCE ECOPLUS C

The FlexBalance EcoPlus C allows hydraulic separation between the primary and secondary circuits of commercial heating and cooling systems with air and dirt separation.

- No more overloaded pumps.
- Improved accurate regulation of the system.
- Considerably improved heat transfer.
- Higher output by the system.
- Intergration of air and dirt separation.
- Compact.
- Heat transfer level of 99%.
- Low flow resistance.

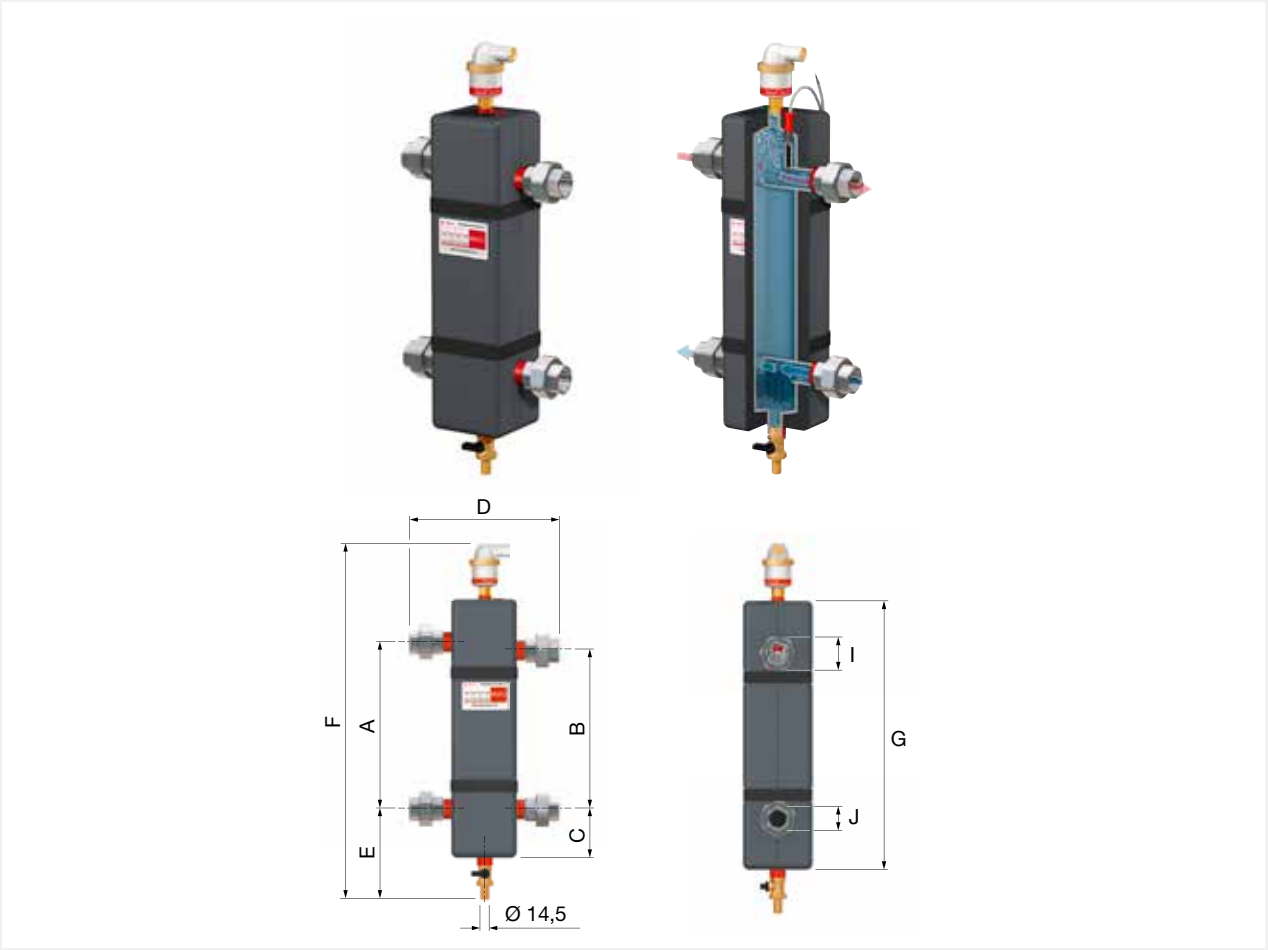
- Equipped with a Flexvent Top ⅜" white (28510).
- Equipped with a brass drain valve ½" and hose connection.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Minimum/Maximum working pressure: 0.2 / 10 bar.
- Minimum/Maximum working temperature: -10 °C / 110 °C.
- Vessel: steel ST 37/2, red coated RAL 3002.
- Insulation: material - PUR foam with two quick fasteners. λ: 0.022 - 0.025W/mK.
- A temperature sensor can be inserted in the sensor connection (G ½") with an immersion pipe. Inner diameter: 12.5 mm.

FlexBalance EcoPlus C - Flow resistance



FlexBalance EcoPlus C

- Coupling (4x) with conical seal, galvanized steel.



Type	Connection (4x)	Capacity [l]	Max. power [kW]	Flow rate [l/s]	K_v * [m³/h] (ΔP = 1 bar)	Length immersion pipe [mm]	Weight [kg]		Order Code
FlexBalance EcoPlus C 1	Rp 1"	1.4	60	0.7	26.6	80	11	1	28377
FlexBalance EcoPlus C 1 ¼	Rp 1 ¼"	2.3	100	1.2	44.0	86	15	1	28378
FlexBalance EcoPlus C 1 ½	Rp 1 ½"	3.8	140	1.6	64.0	92	20	1	28379
FlexBalance EcoPlus C 2	Rp 2"	4.5	200	2.6	104.0	104	24	1	28380

* $K_v = Q / \sqrt{\Delta P}$ Q: Flow [m³/h] ΔP: Pressure loss over the product [bar]
Flow factor K_v: Rate of flow [m³/h] which results in a 1 bar pressure drop across the product.

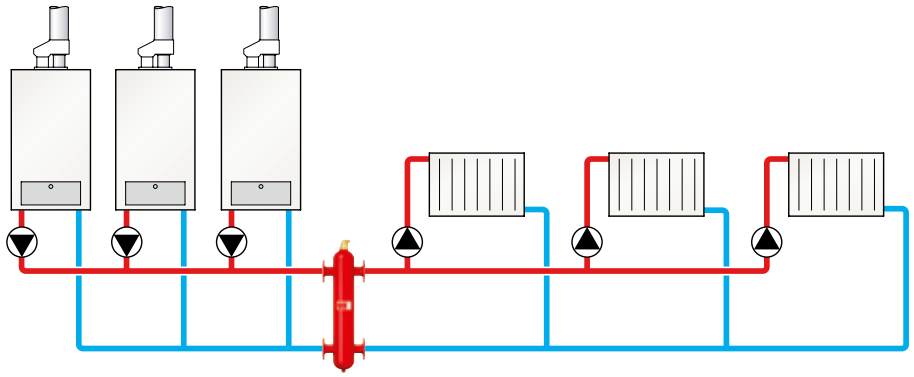
FlexBalance EcoPlus C - Dimensions

Type	Dimensions								
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	I [mm]	J [mm]
FlexBalance EcoPlus C 1	290	276	85	262	160	620	455	55	38
FlexBalance EcoPlus C 1 ¼	340	321	85	280	160	680	505	67	48
FlexBalance EcoPlus C 1 ½	340	320	85	320	160	680	505	74	53
FlexBalance EcoPlus C 2	400	373	95	326	170	755	585	90	65

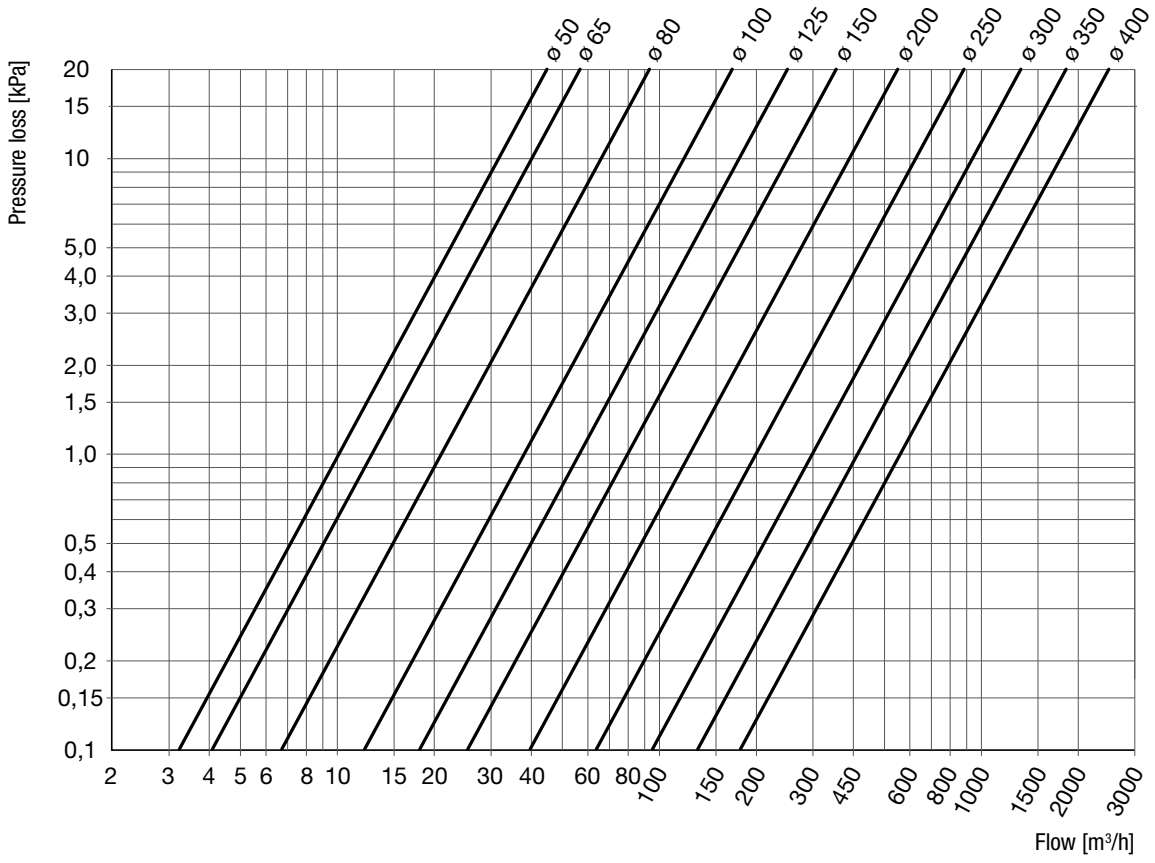
FLEXBALANCE HYDRAULIC BALANCER

For balancing hydraulic pressure in heating installations consisting of multiple circuits and pumps. FlexBalance hydraulic balancers are supplied with an automatic air vent and have a connection for a temperature sensor. The sensor can be connected using an immersion pipe (G ½").

- No more overloaded pumps.
- Improved accurate regulation of the system.
- Considerably improved heat transfer.
- Higher output by the system.



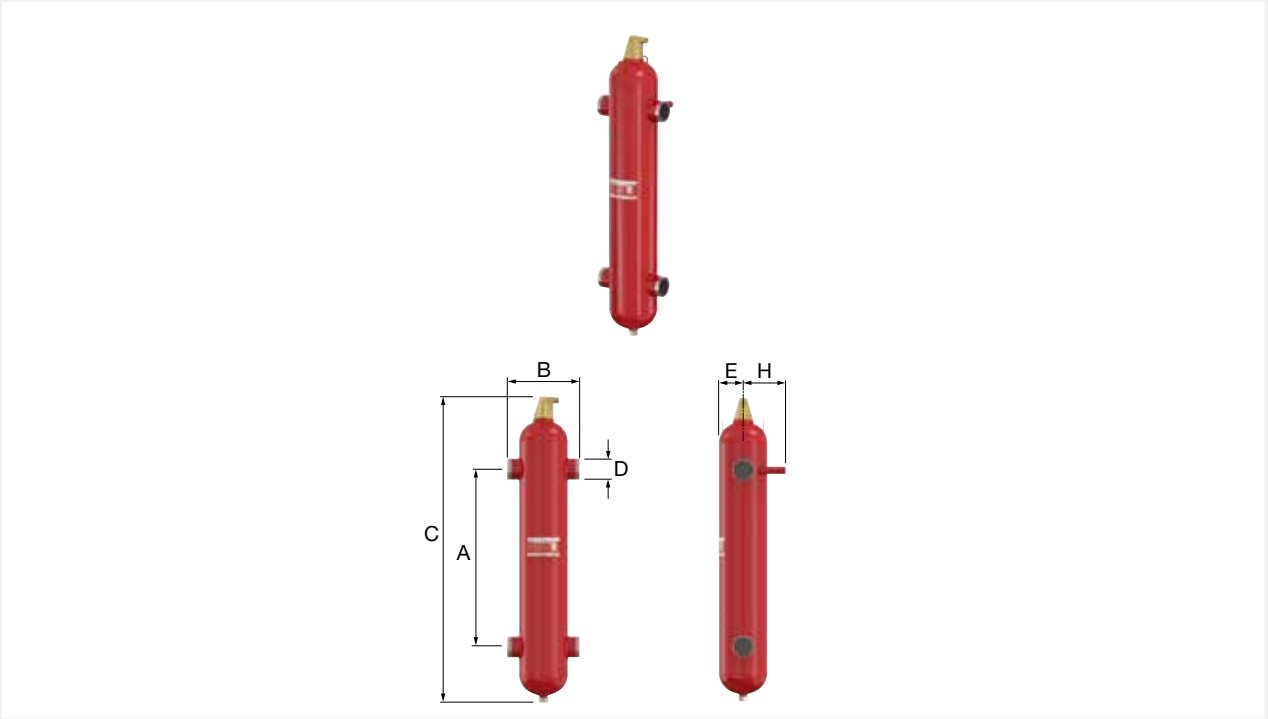
Flexbalance - Flow resistance



FlexBalance S

Conventional VDMA 24770 hydraulic balancer with welded connections.

- Suitable for addition of glycol-based anti-freeze up to 50%.
- Minimum/Maximum working pressure: 0.2 / 10 bar.
- Suitable for systems with a maximum flow temperature of 120 °C.
- Maximum flow rate:
  Primary circuit: 2 m/s
  Secondary circuit: 1.2 m/s.



Type	Capa-city [l]	Connection DN	Connection D [mm]	Capacity [kW] *	Flow in the system [m³/h]	K_v ** [m³/h] (ΔP = 1 bar)	Weight [kg]		Order Code
FlexBalance S 50	17	50	60.3	100 - 200	5 - 15	100	15	1	28431
FlexBalance S 65	21	65	76.1	180 - 330	10 - 17	136	16	1	28432
FlexBalance S 80	65	80	88.9	300 - 450	15 - 30	211	25	1	28433
FlexBalance S 100	78	100	114.3	400 - 770	25 - 55	378	33	1	28434

* Depending on flow velocity.
** $K_v = Q / \sqrt{\Delta P}$ Q: Flow [m³/h] ΔP: Pressure loss over the product [bar]
Flow factor K_v: Rate of flow [m³/h] which results in a 1 bar pressure drop across the product.

CE

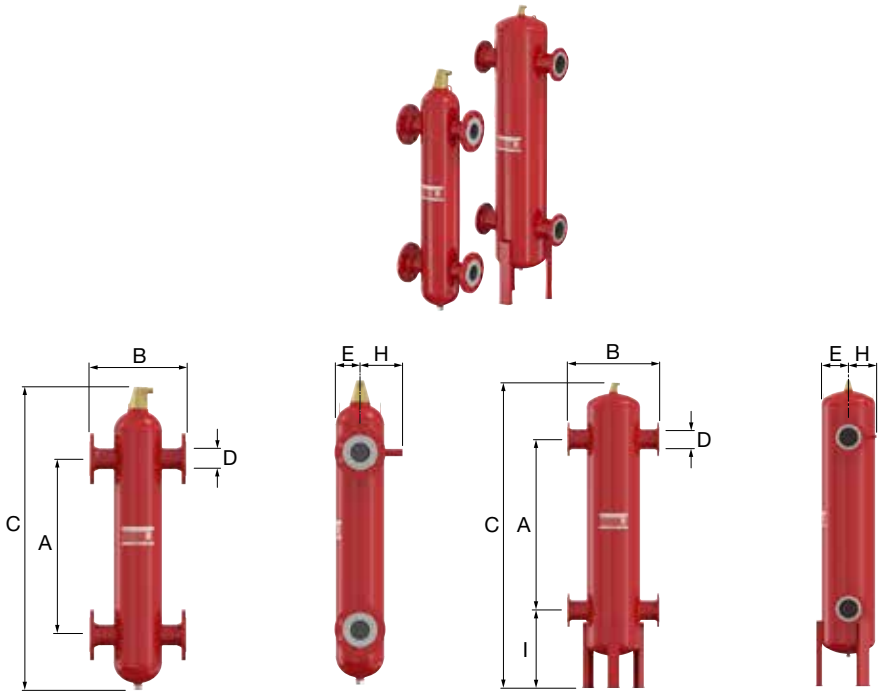
FlexBalance S - Dimensions

Type	Dimensions A [mm]	B [mm]	C [mm]	E [mm]	H [mm]
FlexBalance S 50	490	260	900	88	154
FlexBalance S 65	635	260	1045	88	154
FlexBalance S 80	745	370	1340	135	188
FlexBalance S 100	965	366	1585	135	188

FlexBalance F

Conventional VDMA 24770 hydraulic balancer with flanged connections.

- Suitable for addition of glycol-based anti-freeze up to 50%.
- Minimum/Maximum working pressure: 0.2 / 10 bar.
- Suitable for systems with a maximum flow temperature of 120 °C.
- Maximum flow rate:
  Primary circuit: 2 m/s
  Secondary circuit: 1.2 m/s.
- FlexBalance DN150 and larger: Standard equipped with legs.



Type	Capa-city [l]	Connection DN	Connection D [mm]	Capacity [kW] *	Flow in the system [m³/h]	K_v ** [m³/h] (ΔP = 1 bar)	Weight [kg]		Order Code
FlexBalance F 50	17	50	60.3	100 - 200	5 - 15	100	25	1	28441
FlexBalance F 65	21	65	76.1	180 - 330	10 - 17	136	28	1	28442
FlexBalance F 65 ***	21	65	76.1	180 - 330	10 - 17	136	28	1	28453
FlexBalance F 80	65	80	88.9	300 - 450	15 - 30	211	40	1	28443
FlexBalance F 100	78	100	114.3	400 - 770	25 - 55	378	51	1	28444
FlexBalance F 125	181	125	139.7	700 - 1150	35 - 80	560	97	1	28445
FlexBalance F 150	336	150	168.3	1000 - 1750	55 - 120	775	180	1	28446
FlexBalance F 200	800	200	219.1	1500 - 2800	90 - 200	1230	295	1	28447

* Depending on flow velocity.
** $K_v = Q / \sqrt{\Delta P}$ Q: Flow [m³/h] ΔP: Pressure loss over the product [bar]
Flow factor K_v: Rate of flow [m³/h] which results in a 1 bar pressure drop across the product.
***4 hole flanged version. Not according to EN 1092-1 PN16.

CE

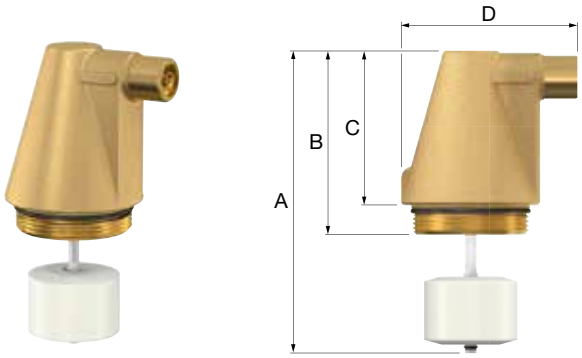
FlexBalance F - Dimensions

Type	Dimensions					
	A [mm]	B [mm]	C [mm]	E [mm]	H [mm]	I [mm]
FlexBalance F 50	490	350	900	88	154	-
FlexBalance F 65	635	350	1045	88	154	-
FlexBalance F 80	745	470	1340	135	188	-
FlexBalance F 100	965	470	1585	135	188	-
FlexBalance F 125	1180	635	2065	180	213	-
FlexBalance F 150	1430	774	2585	225	237	655
FlexBalance F 200	1860	1000	3355	300	277	825

Spare vent cap L

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

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

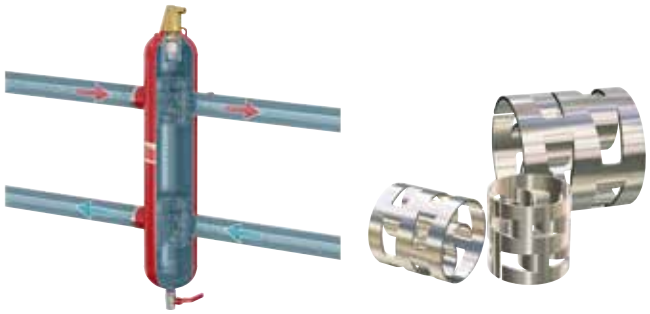


Type	Used for	Dimensions					Order Code
		A [mm]	B [mm]	C [mm]	D [mm]		
Spare vent cap L	Flamcovent (Smart) DN 50 - 600, Flamcovent Clean (Smart) DN 50 - 600, FlexBalance (Plus)	155	94	79	90	1	28555

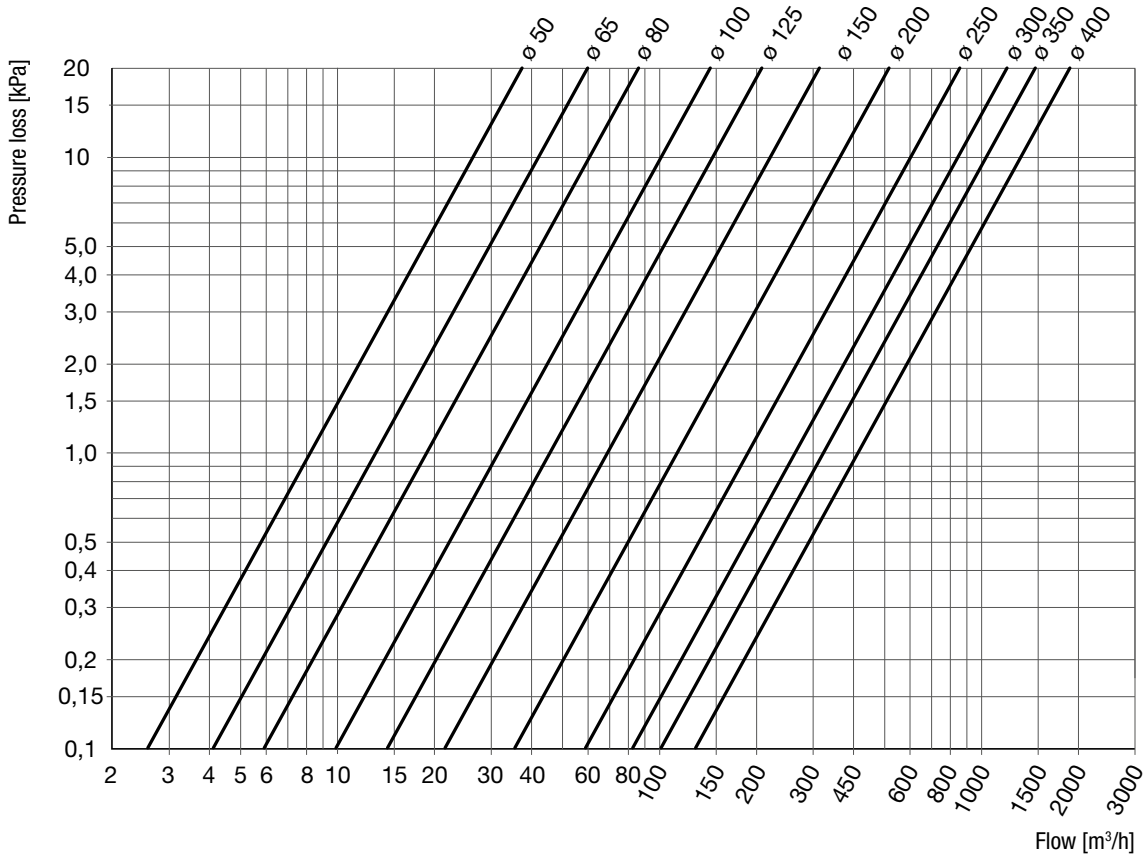
FLEXBALANCE PLUS HYDRAULIC BALANCER

For balancing hydraulic pressure in heating installations consisting of multiple circuits and pumps. FlexBalance Plus hydraulic balancers are supplied with an automatic air vent, a dirt chamber and a connection for a temperature sensor. The sensor can be connected using an immersion pipe (G ½"). The use of our patented PALL-ring technique enables a better response, returns higher efficiency, decreases total built-in height and shares its deaeration and dirt separation benefits.

- Intergration of air and dirt separation.
- No more overloaded pumps.
- Improved accurate regulation of the system.
- Considerably improved heat transfer.
- Higher output by the system.
- Excellent hydraulic control in combination with a large air and dirt separation capacity.
- Smaller construction height than standard hydraulic separators.



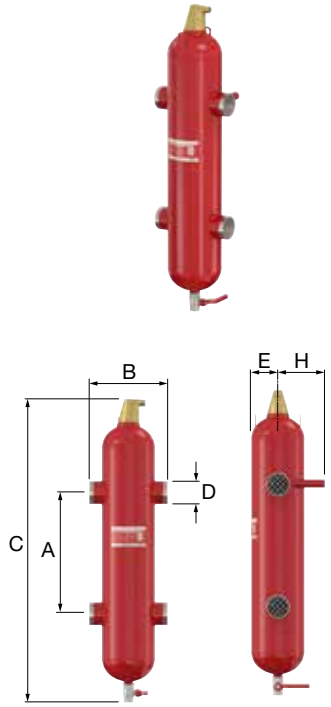
FlexBalance Plus - Flow resistance



FlexBalance Plus S

Conventional VDMA 24770 hydraulic balancer with welded connections.

- Suitable for addition of glycol-based anti-freeze up to 50%.
- Minimum/Maximum working pressure: 0.2 / 10 bar.
- Suitable for systems with a maximum flow temperature of 120 °C.
- Maximum flow rate:
  Primary circuit: 2 m/s
  Secondary circuit: 1.2 m/s.



Type	Capa-city [l]	Connection DN	Connection D [mm]	Capacity [kW] *	Flow in the system [m³/h]	K_v ** [m³/h] (ΔP = 1 bar)	Weight [kg]		Order Code
FlexBalance Plus S 50	17.5	50	60.3	100 - 200	5 - 15	81	18	1	28460
FlexBalance Plus S 65	17.5	65	76.1	180 - 330	10 - 17	131	18	1	28461
FlexBalance Plus S 80	56.0	80	88.9	300 - 450	15 - 30	189	35	1	28462
FlexBalance Plus S 100	56.0	100	114.3	400 - 770	25 - 55	317	37	1	28463

* Depending on flow velocity.
** $K_v = Q / \sqrt{\Delta P}$ Q: Flow [m³/h] ΔP: Pressure loss over the product [bar]
Flow factor K_v: Rate of flow [m³/h] which results in a 1 bar pressure drop across the product.

CE

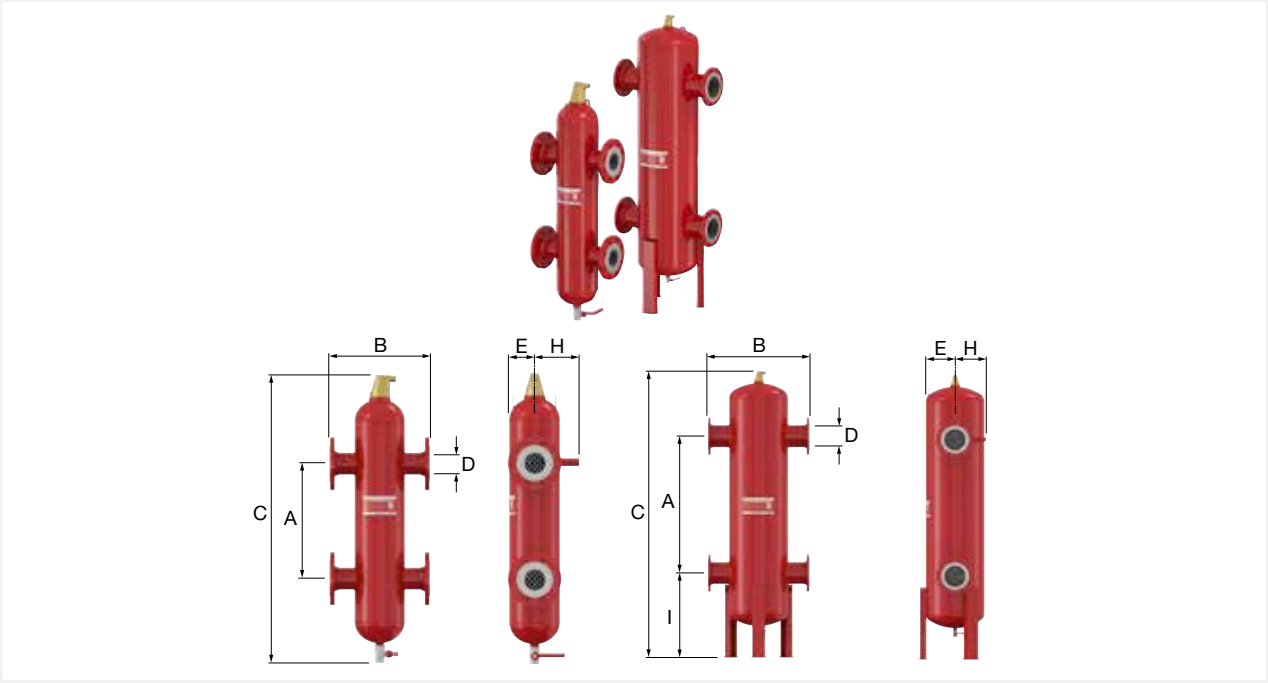
FlexBalance Plus S - Dimensions

Type	Dimensions A [mm]	B [mm]	C [mm]	E [mm]	H [mm]
FlexBalance Plus S 50	400	260	950	88	154
FlexBalance Plus S 65	400	260	950	88	154
FlexBalance Plus S 80	625	370	1265	135	188
FlexBalance Plus S 100	625	366	1265	135	188

FlexBalance Plus F

Conventional VDMA 24770 hydraulic balancer with flanged connections.

- Suitable for addition of glycol-based anti-freeze up to 50%.
- Minimum/Maximum working pressure: 0.2 / 10 bar.
- Suitable for systems with a maximum flow temperature of 120 °C.
- Maximum flow rate:
  Primary circuit: 2 m/s
  Secondary circuit: 1.2 m/s.
- FlexBalance Plus DN150 and larger: Standard equipped with legs.



Type	Capacity [l]	Connection DN	Connection D [mm]	Capacity [kW] *	Flow in the system [m³/h]	K_v ** [m³/h] (ΔP = 1 bar)	Weight [kg]		Order Code
FlexBalance Plus F 50	17.5	50	60.3	100 - 200	5 - 15	81	28	1	28480
FlexBalance Plus F 65	17.5	65	76.1	180 - 330	10 - 17	131	30	1	28481
FlexBalance Plus F 65 ***	17.5	65	76.1	180 - 330	10 - 17	131	30	1	28479
FlexBalance Plus F 80	56.0	80	88.9	300 - 450	15 - 30	189	50	1	28482
FlexBalance Plus F 100	56.0	100	114.3	400 - 770	25 - 55	317	55	1	28483
FlexBalance Plus F 125	146.0	125	139.7	700 - 1150	35 - 80	460	109	1	28484
FlexBalance Plus F 150	272.0	150	168.3	1000 - 1750	55 - 120	679	197	1	28485
FlexBalance Plus F 200	671.0	200	219.1	1500 - 2800	90 - 200	1135	342	1	28486
FlexBalance Plus F 250	1547.0	250	273.0	2500 - 4500	110 - 350	1870	657	1	28487
FlexBalance Plus F 300	1547.0	300	323.9	4200 - 6400	150 - 500	2620	752	1	28488

* Depending on flow velocity.
** $K_v = Q / \sqrt{\Delta P}$ Q: Flow [m³/h] ΔP: Pressure loss over the product [bar]
Flow factor K_v: Rate of flow [m³/h] which results in a 1 bar pressure drop across the product.
***4 hole flanged version. Not according to EN 1092-1 PN16.

CE

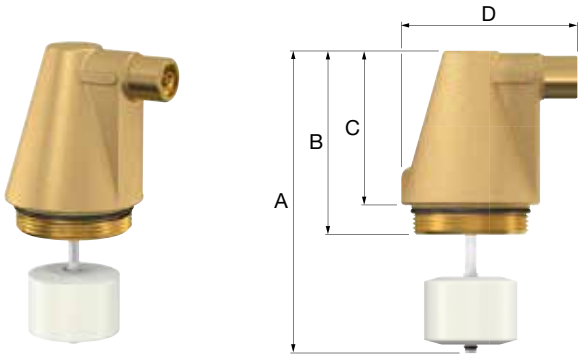
FlexBalance Plus F - Dimensions

Type	Dimensions A [mm]	B [mm]	C [mm]	E [mm]	H [mm]	I [mm]
FlexBalance Plus F 50	400	350	950	88	154	-
FlexBalance Plus F 65	400	350	950	88	154	-
FlexBalance Plus F 80	625	470	1265	135	188	-
FlexBalance Plus F 100	625	470	1265	135	188	-
FlexBalance Plus F 125	830	635	1767	180	213	-
FlexBalance Plus F 150	1040	774	2175	225	237	645
FlexBalance Plus F 200	1400	1000	2895	300	277	825
FlexBalance Plus F 250	1850	1220	3646	400	325	977
FlexBalance Plus F 300	1850	1220	3646	400	369	977

Spare vent cap L

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

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



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

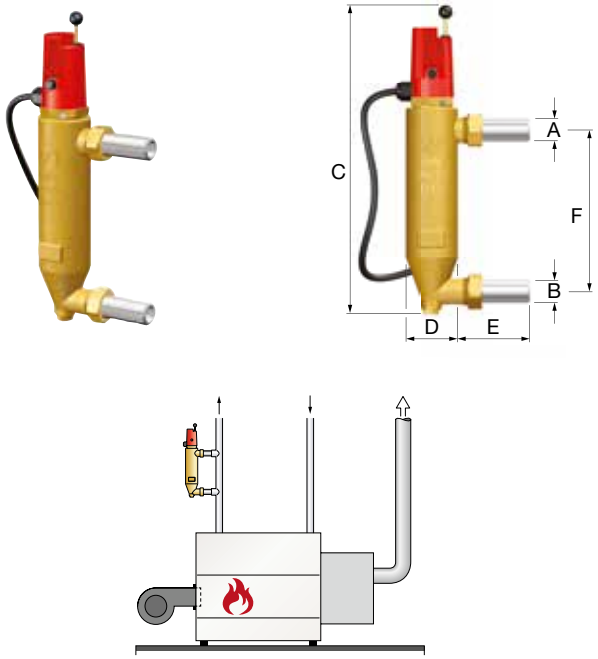
SYSTEM ACCESSORIES

WMS Low Water Level Protection Device

Mechanical low water level protection device.
A mechanical boiler water low level alarm with a float system. If the water level in the boiler drops below a minimum level a float activates a switch. This switch interrupts the power supply to the boiler burner. A locking mechanism prevents the burner from restarting automatically. The test button allows the float to be lowered to simulate a low water alarm condition. The WMS 800 is suitable for continuous operation.

According to EN 12828, system with more than 300 kW must be equipped with water level limiters. However, the installation of such units is recommended for all systems, especially when the heat source is at the top of the system.

- Maximum operating pressure: 10 bar.



Type	Connection *		Dimensions					Order Code
	A	B	C [mm]	D [mm]	E [mm]	F [mm]		
WMS 800	DN 20 / G 1" M	DN 20 / G 1" M	358	62	85	195	1	27455

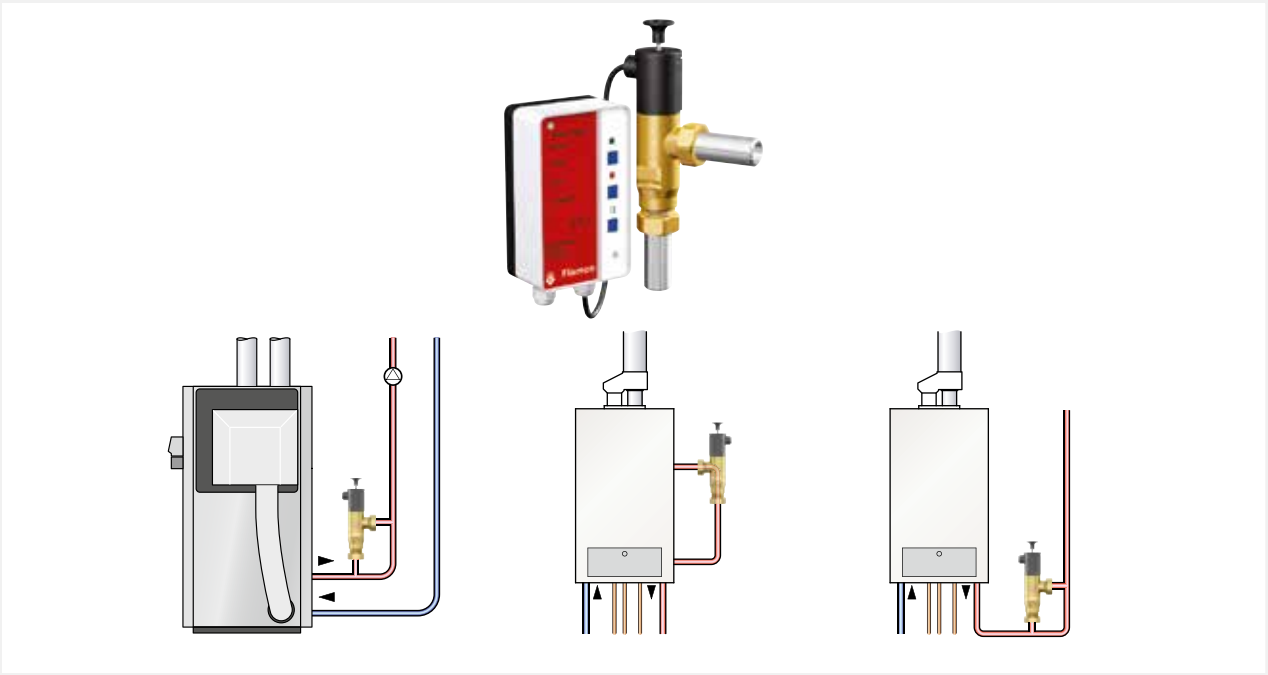
* compression/welding connection.

WMS-E Low Water Level Protection Device

Electronic low water level protection device.
The WMS-E boiler water low level alarm consists of a failsafe, self-monitoring control unit with a periodic self-test function and a sensor. The water shortage switch detects and signals low water levels. If the water level in the boiler drops below a minimum value the signal part interrupts the power supply to the boiler burner and activates the alarm indicator. The control unit and sensor are connected by a two-conductor signaling cable with a maximum length of 50 m.

According to EN 12828, system with more than 300 kW must be equipped with water level limiters. However, the installation of such units is recommended for all systems, especially when the heat source is at the top of the system.

- Maximum operating temperature: 130 °C.
- Maximum operating pressure: 10 bar.
- Electrical connection: 230V - 1ph - 50Hz.



Type	Connection (DN 259)		Order Code
WMS-E (220V - 1ph - 50Hz)	R ³/₄"	1	27450

ACCESSORIES FOR THE INSTALLER

Vessel Carrier

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

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

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

Flexcon Drain Tub

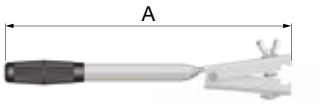
The accessory for draining low positioned tap points.

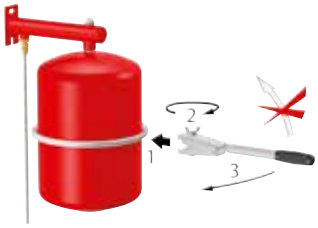
- Flexible in use.
- With hook for easy storage.
- Vital for every installer.
- Made from high grade SBR rubber.

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

Flexcon DT

An easy tool to assist with mounting and removing Flexcon and Airfix expansion vessels of 2 - 25 litres.
By tightening the wing nut, the Flexcon DT is attached to the expansion vessel clamp ring. Thereafter, the expansion vessel can be unscrewed with a lateral movement.





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

Flexcon GVA 90

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

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

Precharge Pressure Tester

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

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

Expansion Vessels for Potable Water Installations

4

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

Airfix D 8 - 35

P. 130

Airfix A 8 - 80

P. 131

Airfix D-E - 10/16 bar

P. 132

Mono Connections

P. 134

Duo Connections

P. 134

Airfix P 2 - 300

P. 135

Airfix P 400 - 5000

P. 136

Airfix P Horizontal

P. 136

Airfix 2 - 4

P. 137

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

P. 137

Mono Connections

P. 138

AIRFIX A/D

For use in potable water or fresh water installations.

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

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

Benefits of using Airfix expansion vessels

- No waste of valuable potable water.
- With special flow through construction.
- Continuous flow through prevents bacterial growth.
- Special butyl rubber diaphragm does not add any colour, odour or taste to the water.
- Corrosion-resistant coating inside, not only on the water side but also on the nitrogen side.
- Internationally approved and certified.
- The clench ring construction allows coating before assembly.
- Nitrogen gas filling for longer retention of pre-charge.

- Colour: White RAL9010.
- Maximum working pressure: 8/10 bar.
- Suitable for systems with a maximum flow temperature of 120 °C.
- Maximum temperature diaphragm: 70 °C.
- Vessels in accordance with EN13831.
- Approvals: **DVGW-W270**
  WRAS
  ACS
  PZH
  KIWA approved execution available on request.
  Approved for potable water applications according to CE 2002/16/EC.
- In accordance with Pressure Equipment Directive 2014/68/EU.

- Airfix A/D 35 - 80: With suspension eye. Connection to the underside of the vessel.

Airfix Selection Table

Selection table for pressure expansion vessels for boiler applications.
- Cold water temperature: 10 °C.
- Hot water temperature: 60 °C.

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

Airfix D 8 - 35

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

- Including special brass flow dividing T-piece (¾") and internal synthetic flow through construction.
- Quality Vignette DIN-DVGW: NW-9481 AU2096.

Type	Pre-charge [bar]	Max. working pressure [bar]	Dimensions Ø [mm]	Dimensions H. [mm]	Connection	Weight [kg]		Order Code
Airfix D 8	4	10	245	301	R ¾"	3.2	50	14259
Airfix D 12	4	10	286	334	R ¾"	4.3	36	14349
Airfix D 18	4	10	328	325	R ¾"	4.9	24	14459
Airfix D 25	4	10	358	378	R ¾"	6.6	18	14559
Airfix D 35	4	8	396	437	R ¾"	8.1	18	14659

Airfix A 8 - 80

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

- Including synthetic flow divider.
- Quality Vignette DIN-DVGW: 04-0359-W AG 003/04.

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

AIRFIX D-E

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

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

- Coated, two-way system connection for complete vessel flow through.
- Low pressure drop.
- Nitrogen gas filling for longer retention of pre-charge.
- Replaceable butyl rubber bladder according to DIN4807/5.
- Easy to install with long service life.
- Pressure gauge with blow back protection.

- Quality Vignette DIN-DVGW: NW-0411 BQ 0340.
- Colour: White, RAL 9010.
- Standard pre-charge: 6 bar.
- Suitable for systems with a maximum flow temperature of 120 °C.
- Maximum temperature bladder: 70 °C.
- In accordance with Pressure Equipment Directive 2014/68/EU.

Airfix D-E - 10.0 bar

- Maximum operating pressure: 10 bar.

Airfix D-E 100 - 1000:
- In accordance with EN13831.
- Delivered with pressure gauge, sight-glass, threaded flow through connection and height adjustable feet.

Airfix D-E 1600 - 3000:
- In accordance with AD2000.
- With electronic diaphragm rupture sensor and flanged connections.
- The diaphragm rupture sensor may be configured for remote read-out.



Type	Capacity [l]	Dimensions Ø [mm]	Dimensions H. [mm]	System connection (2x)	Flanges * (2x)	Weight [kg]		Order Code
Airfix D-E 100	100	484	897	G 1 ½" M	-	38	1	14750
Airfix D-E 200	200	600	1075	G 1 ½" M	-	51	1	14751
Airfix D-E 300	300	600	1444	G 1 ½" M	-	65	1	14752
Airfix D-E 400	400	790	1287	G 2" M	-	89	1	14753
Airfix D-E 600	600	790	1647	G 2" M	-	110	1	14754
Airfix D-E 800	800	790	1994	G 2" M	-	148	1	14755
Airfix D-E 1000	1000	790	2345	G 2" M	-	170	1	14756
Airfix D-E 1600	1600	1000	2663	-	DN 80	550	1	14916
Airfix D-E 2000	2000	1200	2412	-	DN 80	620	1	14920
Airfix D-E 3000	3000	1200	3312	-	DN 80	805	1	14930

* According to EN 1092-1 PN16.

Airfix D-E - 16.0 bar

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

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

* According to EN 1092-1 PN16.

Mono Connections

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

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

Coated steel connections suitable for:
- Airfix D-E 10 bar: 1600 - 3000 l.
- Airfix D-E 16 bar: 50 - 3000 l.

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

Duo Connections

Stainless steel (AISI 304) flow through armature with double system connection.

Suitable for:
- Airfix D-E 10 bar: 100 - 1000 l.: Available on request.
- Airfix D-E 10 bar: 1600 - 3000 l.
- Airfix D-E 16 bar: 50 - 3000 l.

Type	Capacity [l]	Connection*		Order Code
Duo small - Stainless steel	50 - 300	PN16 DN40	1	14950
Duo medium - Stainless steel	600 - 1000	PN16 DN50	1	14951
Duo large - Stainless steel	1600 - 3000	PN16 DN80	1	14952

* According to EN 1092-1 PN 16.

AIRFIX P

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

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

Airfix P 2 - 300

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

Type	Capacity [l]	Pre-charge [bar]	Dimensions ø [mm]	Dimensions H. [mm]	Connection	Bladder	Weight [kg]		Order Code
Airfix P 2 **	2	0.7	120	235	G 1/2" M	Butyl	4.6*	336	24840
Airfix P 2	2	3.5	120	235	G 1/2" M	Butyl	4.6*	336	24850
Airfix P 3	3	3.5	170	240	G 3/4" M	Butyl	1.5	168	24851
Airfix P 5	5	3.5	170	275	G 3/4" M	Butyl	1.7	144	24852
Airfix P 8	8	3.5	220	305	G 3/4" M	Butyl	2.2	90	24853
Airfix P 12	12	3.5	260	310	G 3/4" M	Butyl	2.9	72	24854
Airfix P 16	16	3.5	260	345	G 3/4" M	EPDM	3.4	60	24855
Airfix P 18	18	3.5	260	375	G 3/4" M	EPDM	3.5	60	24856
Airfix P 24	24	3.5	260	485	G 3/4" M	EPDM	4.3	56	24857
Airfix P 35	35	3.5	380	470	G 1" M	EPDM	8.0	24	24858
Airfix P 50	50	3.5	380	720	G 1" M	EPDM	9.9	15	24859
Airfix P 60	60	3.5	380	830	G 1" M	EPDM	12.1	15	24860
Airfix P 80	80	3.5	460	760	G 1" M	EPDM	14.0	10	24861
Airfix P 100	100	3.5	460	880	G 1" M	EPDM	16.0	10	24862
Airfix P 150	150	3.5	510	1030	G 1" M	EPDM	25.5	8	24863
Airfix P 200	200	3.5	590	1070	G 1 1/4" M	EPDM	37.5	8	24864
Airfix P 300	300	3.5	650	1250	G 1 1/4" M	EPDM	50.5	3	24865

* Per set of four in one box.

Airfix P 400 - 5000

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

Type	Capacity [l]	Pre-charge [bar]	Dimensions ø [mm]	Dimensions H [mm]	Connection	Bladder	Weight [kg]		Order Code
Airfix P 400	400	3.5	790	1287	G 1 ¼" M	EPDM	84	3	24933
Airfix P 600	600	3.5	790	1647	G 1 ¼" M	EPDM	106	1	24934
Airfix P 800	800	3.5	790	1994	G 1 ¼" M	EPDM	145	1	24935
Airfix P 1000	1000	3.5	790	2345	G 1 ¼" M	EPDM	167	1	24936
Airfix P 1500	1500	3.5	1000	2510	Rp 2 ½"	Butyl	423	1	24869
Airfix P 2000	2000	3.5	1100	2745	Rp 2 ½"	Butyl	483	1	24870
Airfix P 2500	2500	3.5	1200	3295	Rp 2 ½"	Butyl	537	1	24871
Airfix P 3000	3000	3.5	1200	3425	Rp 2 ½"	Butyl	766	1	24872
Airfix P 5000	5000	3.5	1500	3615	Rp 2 ½"	Butyl	1620	1	24873

Airfix P Horizontal

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

Type	Capacity [l]	Pre-charge [bar]	Dimensions ø [mm]	Dimensions L. [mm]	Connection	Bladder	Weight [kg]		Order Code
Airfix P 24-H	24	3.5	260	485	G ¾" M	EPDM	4.7	56	24880
Airfix P 50-H	50	3.5	380	595	G 1" M	EPDM	8.1	20	24890
Airfix P 60-H	60	3.5	380	720	G 1" M	EPDM	10.4	15	24881
Airfix P 80-H	80	3.5	460	660	G 1" M	EPDM	12.3	12	24882
Airfix P 100-H	100	3.5	460	780	G 1" M	EPDM	14.0	12	24883
Airfix P 150-H	150	3.5	510	950	G 1" M	EPDM	23.5	6	24884
Airfix P 200-H	200	3.5	590	940	G 1 ¼" M	EPDM	34.2	6	24885
Airfix P 300-H	300	3.5	650	1150	G 1 ¼" M	EPDM	44.0	6	24886
Airfix P 500-H	500	3.5	750	1420	G 1 ¼" M	EPDM	58.0	6	24887

AIRFIX 2 - 4

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

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

Airfix 2 - 4

- Maximum operating pressure: 6.0 bar.

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

* Gas charge must be stated on order.

AIRFIX D-E-B

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

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

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

40 bar execution available on request.

Airfix D-E-B - 10.0 bar

- Maximum working pressure: 10.0 bar.

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

Airfix D-E-B - 16.0 bar

- Maximum working pressure: 16.0 bar.

Type	Capa-city [l]	Dimensions Ø [mm]	Dimensions H. [mm]	Connection	Weight [kg]		Order Code
Airfix D-E-B 50	50	450	830	Rp 1 ½"	58	1	14703
Airfix D-E-B 80	80	450	1010	Rp 1 ½"	69	1	14803
Airfix D-E-B 120	120	450	1265	Rp 1 ½"	83	1	14815
Airfix D-E-B 180	180	550	1255	Rp 1 ½"	124	1	14821
Airfix D-E-B 240	240	550	1515	Rp 1 ½"	147	1	14827
Airfix D-E-B 300	300	550	1855	Rp 1 ½"	178	1	14833
Airfix D-E-B 600	600	750	1840	Rp 2"	282	1	14863
Airfix D-E-B 800	800	750	2230	Rp 2"	333	1	14883
Airfix D-E-B 1000	1000	750	2730	Rp 2"	398	1	14913
Airfix D-E-B 1600	1600	1000	2680	Rp 2 ½"	587	1	14919
Airfix D-E-B 2000	2000	1200	2400	Rp 2 ½"	657	1	14923
Airfix D-E-B 3000	3000	1200	3300	Rp 2 ½"	864	1	14933

Airfix D-E-B - 25.0 bar

- Maximum working pressure: 25.0 bar.

Type	Capa-city [l]	Dimensions Ø [mm]	Dimensions H. [mm]	Connection	Weight [kg]		Order Code
Airfix D-E-B 50	50	450	830	Rp 1 ½"	59	1	14705
Airfix D-E-B 80	80	450	1010	Rp 1 ½"	71	1	14805
Airfix D-E-B 120	120	450	1265	Rp 1 ½"	87	1	14811
Airfix D-E-B 180	180	550	1255	Rp 1 ½"	123	1	14817
Airfix D-E-B 240	240	550	1515	Rp 1 ½"	149	1	14829
Airfix D-E-B 300	300	550	1855	Rp 1 ½"	182	1	14835
Airfix D-E-B 600	600	750	1840	Rp 2"	349	1	14865
Airfix D-E-B 800	800	750	2230	Rp 2"	417	1	14885
Airfix D-E-B 1000	1000	750	2730	Rp 2"	500	1	14905

Mono Connections

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

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

Coated steel connections suitable for:
- Airfix D-E 10 bar: 1600 - 3000 l.
- Airfix D-E 16 bar: 50 - 3000 l.

Type	Capacity [l]	Connection		Order Code
Mono small - Stainless steel	50 - 300	G 1 ½"	1	14960
Mono medium - Stainless steel	600 - 1000	G 2"	1	14961
Mono large - Stainless steel	1600 - 3000	G 2 ½"	1	14962
Mono small - Coated steel	50 - 300	G 1 ½"	1	14955
Mono medium - Coated steel	600 - 1000	G 2"	1	14956
Mono large - Coated steel	1600 - 3000	G 2 ½"	1	14957

Accessories for Potable Water Installations

5

The comprehensive range of Flamco accessories for potable water installations provide protection, safety and efficiency. For example, the Prescor BFP eliminates the risk of contamination of the mains water network, the Flamcomix thermostatic mixing valve ensures safe and accurate temperature control and Prescor B boiler valves protect potable water systems against excessive pressure. In addition, Flamco has developed a water shock arrestor to absorb water hammer (sudden pressure wave in a closed pipe).
The construction and high quality of applied materials with these products guarantee optimum safety.

Prescor B

P. 142

Prescor SB

P. 143

Prescor IC

P. 144

Flexbrane

P. 145

Siphon Flexbrane CE

P. 145

Prescor T&P

P. 146

Reduflex

P. 146

Flamcomix Mixing Valve

P. 148

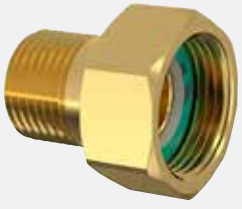
Flamcomix Insulation box

P. 149

Flamcomix Backflow Preventer set

P. 149

Flamcomix Connections set



P. 150

Flamcomix Precision Thermometer

P. 150

AirfixControl

P. 150

Flexofit S

P. 151

Flexofit S T-fitting

P. 151

MB

P. 152

SB-A Band

P. 152

Flexcon DT

P. 153

Vessel Carrier

P. 153

Precharge Pressure Tester

P. 153

PRESCOR B AND SB SAFETY VALVES

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

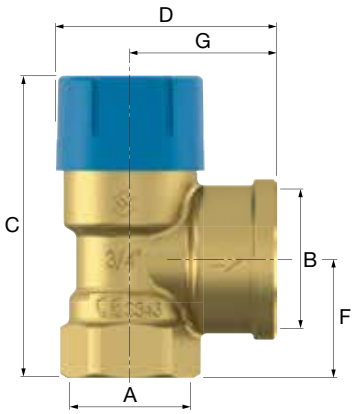
The seating of Prescor boiler valves is designed so that it not only makes a perfect seal but can also achieve a large blow-off capacity. The hardness of the rubber is adapted according to the set pressure of the safety valve. Due to this combination of a specifically designed seating and special rubber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

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

- In accordance with PED 2014/68/EU and EN 12516-3.

Prescor B

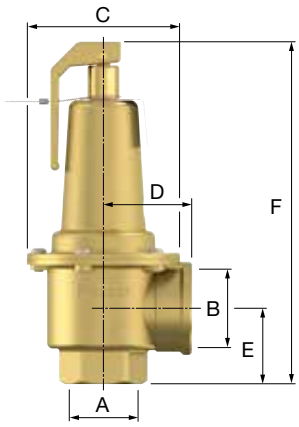
- Minimum/Maximum working temperature: 0 °C / 95 °C.
- Peak load: 140 °C.



Type	Set pressure [bar]	Connection A	Connection B	Dimensions C [mm]	Dimensions D [mm]	Dimensions F [mm]	Dimensions G [mm]	Capacity [kW]		Order Code
Prescor B 1/2	6.0	Rp 1/2"	Rp 1/2"	68.7	47.2	21.5	28.5	75	50	27100
Prescor B 1/2	7.0	Rp 1/2"	Rp 1/2"	68.7	47.2	21.5	28.5	75	50	27103
Prescor B 1/2	8.0	Rp 1/2"	Rp 1/2"	68.7	47.2	21.5	28.5	75	50	27101
Prescor B 1/2	10.0	Rp 1/2"	Rp 1/2"	68.7	47.2	21.5	28.5	75	50	27102
Prescor B 3/4	6.0	Rp 3/4"	Rp 1"	76.8	55.2	29.5	36.5	150	40	27110
Prescor B 3/4	7.0	Rp 3/4"	Rp 3/4"	70.9	49.2	23.5	30.5	150	40	28233
Prescor B 3/4	8.0	Rp 3/4"	Rp 1"	76.8	55.2	29.5	36.5	150	40	27111
Prescor B 3/4	10.0	Rp 3/4"	Rp 1"	76.8	55.2	29.5	36.5	150	40	27112
Prescor B 1	6.0	Rp 1"	Rp 1 1/4"	100.5	73.2	36.0	47.0	250	16	29005
Prescor B 1	7.0	Rp 1"	Rp 1 1/4"	100.5	73.2	36.0	47.0	250	16	28993
Prescor B 1	8.0	Rp 1"	Rp 1 1/4"	100.5	73.2	36.0	47.0	250	16	29006
Prescor B 1	10.0	Rp 1"	Rp 1 1/4"	100.5	73.2	36.0	47.0	250	16	29007
Prescor B 1/2 M x K 15	6.0	R 1/2"	K 15	81.2	60.5	37.0	42.0	75	40	28283
Prescor B 1/2 M x K 15	9.0	R 1/2"	K 15	81.2	60.5	37.0	42.0	75	40	28281
Prescor B 1/2 M x K 15	10.0	R 1/2"	K 15	81.2	60.5	37.0	42.0	75	40	28282

Prescor SB

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



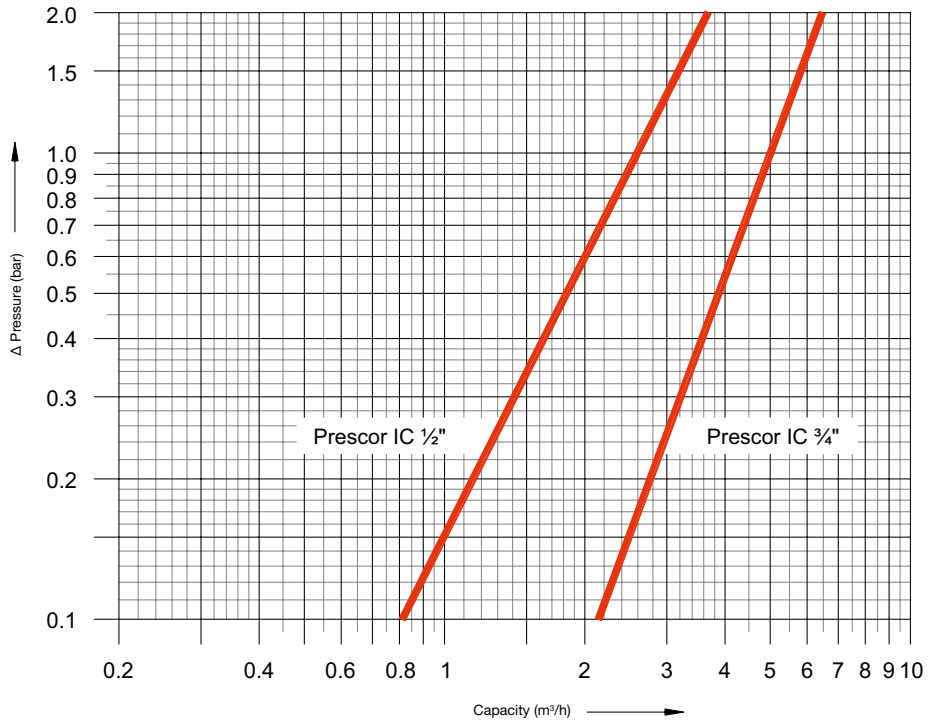
Type	Set pressure [bar]	Connection		Dimensions				Capacity [kW]		Order Code
		A	B	C [mm]	D [mm]	E [mm]	F [mm]			
Prescor SB 1 1/4	6.0	G 1 1/4" F	G 1 1/2" F	95	55	47	213	350	1	29008
Prescor SB 1 1/4	8.0	G 1 1/4" F	G 1 1/2" F	95	55	47	213	350	1	29009
Prescor SB 1 1/4	10.0	G 1 1/4" F	G 1 1/2" F	95	55	47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

SAFETY GROUPS

For protecting the potable water system from excess pressure during the heating cycle.
The non-return valve will prevent the water (e.g. from a water heater) from flowing back into the mains water pipe.

- Suitable for all kinds of heated water preparation devices and storage apparatus.
- With ball valve for easy, quick and safe opening and closing.
- The funnel can be rotated up to 360°. Hence it can be fitted in almost any position.
- Large flow-through capacity and therefore hardly any pressure drop over the safety group.
- Very compact and therefore recommended for the most modern built-in devices.

Prescor IC - Pressure loss diagram



Prescor IC

- Prescor IC ½": With coupling set for the funnel.

- In accordance with European standard EN-1488.
- Minimum/Maximum working temperature: -10 °C / 95 °C.
- Peak load: 140 °C.
- Main Body: Brass.
- Guidance bus: PBTP GF30.
- Spring: Stainless steel (DIN 17224).

Type	For storage vessels up to [l]	Set pressure [bar]	Sound class	Connection (compression) [mm]		Order Code
Prescor IC ½	200	8	I	15 x 15 x 22	20	27173
Prescor IC ¾	1000	8	II	22 x 22 x 28	20	27190

Flexbrane

- With air gap rendering a separate funnel unnecessary.

- In accordance with European standard EN-1487.
- Nickel plated outside body.
- Minimum/Maximum working temperature: 0 °C / 95 °C.
- Peak load: 140 °C.


27170


27171


28365


28360


28350


28388


28387

Type	Set pressure [bar]	Connection		Order Code
Flexbrane CE $^1/_2$	7	½" M (with nipple) x ¾" M x 1" M.	1	27170
Flexbrane CE $^3/_4$	7	$^3/_4$" F x $^3/_4$" M x 1" M	1	27171
Connection kit 1 $^1/_4$ (for twinning of 2 GS 1)		1"$^1/_4$ x 1	1	28385
Flexbrane CE-H $^3/_4$ hor.	7	$^3/_4$" F x $^3/_4$" M x 1" M	1	28388
Flexbrane CE 2000 $^3/_4$ vert. NF - ACS	7	$^3/_4$" F x $^3/_4$"M x 1"M	20	28350
Flexbrane NF - ACS	7	$^3/_4$" F x $^3/_4$" M x 1" M	20	28360
Flexbrane SST NF - ACS	7	$^3/_4$" F x $^3/_4$" M x 1" M	1	28365
Flexbrane CF 1 hor.	7	1" F x 1" M x 1" M	1	28387
Dielectric connector $^3/_4$ MF	7	$^3/_4$"	1	27805

Siphon Flexbrane CE

Type	Set pressure [bar]	Connection		Order Code
Plastic siphon for CE and connection piece	7	1" x 1"	1	27184

PRESCOR T&P VALVE

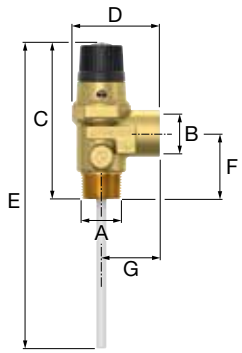
The Prescor T&P temperature and pressure relief valves control and limit the temperature and pressure of the hot water contained in a domestic water heater or storage vessel and prevent it from being able to reach temperatures that are too high.
On reaching the settings, the valve discharges a sufficient 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 ºC / 96 ºC.
- Minimum/Maximum working temperature: -10 °C / 120 °C.
- Peak load: 140 °C.



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

PRESSURE REDUCING VALVES

Reduflex

Suitable for hot water, cold water and compressed air.

- With captive nut.
- Maximum working pressure: 16 bar.
- Maximum working temperature: 80 °C.

Type	Connection		Order Code
Reduflex adjustable ³/₄	³/₄" M x ³/₄" F	1	28279

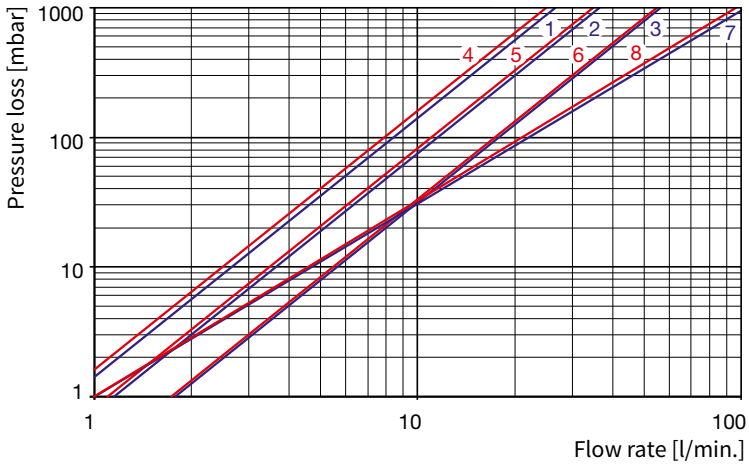
FLAMCOMIX

To efficiently store as much heat as possible the water temperature in a boiler or combo-vessel is higher than 60 °C. At this temperature level, there is a risk of scalding within a few seconds. To prevent this, a thermostatic mixing valve is used between the vessel and the draw-off point or several draw-off points. The Flamcomix limits the maximum output temperature of the draw-off points. This permits the input temperature to be maintained at a high level thus preventing the growth of Legionella bacteria. The output temperature can be set to a safe and comfortable level. Inclusion of a Flamcomix valve will improve safety in the hot water system. In addition, the comfort of the system is increased by the constant output temperature. Furthermore, you avoid wasting water by an immediate supply of water at the correct temperature.

Flamcomix main advantages

- **Stable output**
  The output temperature is maximum ± 3 °C of the set temperature. This way the Flamcomix is very capable of absorbing sudden temperature fluctuations.
- **No calcification**
  Lime cannot attach to the synthetic internal parts and the PTFE coating. This way calcification is prevented (only in the standard series).
- **Setting accuracy**
  The multi-turn setting control permits fine adjustment of output temperature.
- **Locking cap**
  The locking cap prevents accidental adjustment of the output temperature.
- **Little pressure resistance**
  Minimal pressure drop is achieved by the optimised design of the internal parts and the back-flow preventor that was developed especially for this purpose.

Flamcomix - Pressure loss diagram



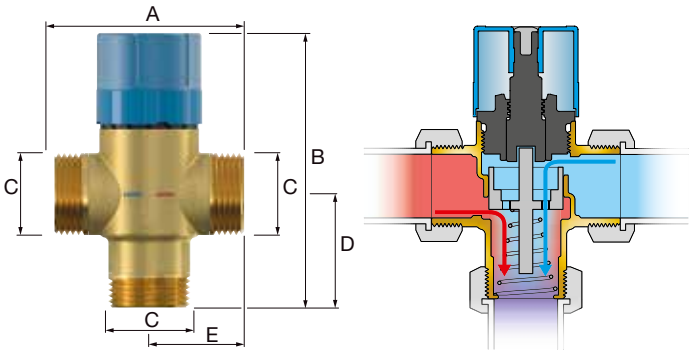
Reference	DN	K_{VS} [m³/h]	V [l/min]	Back-flow safeguard
1	15	1.6	26	-
2	20	2.2	36	-
3	25	3.4	56	-
4	15	1.5	25	✔
5	20	2.1	35	✔
6	25	3.3	55	✔
7 (HC)	25	6.1	102	-
8 (HC)	25	5.9	102	✔

Flamcomix Mixing Valve

For application with potable water according to Guideline 98/83/EG.

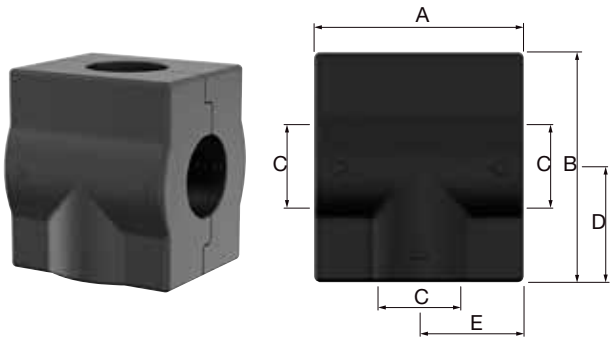
- Maximum operating temperature: 100 °C (including back-flow safeguard 90 °C).
- Operating pressure range: 0.5 - 10 bar.
- Maximum working pressure (dynamic): 0.5 - 5 bar.
- Maximum pressure differential of hot / cold supply: 2 bar.
- For a stable output temperature: ± 3 °C (cold water) and ± 15 °C (hot water).
- Noise category: 2.
- Installation position: any position.

- Housing: non-dezincifiable brass.
- Internal parts: high quality synthetics.
- Seals: EPDM.
- Spring: stainless steel.
- Brass housing with anti-lime coating (PTFE).



Type	DN (syst.)	Connection (C)	Adjustable temperature range [°C]	Back flow preventer	Dimensions A [mm]	B [mm]	D [mm]	E [mm]		Order Code
Flamcomix 45-65 FS DN15	DN15	3/4"	45 - 65	no	76.0	max. 122	46	38.00	1	28770
Flamcomix 45-65 FS DN20	DN20	1"	45 - 65	no	77.0	max. 122	46	38.50	1	28771
Flamcomix 45-65 FS DN25	DN25	1 1/4"	45 - 65	no	77.0	max. 122	46	38.50	1	28772
Flamcomix 35-70 FS DN15	DN15	3/4"	35 - 70	no	76.0	max. 122	46	38.00	1	28773
Flamcomix 35-70 FS DN20	DN20	1"	35 - 70	no	77.0	max. 122	46	38.50	1	28774
Flamcomix 35-70 FS DN25	DN25	1 1/4"	35 - 70	no	77.0	max. 122	46	38.50	1	28775
Flamcomix 35-70 FS BFP DN15	DN15	3/4"	35 - 70	yes	78.5	max. 122	46	39.25	1	28776
Flamcomix 35-70 FS BFP DN20	DN20	1"	35 - 70	yes	79.5	max. 122	46	39.75	1	28777
Flamcomix 35-70 FS BFP DN25	DN25	1 1/4"	35 - 70	yes	79.5	max. 122	46	39.75	1	28778
Flamcomix 20-70 HC DN25	DN25	1 1/4"	20 - 70	no	85.0	max. 134	51.4	42.50	1	28780

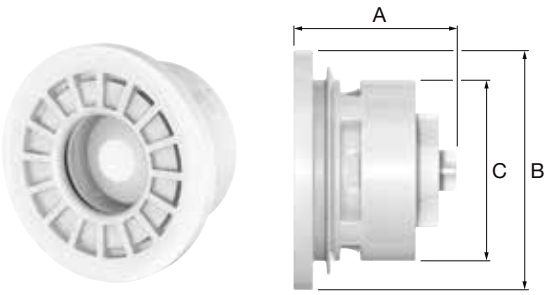
Flamcomix Insulation box



Type	Dimensions						Order Code
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]		
Flamcomix insulation box DN15	98	109	35	59	50	1	28790
Flamcomix insulation box DN20	98	109	43	59	50	1	28791
Flamcomix insulation box DN25	98	109	50	59	50	1	28792
Flamcomix HC insulation box DN25	98	109	50	59	50	1	28789

Flamcomix Backflow Preventer set

Available as Flamcomix with integrated check valve or Flamcomix and check valve as separate components. The check valves are specifically designed for use in a Flamcomix thermostatic mixing valve. This results in a very low pressure drop.



Type	Dimensions				Order Code
	A [mm]	B [mm]	C [mm]		
Flamcomix Backflow preventer set DN15	18.10	24.1	20.65	2	28793
Flamcomix Backflow preventer set DN20	20.55	30.1	26.15	2	28794
Flamcomix Backflow preventer set DN25	20.55	38.6	32.65	2	28795
Flamcomix HC Backflow preventer set DN25	20.55	38.6	32.65	2	28787

Flamcomix Connections set

Type		Order Code
Flamcomix Connections set ³/₄" x ¹/₂" (3x)	1	28796
Flamcomix Connections set 1" x ¹/₂" (3x)	1	28797
Flamcomix Connections set 1" x ³/₄" (3x)	1	28798
Flamcomix Connections set 1 ¹/₄" x 1" (3x)	1	28799

Flamcomix Precision Thermometer

Type		Order Code
Precision Thermometer	1	28788

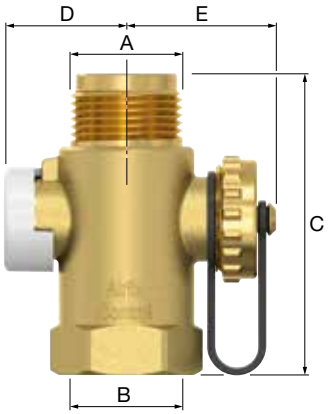
AIRFIXCONTROL

With this component the flushing function is fully guaranteed. When the vessel is disconnected from the system the system flow remains in function.
AirfixControl enables an easy yearly precharge check of the Airfix A or D expansion vessel.

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

AirfixControl

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



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

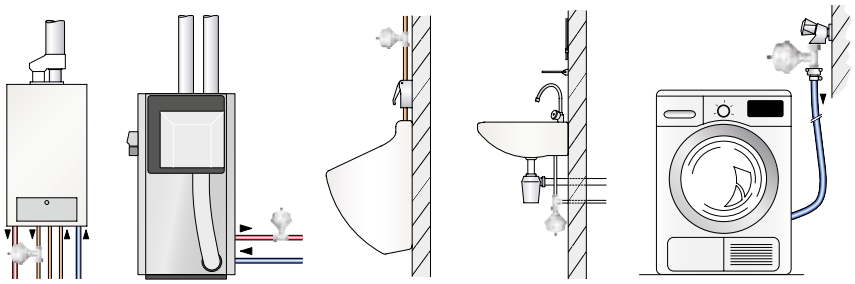
DIN 4807-5

FLEXOFIT S WATER SHOCK ARRESTOR

Flexofit S absorbs water hammer in order to minimize noise and damage to the system.

A water hammer arrestor absorbs the wave of pressure before it can develop into water hammer. The Flexofit does this by having two areas that are separated by a rubber diaphragm. On one side, there is a gas cushion under pressure, while the other side is in connected to the system. The gas cushion compresses and absorbs the wave of pressure.

- Capacity : 160 cm^3.
- Solid brass, chromium plated housing.
- Membrane: butyl rubber.
- Maximum working pressure: 10.0 bar (peak load: 40.0 bar).
- Maximum working temperature: 90 °C.



Flexofit S - Selection table

Based on a flow rate of 3 m/s.

System pressure [bar]		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7
Ø Pipe	Max. pipe length up to the 1st bend [m]	Number of Flexofit S water hammer arrestors to be fitted										
1/2" (15 mm)	15	1	1	1	1	1	1	1	2	2	2	2
	20	1	1	1	1	1	2	2	2	2	-	-
	30	1	1	2	2	2	2	2	2	-	-	-
3/4" (22 mm)	7.5	1	1	1	1	1	1	1	2	2	2	2
	15	1	1	2	2	2	2	2	-	-	-	-
	20	2	2	2	2	2	-	-	-	-	-	-
1" (28 mm)	7.5	1	1	1	1	1	2	2	2	2	-	-
	15	2	2	2	2	2	-	-	-	-	-	-
	20	2	-	-	-	-	-	-	-	-	-	-
1 1/4" (35 mm)	7.5	2	2	2	2	2	2	-	-	-	-	-

Flexofit S

kiwa

Type	Pre-charge [bar]	Dimensions Ø [mm]	Dimensions H. [mm]	Connection	Packaging unit	Order Code
Flexofit S 1/2	2	83	102	R 1/2"	20	24980
Flexofit S 1/2 with T-fitting	2	83	130	G 3/4" F x G 3/4" M	20	24989

Flexofit S T-fitting

For mounting Flexofit water hammer arrestors quickly and easily between the tap and the washing machine or dish-washer.

Type	Connection	Packaging unit	Order Code
T-fitting Flexofit S	G 3/4" F x G 1/2" F x G 3/4" M	1	24985

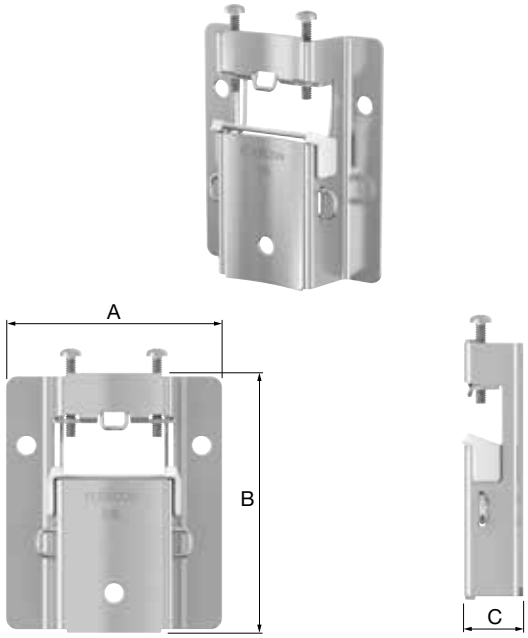
WALL MOUNTING

MB

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

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

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



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

SB-A Band

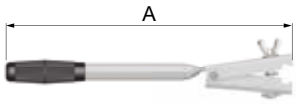
For mounting an Airfix P expansion vessel (2 - 35 litres) to the wall.

Type	Application		Order Code
SB-A	Band for fitting Airfix P vessels, to be combined with MB 2	5	27914

ACCESSORIES FOR THE INSTALLER

Flexcon DT

An easy tool to assist with mounting and removing Flexcon and Airfix expansion vessels of 2 - 25 litres.
By tightening the wing nut, the Flexcon DT is attached to the expansion vessel clamp ring. Thereafter, the expansion vessel can be unscrewed with a lateral movement.



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

Vessel Carrier

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

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

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

Precharge Pressure Tester

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

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

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

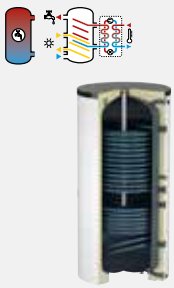
Duo Solar 200 - 1000

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

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.

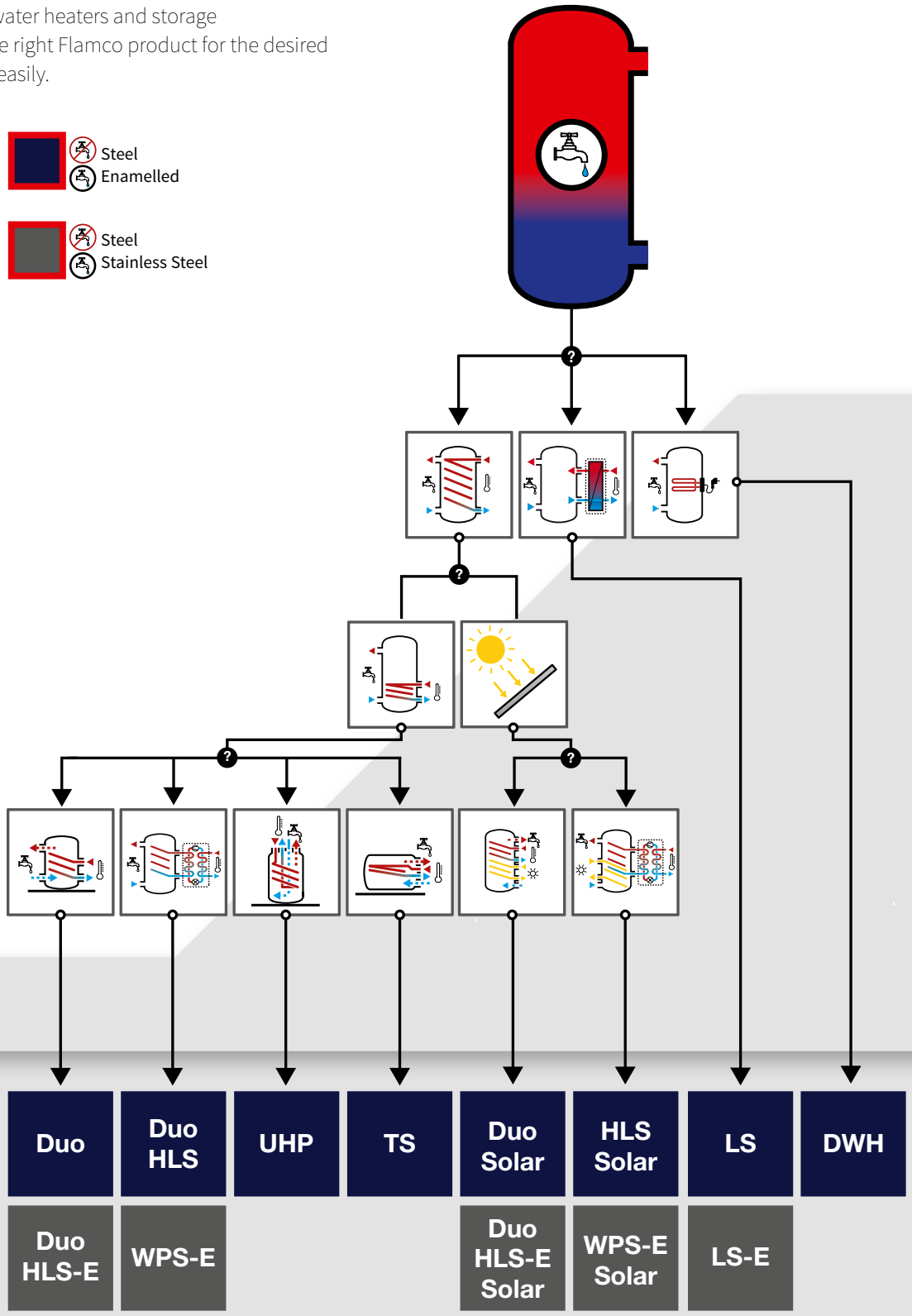
Enamelled

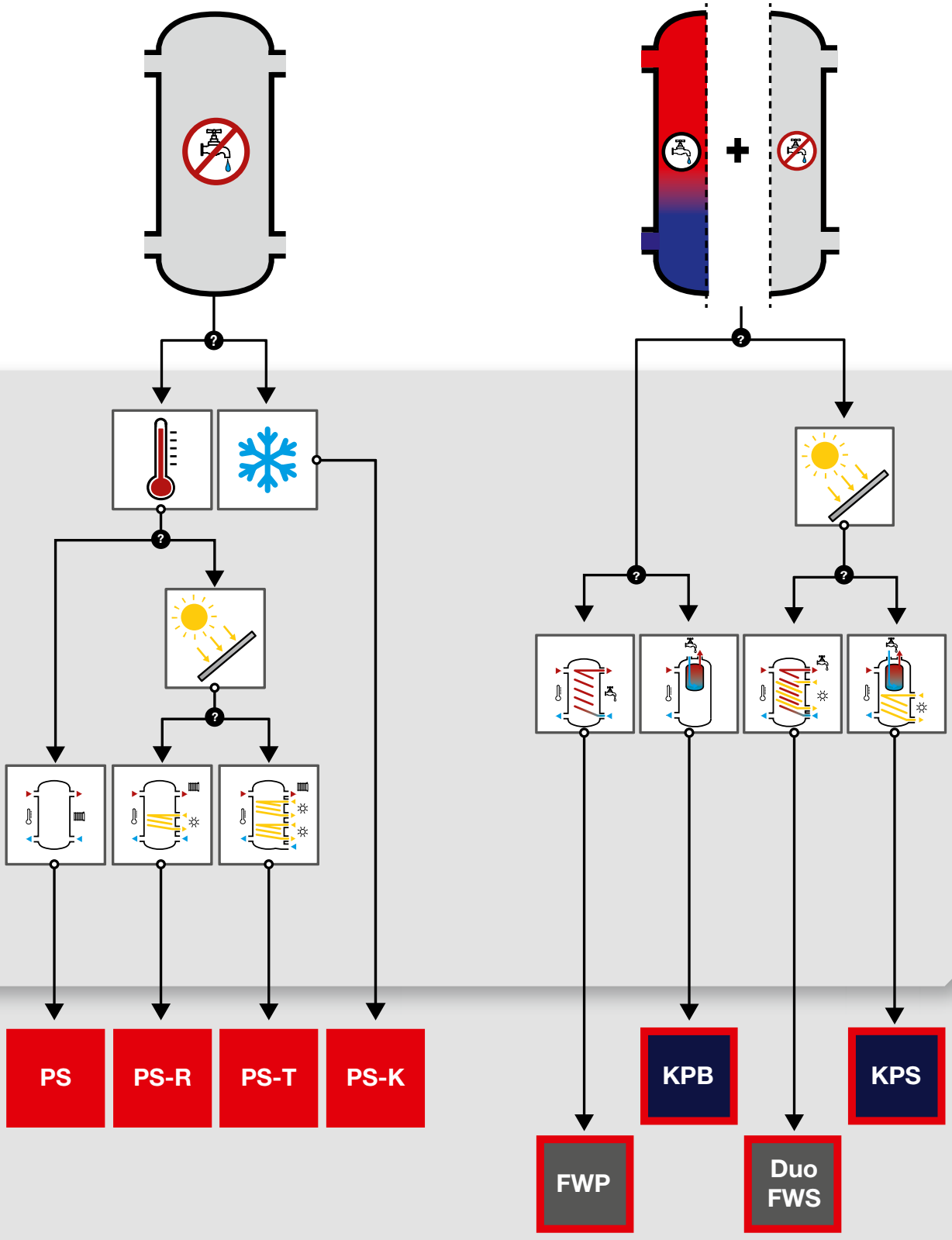
Steel
Enamelled

Stainless Steel

Steel
Stainless Steel

Steel





DUO UPRIGHT WATER HEATERS

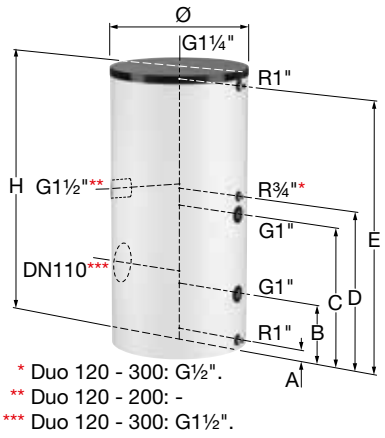
Duo 120 - 500

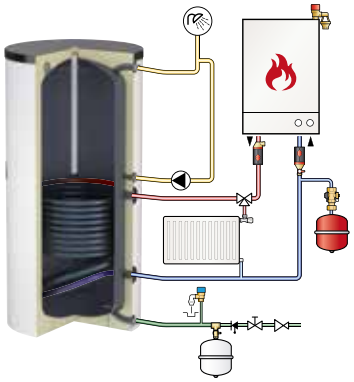
An indirectly heated and upright water heater including a permanently welded-in heating coil, suitable for all modern heating systems.

- 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

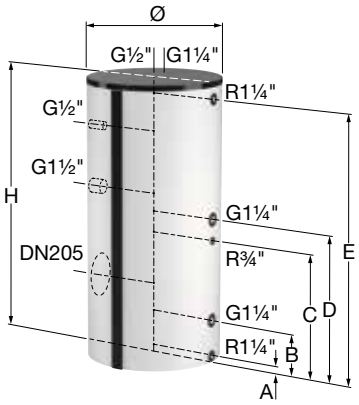
Type	Distance from floor to connection centres A [mm]	B [mm]	C [mm]	D [mm]	E [mm]
Duo 120	65	245	545	635	885
Duo 150	65	245	590	690	985
Duo 200	65	245	710	885	1285
Duo 300 Ø660	65	310	750	850	1560
Duo 400	70	330	770	870	1470
Duo 500	70	330	890	990	1670

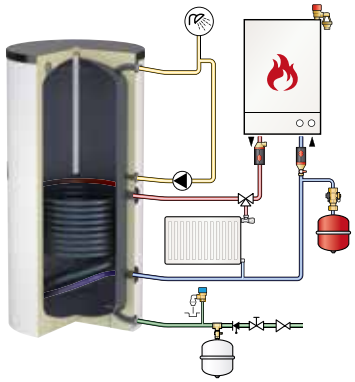
Duo 750 - 1000

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

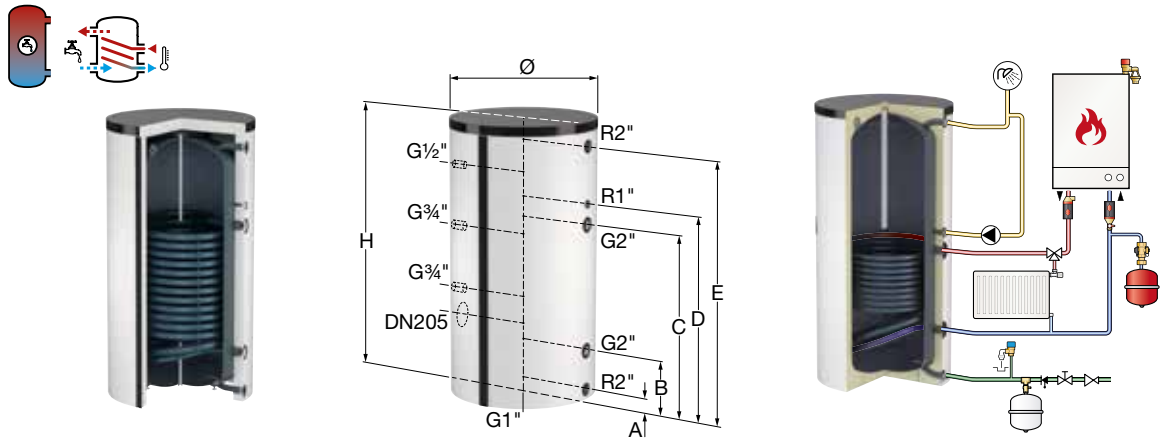
Type	Distance from floor to connection centres A [mm]	B [mm]	C [mm]	D [mm]	E [mm]
Duo 750	60	320	890	1040	1880
Duo 1000	70	330	960	1110	2140

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.

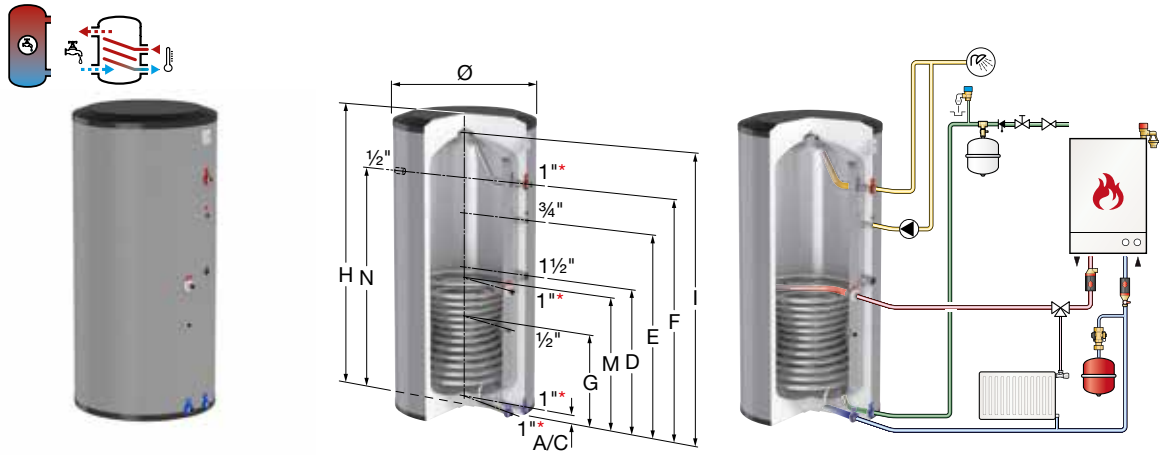
DUO HLS-E STAINLESS STEEL WATER HEATERS

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

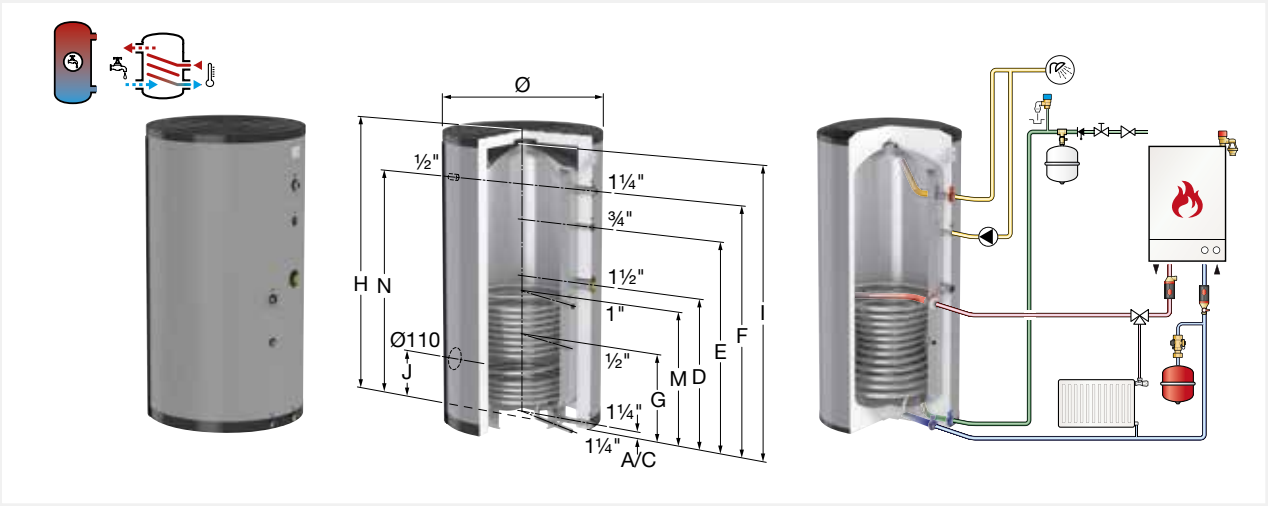
Type	Distance from floor to connection centres A/C [mm]	M [mm]	D [mm]	E [mm]	F/N [mm]	G [mm]	I [mm]
Duo HLS-E 120	50	390	-	618	748	293	933
Duo HLS-E 150	50	450	-	808	938	353	1123
Duo HLS-E 200	50	553	-	1110	1240	378	1425
Duo HLS-E 300	53	658	798	1028	1278	458	1728
Duo HLS-E 400	55	690	745	1228	1413	490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

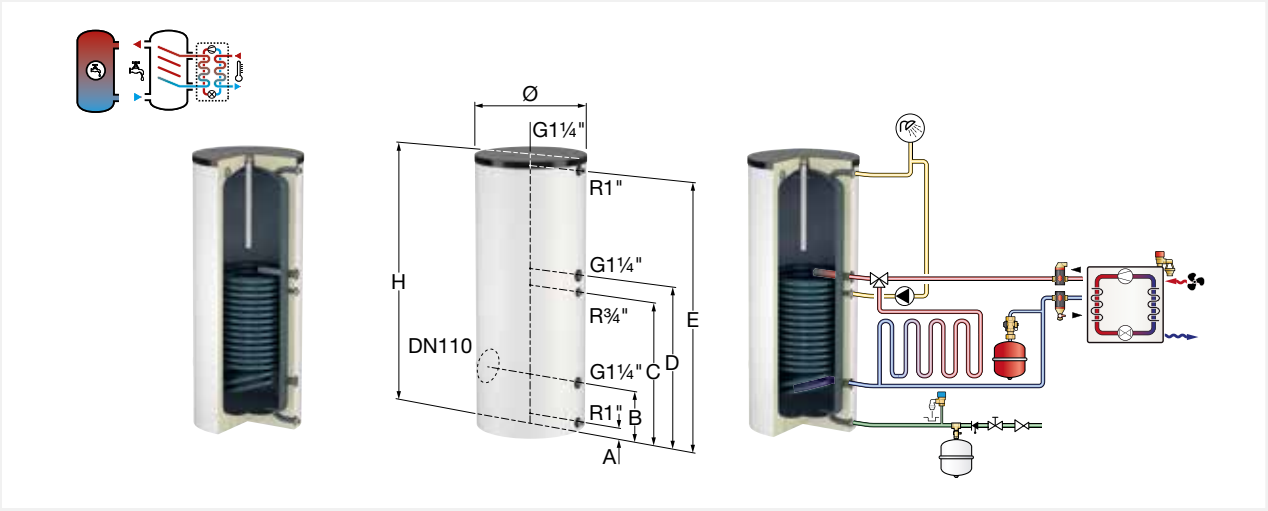
DUO HLS HIGH-YIELD WATER HEATERS

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

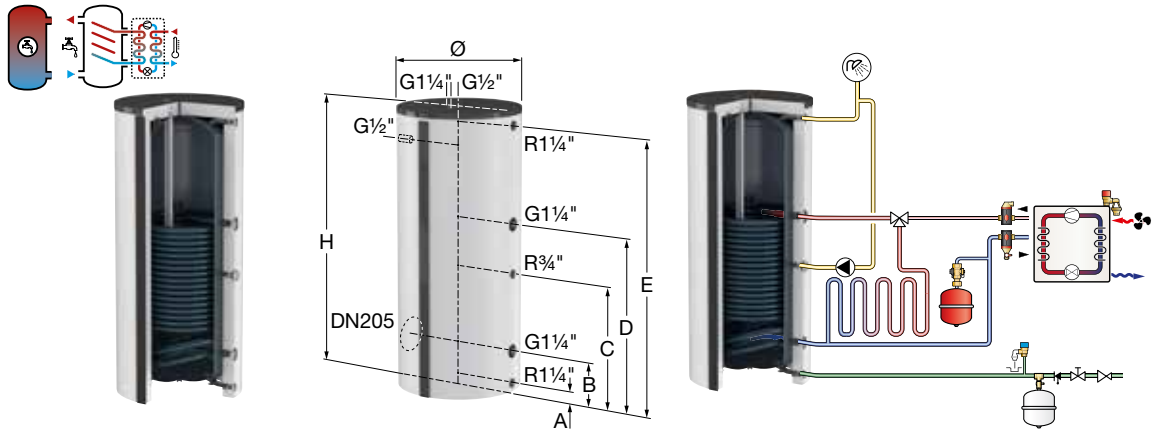
Duo HLS 750 - 1000

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

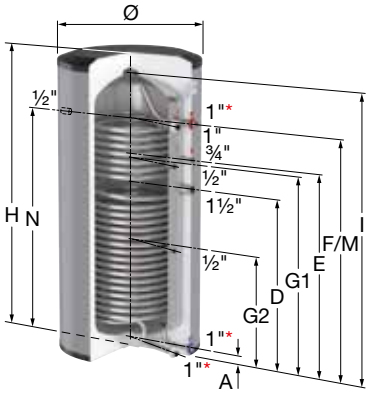
WPS-E

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

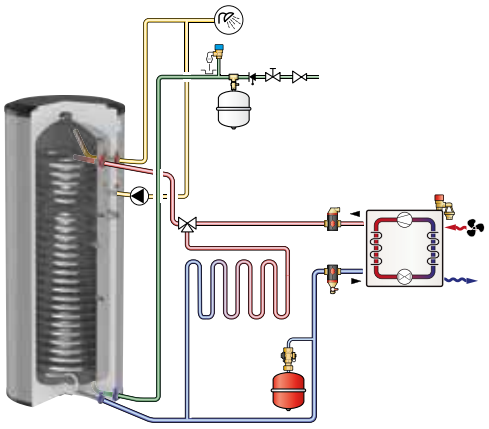
A water heater specially developed for combination with heat pumps. The large surface area of the heating coils and their innovative Diabolo shape guarantee very efficient potable hot water production. This results in a short heat up time and guaranteed hot water performance.

- 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.

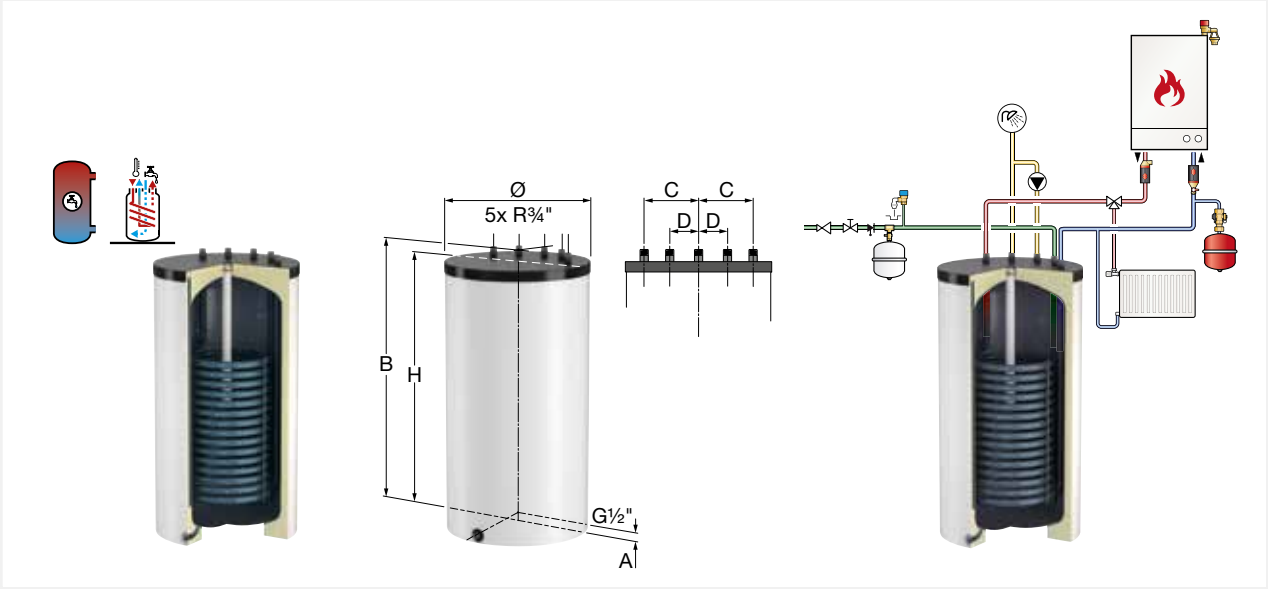
UHP LOW HEIGHT WATER HEATERS

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.

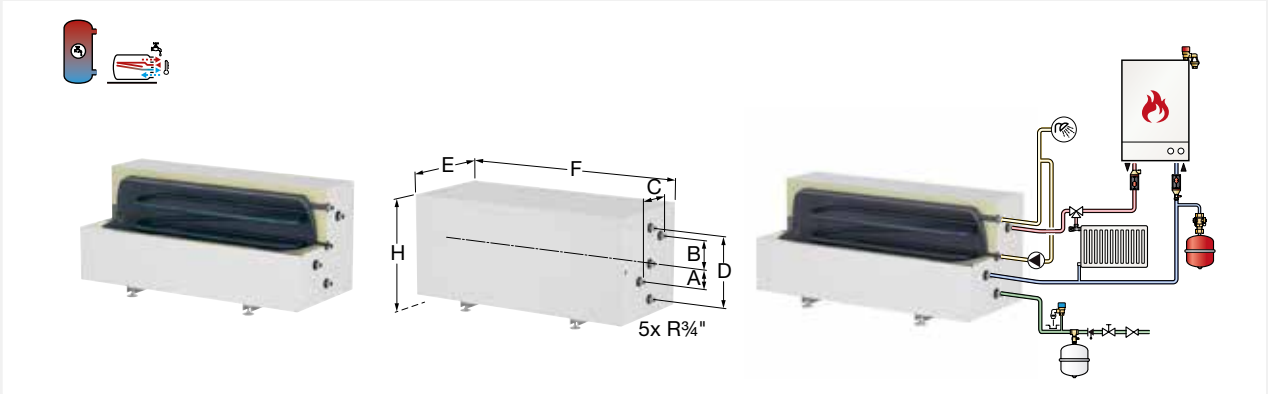
TS HORIZONTAL WATER HEATERS

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.

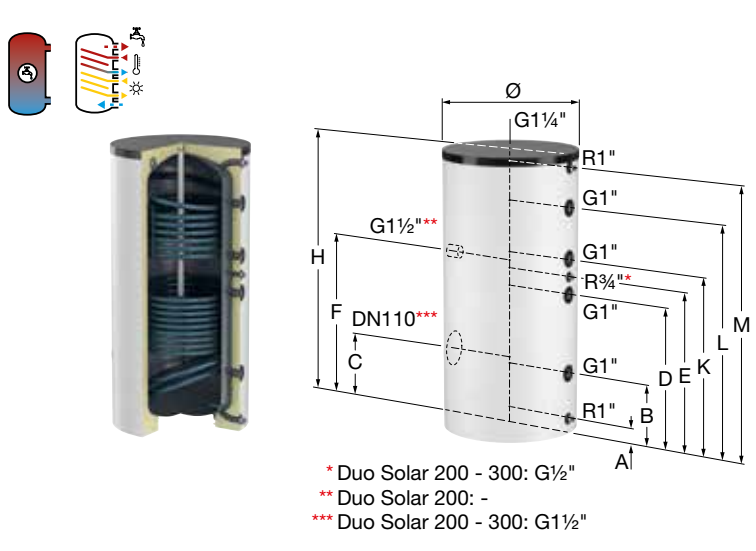
DUO SOLAR UPRIGHT WATER HEATERS

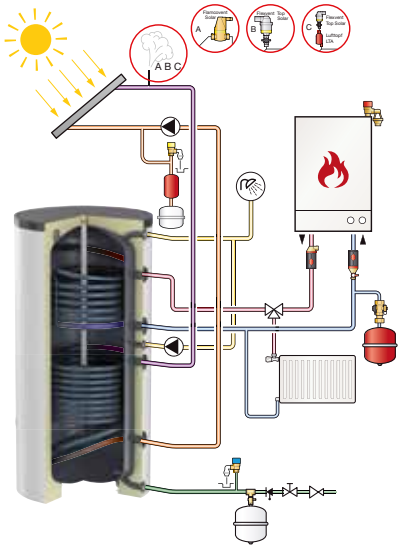
Duo Solar 200 - 500

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

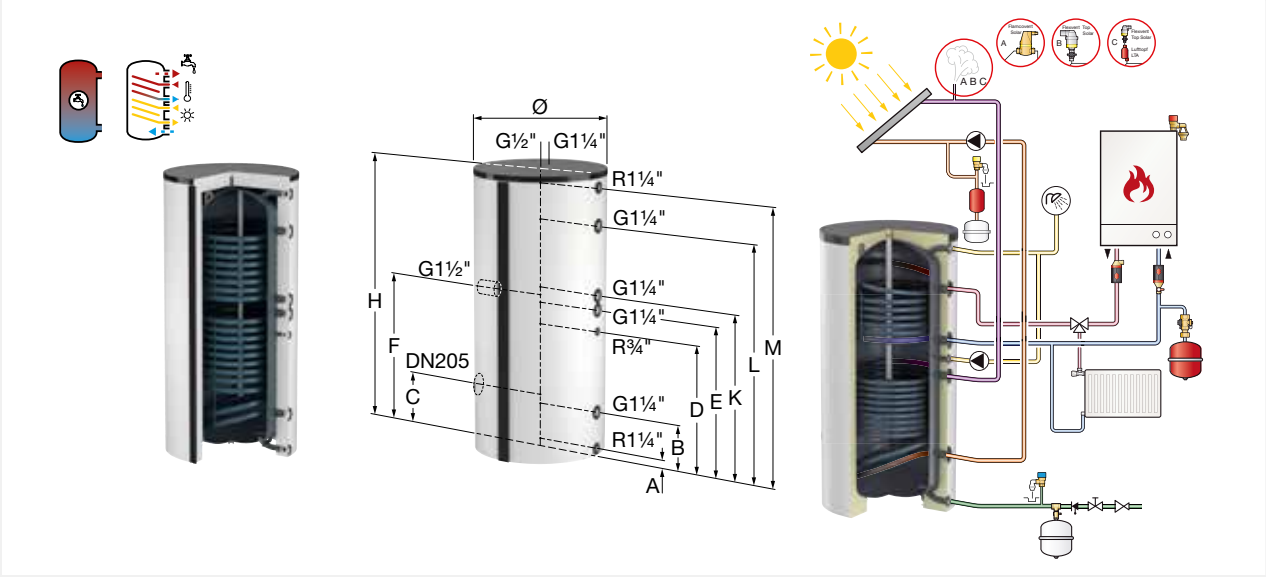
Type	Distance from floor to connection centres A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]	L [mm]	M [mm]
Duo Solar 200	65	245	-	710	545	-	885	1085	1285
Duo Solar 300 Ø660	65	310	-	750	850	845	950	1270	1560
Duo Solar 400	70	330	345	770	860	870	970	1250	1470
Duo Solar 500	70	330	345	890	980	990	1090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

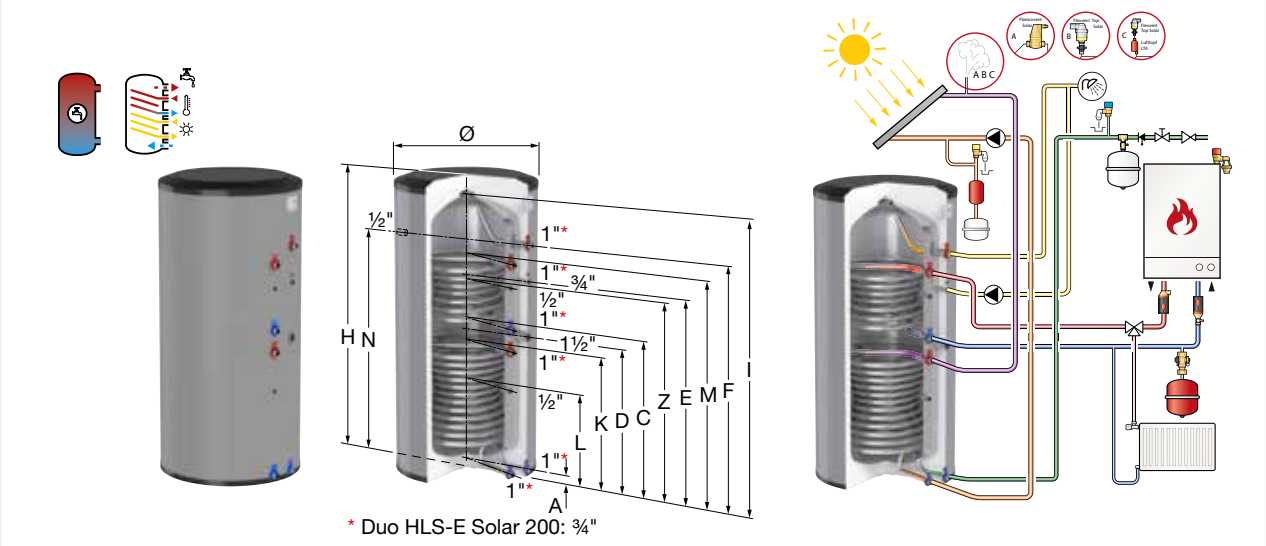
DUO HLS-E SOLAR STAINLESS STEEL WATER HEATERS

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

* Dimensions including insulation.

Duo HLS-E Solar - Connection diagram

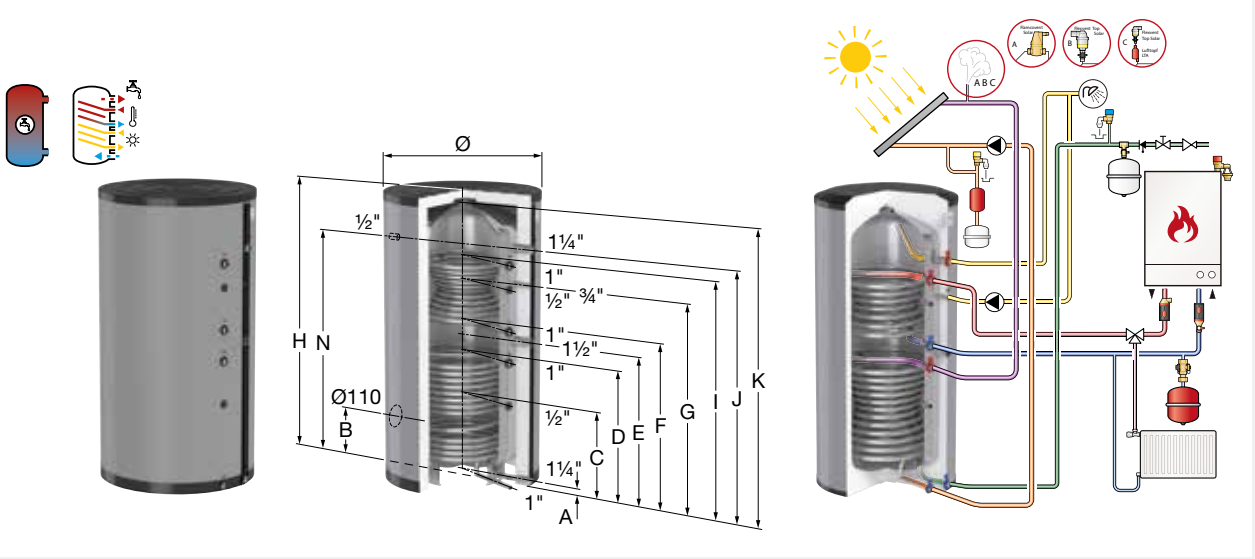
Type	Distance from floor to connection centres										
	A [mm]	L [mm]	K [mm]	D [mm]	C [mm]	Z [mm]	E [mm]	M [mm]	N [mm]	F [mm]	I [mm]
Duo HLS-E Solar 200	50	378	553	710	868	1010	1010	1108	1240	1240	1425
Duo HLS-E Solar 300	53	458	658	798	933	1173	1293	1293	1543	1543	1728
Duo HLS-E Solar 400	55	490	690	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

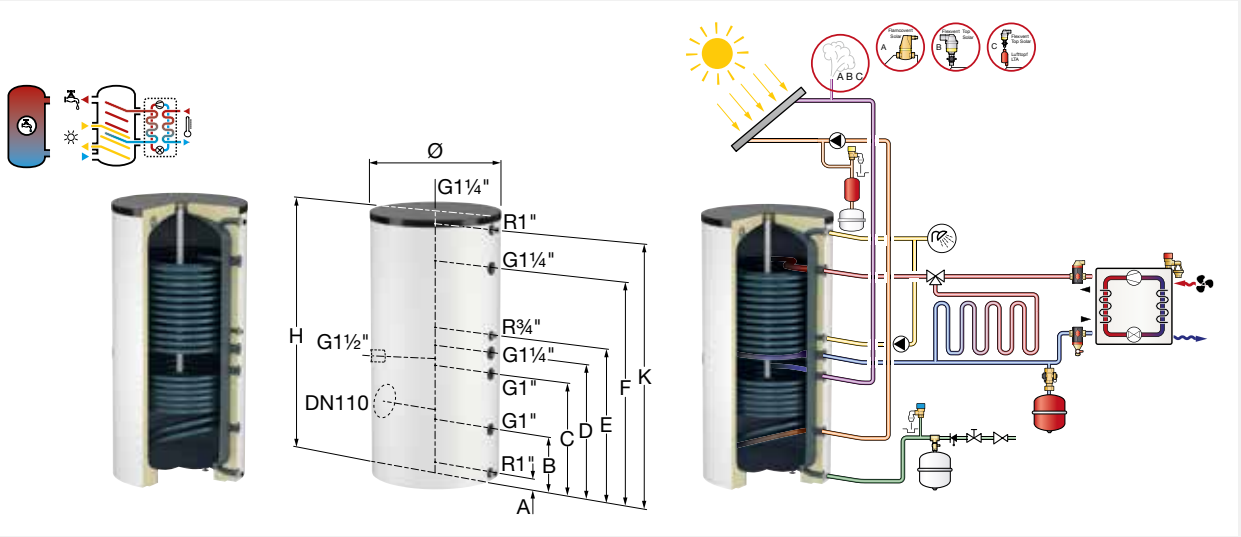
HLS Solar

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

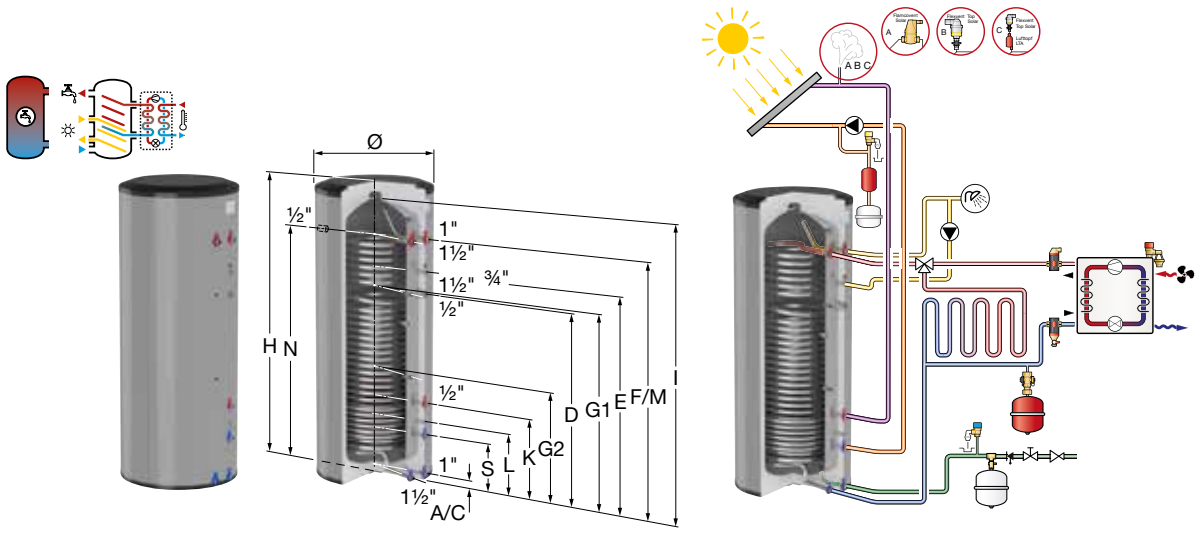
WPS-E Solar

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

* Dimensions including insulation.

WPS-E Solar - Connection diagram

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

WPS-E Solar - Performance

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

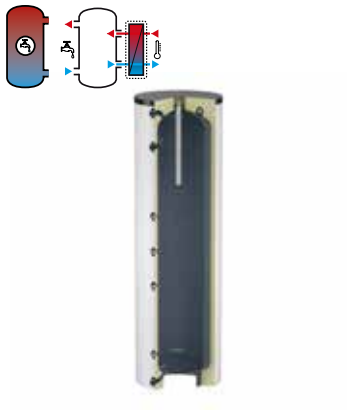
LS STORAGE VESSELS FOR POTABLE HOT WATER

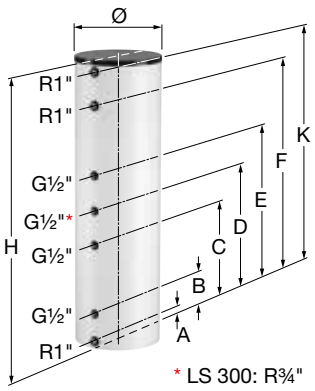
LS 200 - 300

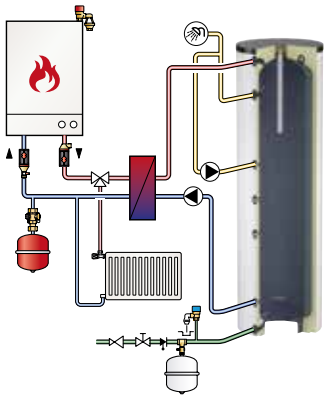
Storage vessel for potable hot water, for use in systems in which heat can be exchanged by external heat exchangers.

- 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

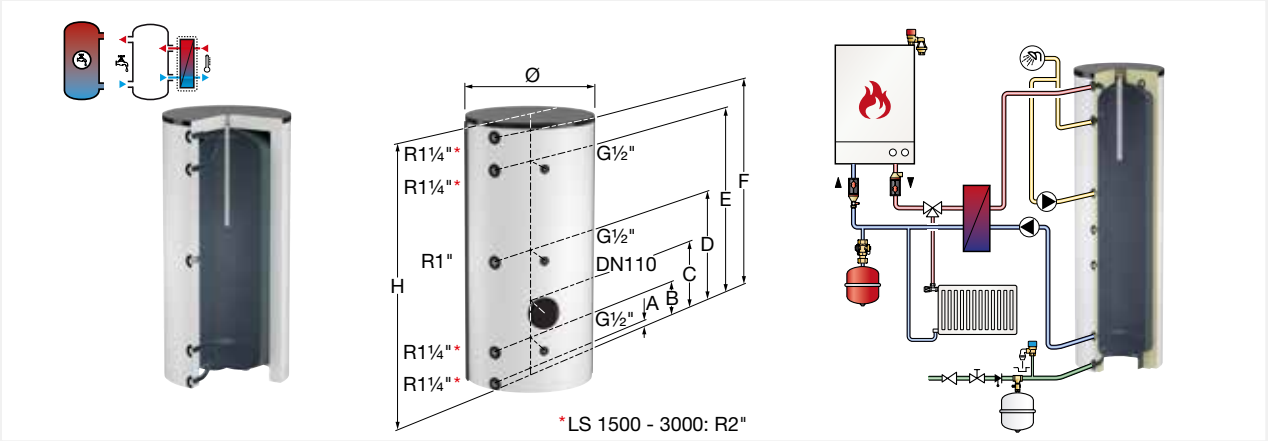
Type	Distance from floor to connection centres						
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K [mm]
LS 200	65	245	545	710	885	1075	1285
LS 300	65	310	-	850	950	1340	1560

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

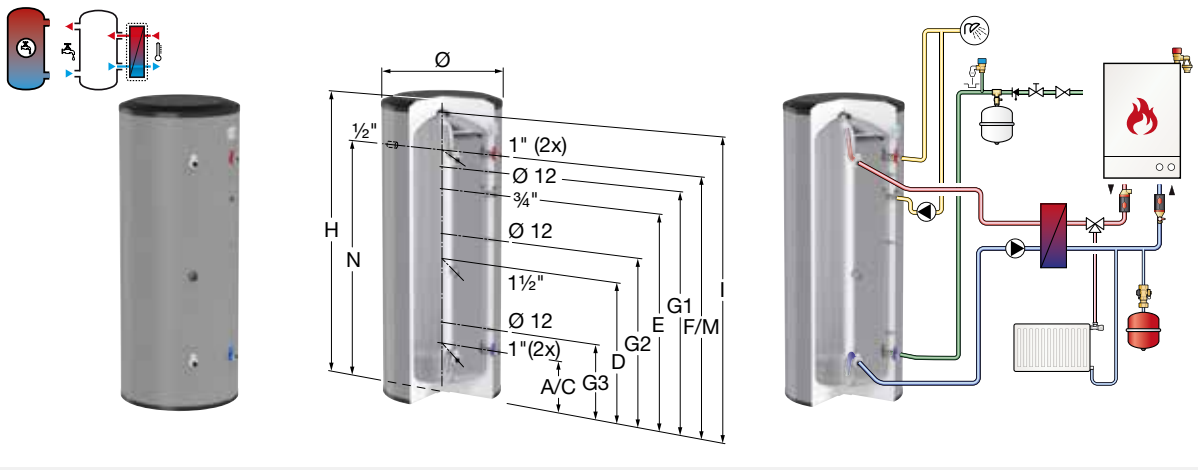
LS-E 300 - 500

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

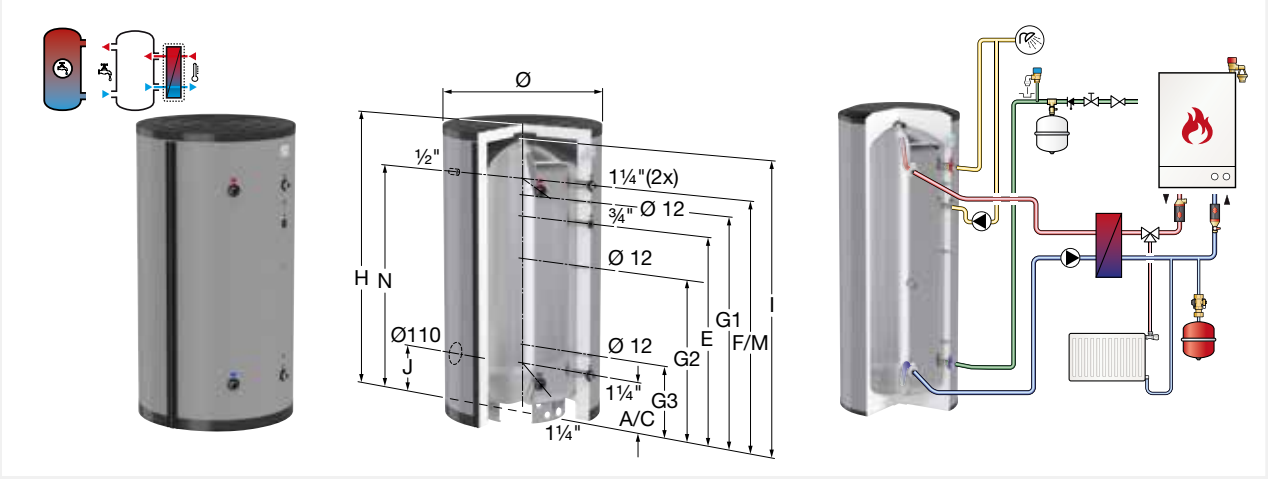
Type	Distance from floor to connection centres A/C [mm]	D [mm]	G3 [mm]	G2 [mm]	E [mm]	G1 [mm]	F/M/N [mm]	I [mm]
LS-E 300	258	798	378	798	1131	1418	1543	1728
LS-E 500	283	929	437	1095	1369	1606	1723	1923

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

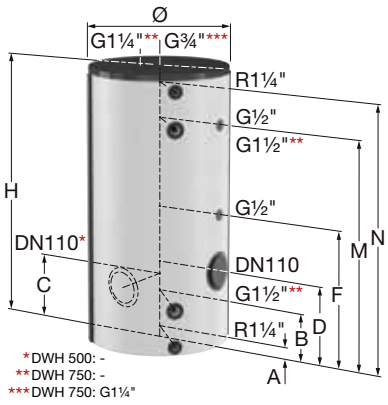
DWH 500 - 3000

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

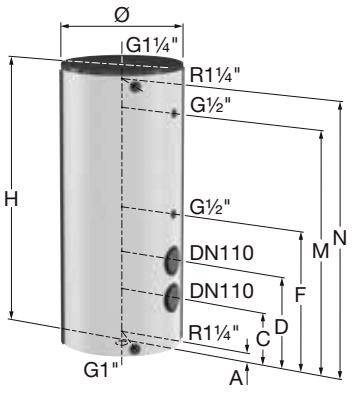
All units are extremely compact and the connections are all conveniently placed 'in-line' to make installation easier, neater and, as a result, faster. This direct model can be fitted with two or more electric immersion heating elements.

- 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.

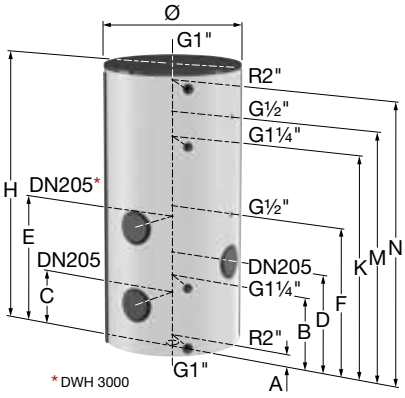
Insulation:
- Standard colours: white (RAL 9010).
- Including EPS insulating mantle (fire category B1) with a polypropylene outer shell (fire category B2).



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.

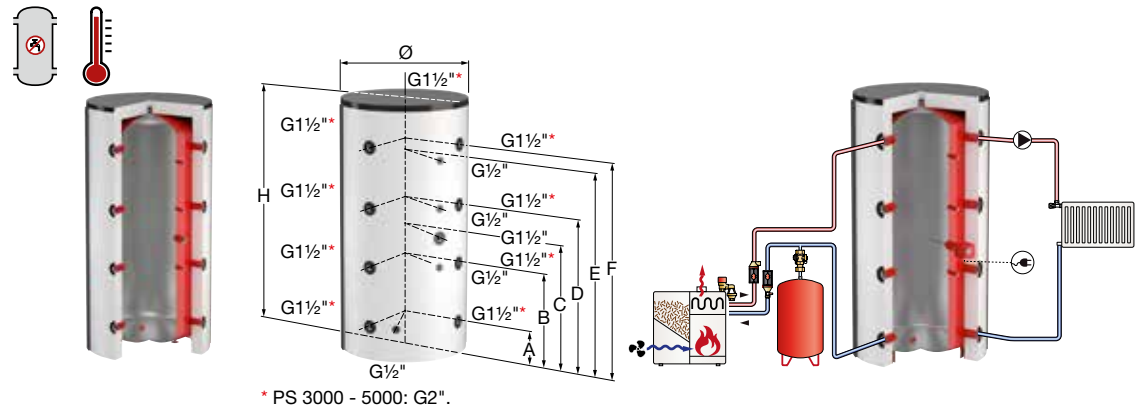
PS BUFFER VESSELS

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.

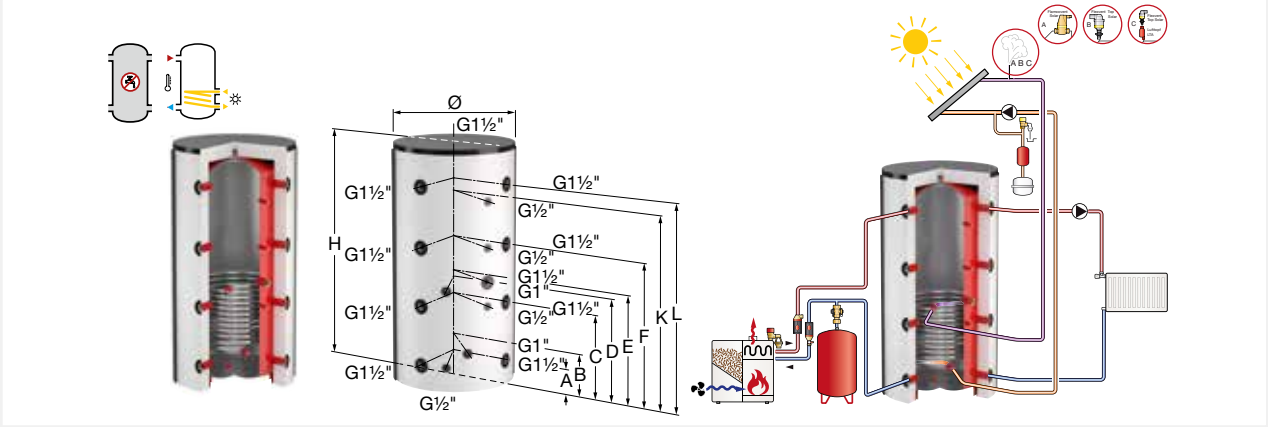
PS-R INDIRECTLY HEATED BUFFER VESSELS

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

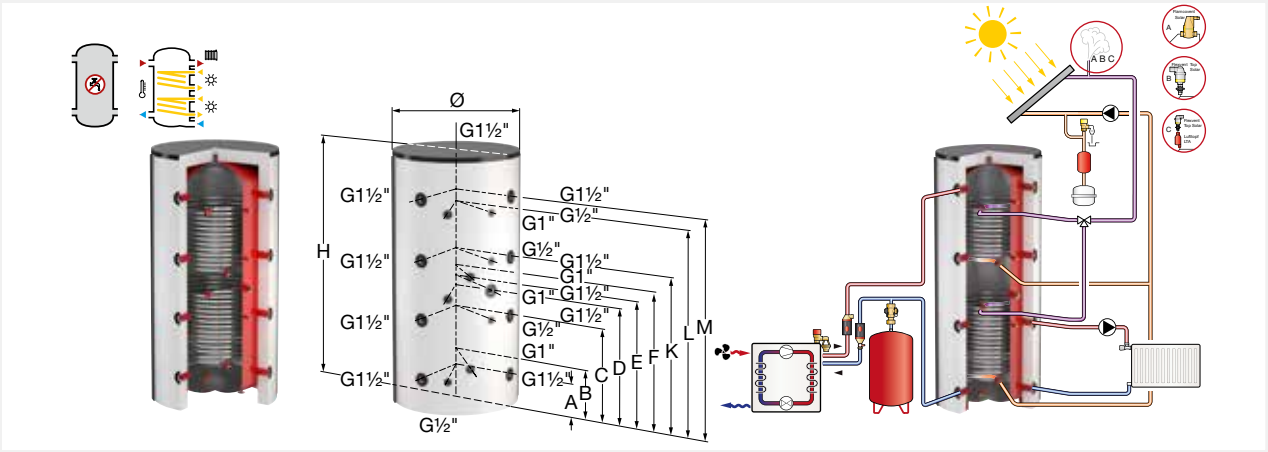
PS-T INDIRECTLY HEATED BUFFER VESSELS

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.

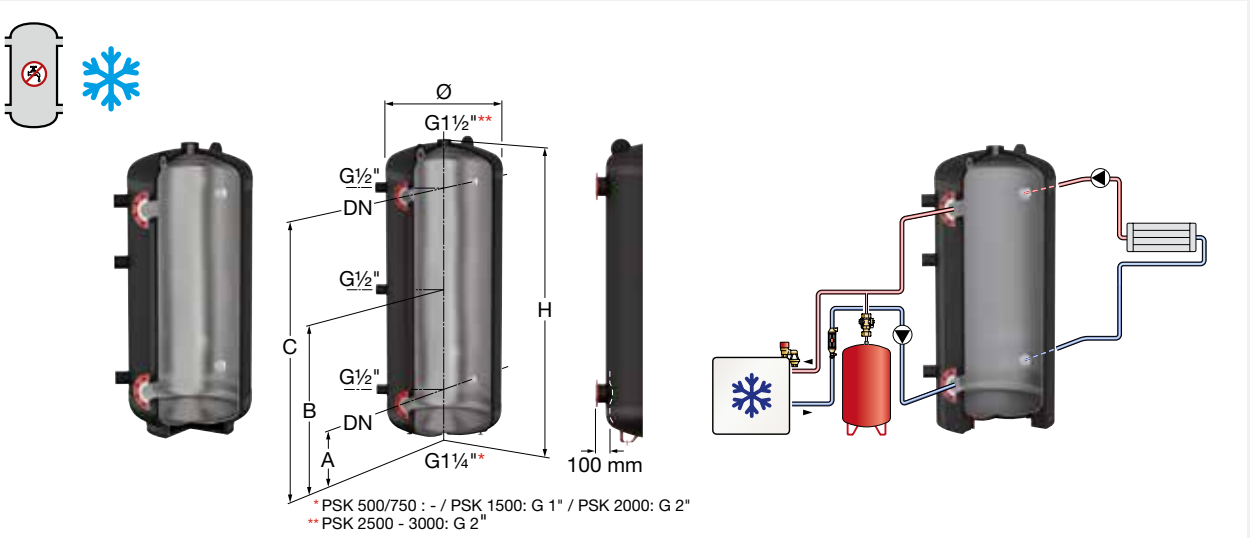
- Including adjustable feet for accurate levelling.
- Large flange connections for large water flows.
- Sturdy construction, easy to assemble.
- Temperature-sensor connections: G½" (3x).
- Connections:
  Female thread according to DIN ISO 228/T.1

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

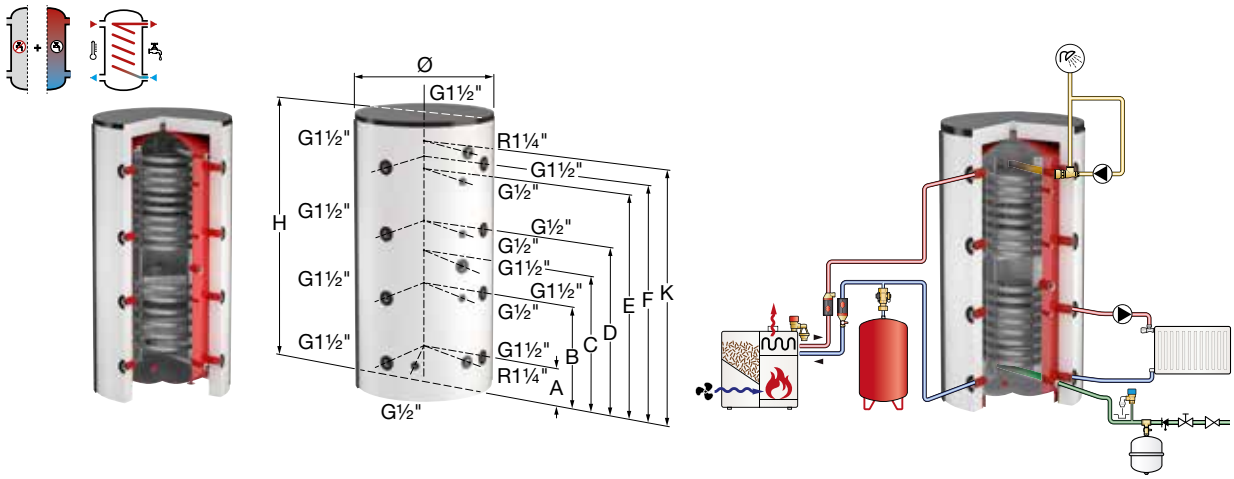
FWP COMBI WATER HEATERS

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

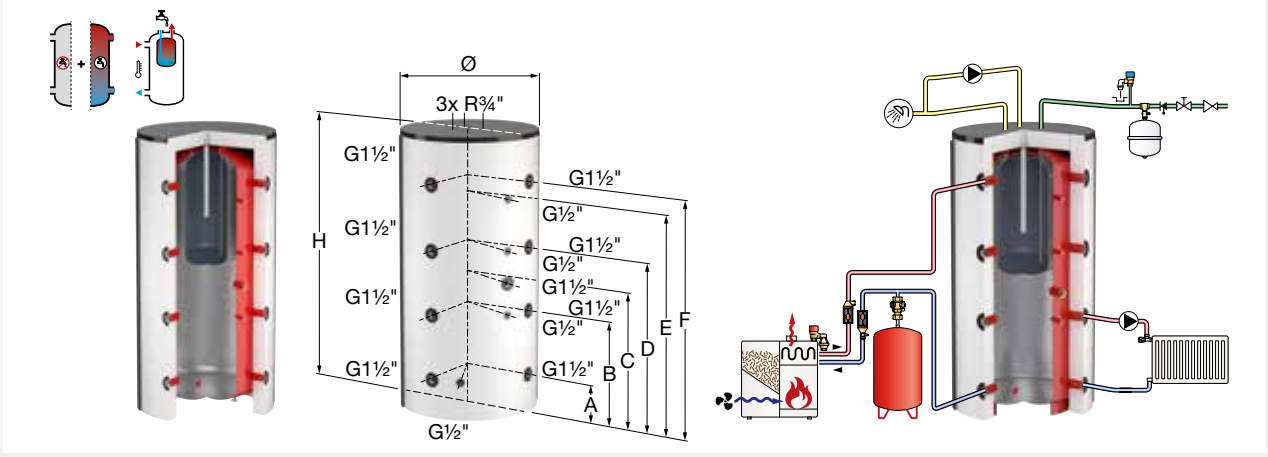
KPB COMBI WATER HEATERS

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

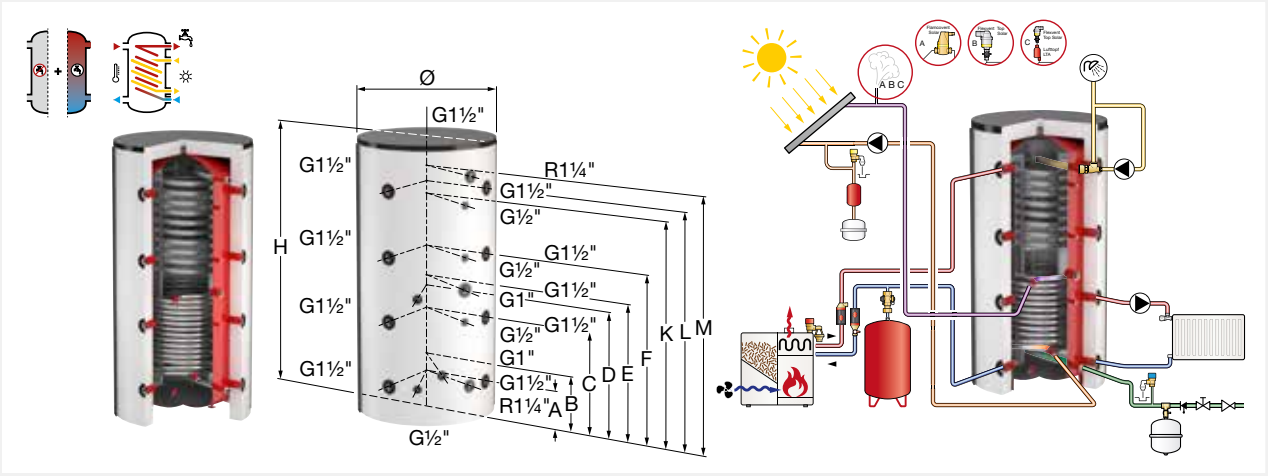
DUO FWS COMBI WATER HEATERS

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

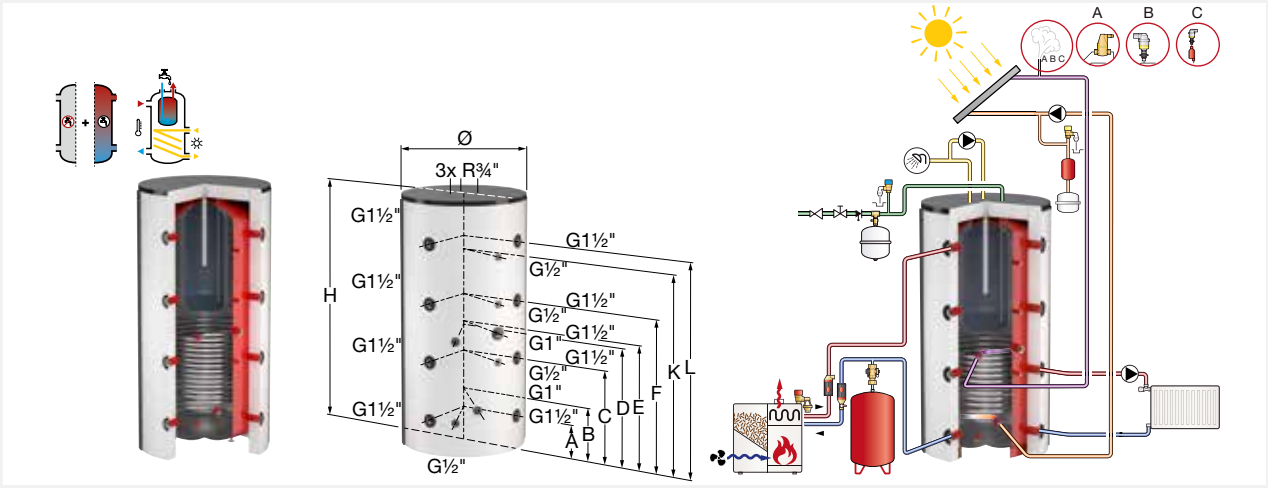
KPS COMBI WATER HEATERS

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

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

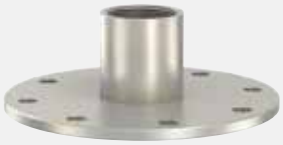
Insulating Connection Cap

P. 209

Reducing flange

P. 210

Reducing flange - Stainless steel

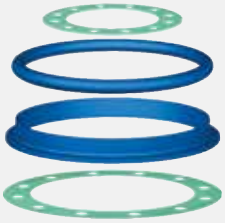


P. 210

Blind flange

P. 210

Gaskets



P. 210

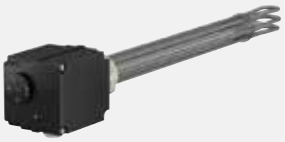
EHF heating element

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

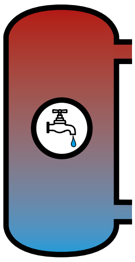
Circulation set

P. 214

Oval lid for service hatch - Stainless steel

P. 214

Accessories for Water Heaters and Storage Vessels

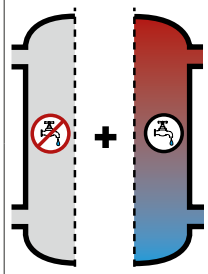
 Type		Inspection port	Reducing Flange	Gasket DN 110-F / DN 110 m. socket G 1½"	Heating element with flange connection											Thermometer			ATH External thermostat	RWT 4,6 Ribbed tube heat exchanger	Plunge pipe [1]		Magnesium anode (spare part)							Screw-in heating element											Maintenance-free anode				Isolation 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			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"		
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								•				For RWT 1	For RWT 1,8 - 3	For RWT 4,6	•	
	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					
	1500	205			R	R	R	R	R	R	R	R	R	•	•				•	I																													
	2000	205			R	R	R	R	R	R	R	R	R	•	•				•	I																													
	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																							•																		•						
	200	80																							•																		•						
Duo Solar	200																	Standard			Standard		•							C	C	C									•							•	
	300																							•						C	C	C									•				For RWT 1	For RWT 1,8 - 3	For RWT 4,6	•	
	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	•	•													•		C	C	C	C	C	C							•							
Duo HLS- E Solar	200															•																																	
	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			•	•	•	•	•	•	•	•	•														•			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	•			•																							
	2000	2 x 205			R	R	R	R	R	R	R	R	R	•	•	•			I	•				•																				RWT 1,8 -3			
	3000	3 x 205			R	R	R	R	R	R	R	R	R	•	•	•			I	•				•																				RWT 4,6			

• = 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			ATH External thermostat	RWT 4,6 Ribbed tube heat exchanger	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				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.

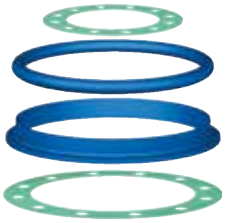
Type		Order Code
Reducing flange DN 110 / G 1 ½" - Stainless steel	1	19458

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.

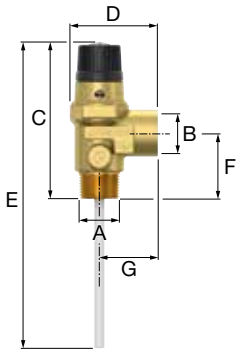
The valve opens the outlet on reaching the settings for:

- **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

Venting Range and Air/Dirt Separators

8

Systems in which the water is properly deaerated and free of contamination are more efficient, produce less noise and have a longer service life. Our products use proven and innovative technology to remove air and solid particles from the water, i.e. using coalescence and flow velocity reduction. Regardless of whether in a domestic environment or commercial installations with large heating or cooling systems, Flamco's range of automatic air vents and air/dirt separators provide the most efficient solution.

Flexvent

P. 221

Flexvent H

P. 221

Air intake preventer

P. 221

Flexvent Top

P. 221

Flexvent Solar

P. 221

Flexvent Top Solar

P. 221

Flexvent Super / Flexvent Super NPT

P. 221

Flexvent Pro / Flexvent Pro NPT

P. 221

Flexvent Max

P. 221

LTA Air Accumulator

P. 221

Flamcovent Smart / Flamcovent Smart NPT

P. 221

EcoPlus Pack Flamcovent Smart

P. 221

Flamcovent Smart EcoPlus

P. 221

Flamcovent Smart S - 10.0 bar

P. 221

Flamcovent Smart F - 10.0 / 16.0 bar

P. 221

Spare vent cap L

P. 221

Flamcovent IsoPlus

P. 221

Flamco Clean Smart / Flamco Clean Smart NPT

P. 221

Flamco Clean Smart EcoPlus

P. 221

EcoPlus Pack Flamco Clean Smart

P. 221

Magnets Smart 22 mm - 2"

P. 221

Flamco Clean Smart S - 10.0 bar

P. 221

Flamco Clean Smart F - 10.0 / 16.0 bar

P. 221

Dirt collector

P. 221

Flamco Clean IsoPlus

P. 221

Flamcovent Clean Smart / Flamcovent Clean Smart NPT

P. 221

Flamcovent Clean Smart EcoPlus

P. 221

EcoPlus Pack Flamcovent Clean Smart

P. 221

Magnets Smart 22 mm - 2"

P. 221

Flamcovent Clean Smart S - 10.0 bar

P. 221

Flamcovent Clean Smart F - 10.0 / 16.0 bar

P. 221

Flamcovent Clean Smart F - ANSI flanges

P. 221

Dirt collector

P. 221

Flamcovent Clean IsoPlus

P. 221

Spare vent cap L

P. 221

PSD

P. 221

PSD USA 110V

P. 221

Flexfiller Plus & Midifill Plus

P. 221

PressDS Plus

P. 221

Vacumat Eco

P. 221

Impulse Output Water Meter

P. 221

Vacumat Basic

P. 221

Vacumat Basic Floor Console

P. 221

NFE 1 Top-up Unit

P. 221

ENA 7 - 30

P. 221

NFE 1 Top-up Unit

P. 221

NFE 2 Top-up Unit

P. 221

Gas Sensor

P. 221

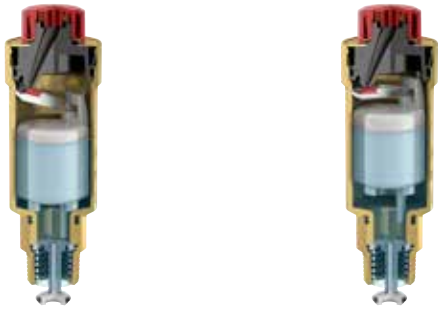
FLEXVENT AUTOMATIC AIR VENTS

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

Flexvent float vents are made of brass. Most types are equipped with a shut-off valve for easy fitting and dismantling.
A Flexvent float vent is easy to fit in any installation due to its very small dimensions. The relatively large air cushion at the top of each type of Flexvent float vent protects the valve seat sufficiently against contamination so that the Flexvent will not leak.
To guarantee top quality, we test all Flexvents before they leave our factory.

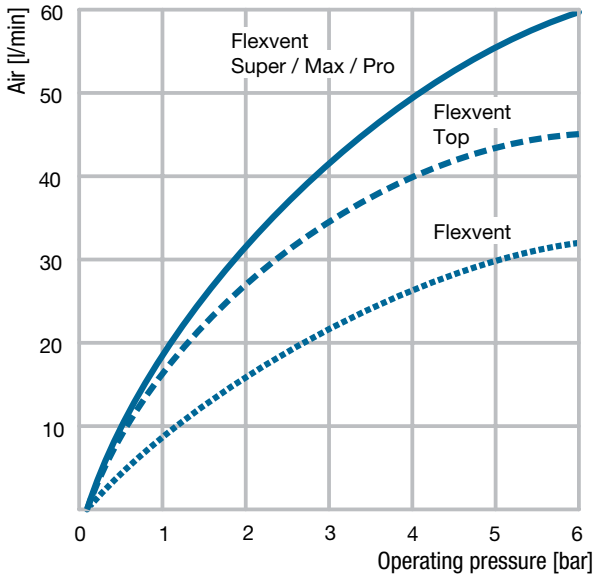
How a Flexvent works

Float operated, the air is collected in the Flexvent causing the float to drop and open the air release valve. The water pressure then pushes the air out, the float rises and closes the valve.
The air cushion in the upper part of each Flexvent protects the valve seat against contamination.



Flexvent capacity graph

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



Flexvent

- With protective cap including expansion sealer rings to prevent leaks.
- Substantial distance between the water and the closing mechanism, reducing the chance of contamination.

- Suitable for addition of glycol-based anti-freeze up to 50%.
- Minimum/Maximum working temperature: -10 °C / 90 °C (peak load: 120 °C).
- Minimum/Maximum working pressure: 0.2 / 6.0 bar (peak load: 10.0 bar).

Flexvent ½ | Flexvent ⅜ | Flexvent ⅛ - ⅜ | Flexvent ⅛ | Flexvent ½ W

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

Flexvent H

The Flexvent H has a ½" 90°-angled connection which means it can be mounted directly on one of the radiator ports.

- Suitable for addition of glycol-based anti-freeze up to 50%.
- Minimum/Maximum working temperature: -10 °C / 90 °C (peak load: 120 °C).
- Minimum/Maximum working pressure: 0.2 / 6.0 bar (peak load: 10.0 bar).

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

Air intake preventer

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

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

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

Flexvent Top

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

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

Flexvent Solar

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

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

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

Flexvent Top Solar

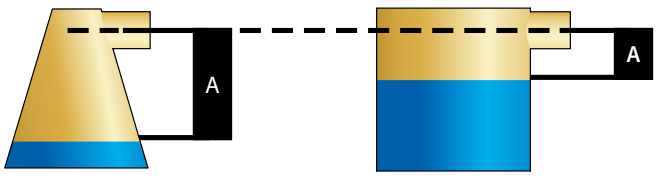
- With ball valve.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Minimum/Maximum working temperature: -30 °C / 180 °C.
- Minimum/Maximum working pressure: 0.2 / 10.0 bar.

Type	Dimensions Ø [mm]	Dimensions H. [mm]	Connection	Shut-off valve		Order Code
Flexvent Top Solar 3/8	54	129	G 3/8" M	no	20	28505

Flexvent Super

- The cap of the Flexvent Super is conical in shape. The advantage of this construction is that the clearance between the water level and venting valve is maximized.
- The air escape duct can be opened or closed with an adjusting screw.
- The venting valve forms an integral part of the cap, so that it is impossible to damage the float vent mechanism from outside.

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



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

Flexvent Super NPT

- Suitable for addition of glycol-based anti-freeze up to 50%.
- Minimum/Maximum working temperature: -10 °C / 120 °C (14 °F / 248 °F).
- Minimum/Maximum working pressure: 0.2 / 10.0 bar (3 / 145 psi).

Type	Dimensions Ø ["]	Dimensions H. ["]	Connection	Shut-off valve		Order Code
Flexvent Super NPT	2.9	4.7	3/4" FNPT	no	1	28545

Flexvent Pro

- Equipped with bubble breaker.
- Outlet: G ¾" M.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Minimum/Maximum working temperature: -10 °C / 120 °C.
- Minimum/Maximum working pressure: 0.2 / 10.0 bar.

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

Flexvent Pro NPT

- Equipped with bubble breaker.
- Outlet: G ¾" M.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- Minimum/Maximum working temperature: -10 °C / 120 °C (14 °F / 248 °F).
- Minimum/Maximum working pressure: 0.2 / 12.0 bar (3 / 175 psi).

Type	Dimensions Ø ["]	Dimensions H. ["]	Connection	Shut-off valve		Order Code
Flexvent Pro NPT	2.5	4.4	1/2" FNPT	no	1	28521

Flexvent Max

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

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

AIR ACCUMULATORS

LTA Air Accumulator

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

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

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

SEPARATORS

For use in sealed heating and cooling systems.
Air and dirt separators protect the boilers, pumps and fittings from damage caused by the deposit of dirt particles, increase comfort and improve the yield. Air and dirt separators also offer benefits in the event of application in old systems or when an open system is converted to a closed system.

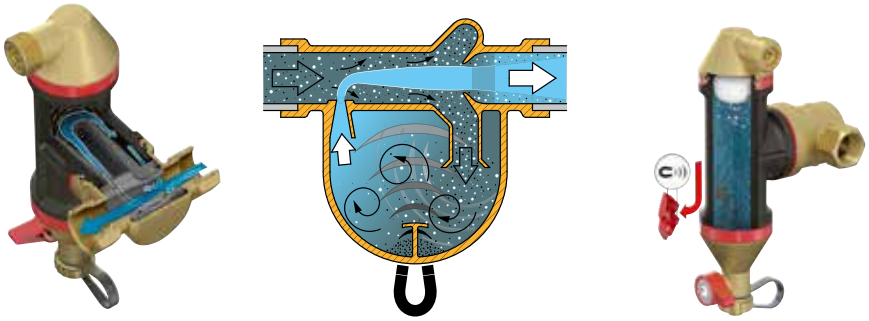
- Increases comfort and yield.
- Prevents deposit of dirt particles in the boiler.
- The removal of air and dirt from the system water extends the service life of pumps, control equipment and other system accessories.

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

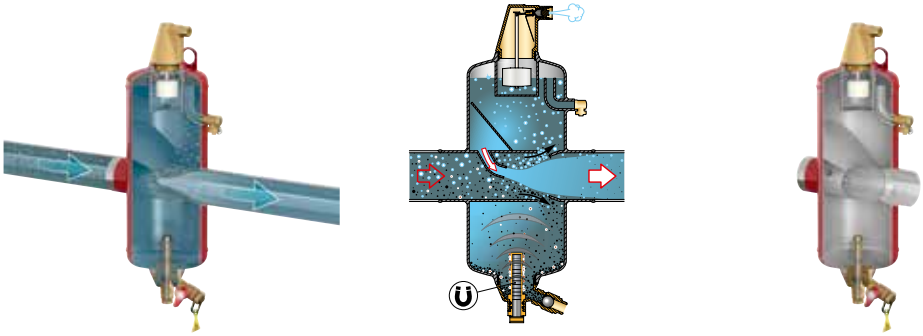
The separation element combined with the return flow ensures excellent air and dirt separation and at the same time saves energy because of the negligible flow resistance. An exceptional rate of at least 40% of the air and dirt is separated per cycle while using only 10% extraction of the main flow.
Inside the chamber of the separator the water velocity is heavily reduced down to less than 1% of the main flow.This efficiently separates microbubbles by allowing the air particles to automatically rise to the air release valve at the top and allows the dirt particles to sink to the bottom to the dirt collector. A supermagnet additionally contributes in trapping ferrous particles.

Double thrust function
Two thrust functions ensure efficient deaeration of the system water
A: The first function is achieved by the separating element in the path of the main flow through the unit, diverting contaminated water into the entrapment chamber.
B: The second effect is achieved by bringing back the clean return flow of water in the centre, upstream of the separating element. This forces the air and dirt particles present in the main flow outwards and into the chambers of the separator to be removed.

22 mm - 2"



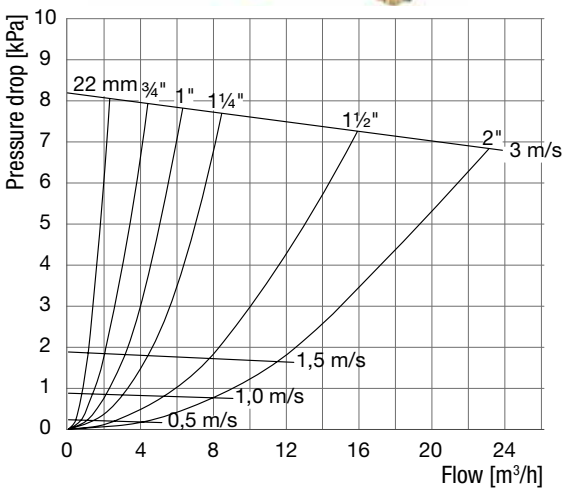
DN 50 - DN 600



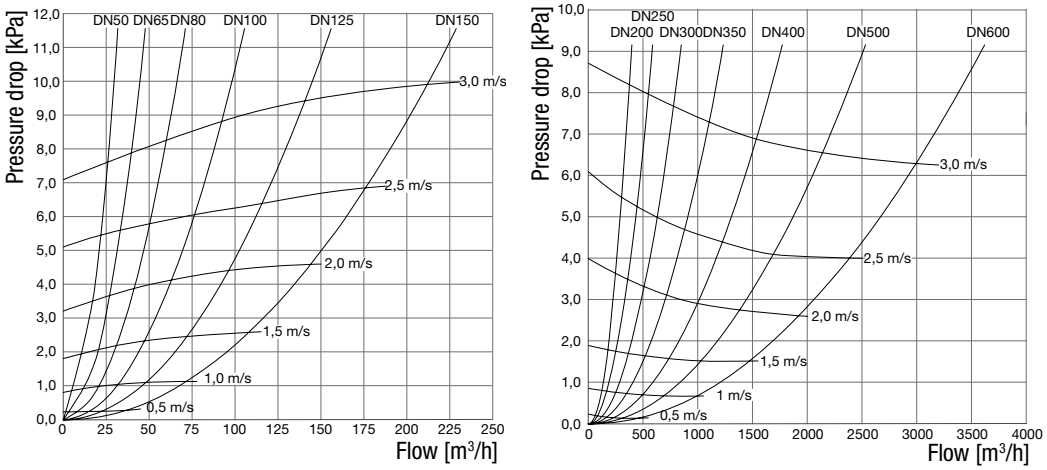
Flamcovent Smart / Flamco Clean Smart / Flamcovent Clean Smart - Selection graphs

Thanks to the innovative design of the Smart series of air and dirt separators the pressure loss in the system is negligible. Even at flow velocities of 3 m/s, the Smart series delivers the best performance on the market. The high efficiency of these devices ensure that cooling and heating systems provide optimum performance.

22 mm - 2"



DN 50 - DN 600



8

AIR SEPARATORS

For total elimination of air from heating and cooling installations.
Air separators increase comfort and improve the yield. Air separators also offer benefits in the event of application in old systems or when an open system is converted to a closed system.

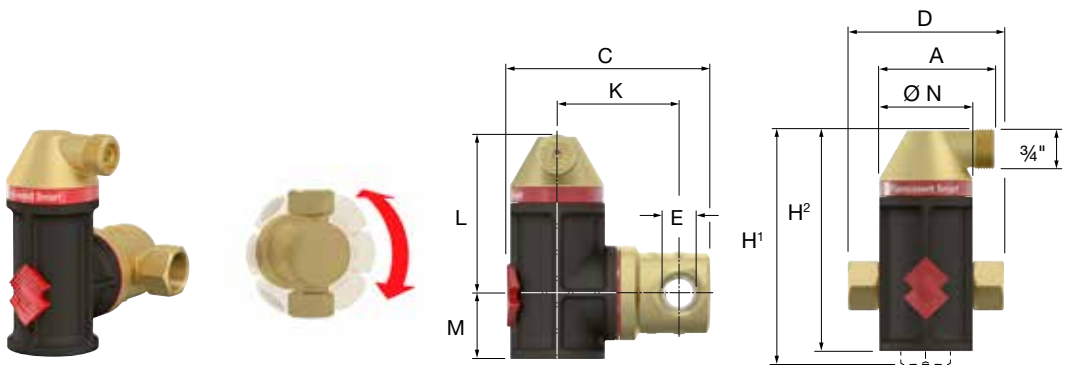
- Increases comfort and yield.
- The removal of air from the system water extends the service life of pumps, control equipment and other system accessories.

Flamcovent Smart

More compact, lighter, cleaner and even more efficient.
The Flamcovent Smart air separators remove even the smallest microbubbles from the system water. They are virtually maintenance-free and the flow resistance is negligibly low.

- 60% better performance compared to conventional separators.
- Flow velocity up to 3 m/s (9.8 ft/s).
- Can be used with all kinds of pipework.
- Compact dimensions, light weight.
- Extremely low flow resistance and low loss of energy.
- Consistent performance throughout its service life.

- Minimum/Maximum working temperature: -10 °C / 120 °C (14 °F / 248 °F).
- Maximum working pressure: 10 bar (145 psi).
- Suitable for addition of glycol-based anti-freeze up to 50%.



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

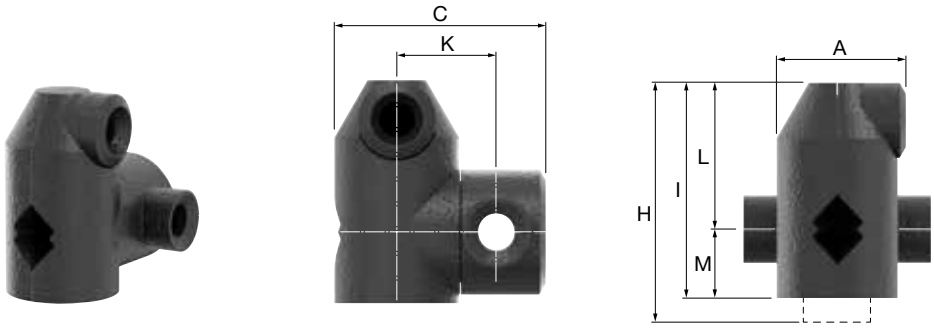
Flamcovent Smart NPT

Type	Con-nection (E)	Dimensions A ["]	C ["]	D ["]	K ["]	L ["]	M ["]	H/H1 ["]	H2 ["]	Ø N ["]	Weight [lbs]		Order Code
Flamcovent Smart ³/₄ NPT	³/₄" FNPT	2.91	5.20	3.94	3.07	3.98	1.46	5.94	5.43	2.36	1.98	1	30201
Flamcovent Smart 1 NPT	1" FNPT	3.23	6.10	4.17	3.58	5.47	1.77	7.56	7.24	2.95	2.47	1	30203
Flamcovent Smart 1 ¹/₄ NPT	1 ¹/₄" FNPT	3.23	6.50	4.33	3.78	5.47	1.77	7.64	7.24	2.95	2.80	1	30204
Flamcovent Smart 1 ¹/₂ NPT	1 ¹/₂" FNPT	3.70	7.60	5.08	4.29	6.81	2.13	9.37	8.94	3.62	3.81	1	30205
Flamcovent Smart 2 NPT	2" FNPT	3.70	8.11	5.51	4.61	6.81	2.13	9.57	8.94	3.62	4.76	1	30206

EcoPlus Pack Flamcovent Smart

EPP EcoPlus insulation pack for the Flamcovent Smart.

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

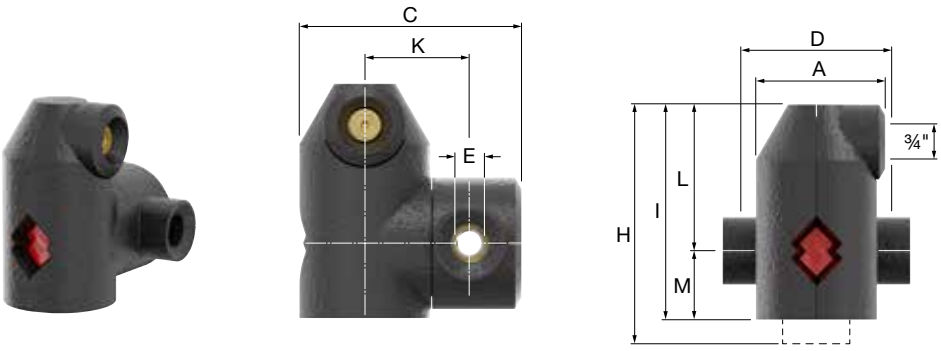


Type	Dimensions							Weight [kg]		Order Code
	A [mm]	C [mm]	K [mm]	L [mm]	M [mm]	H [mm]	I [mm]			
EcoPlus Pack Flamcovent Smart ¾	104	164	78	118	56	194	174	0.07	1	30251
EcoPlus Pack Flamcovent Smart 1	117	189	91	157	63	233	220	0.11	1	30253
EcoPlus Pack Flamcovent Smart 1 ¼	117	199	96	157	63	233	220	0.11	1	30254
EcoPlus Pack Flamcovent Smart 1 ½	134	224	109	191	72	279	263	0.16	1	30255
EcoPlus Pack Flamcovent Smart 2	134	237	117	191	72	279	263	0.17	1	30256

Flamcovent Smart EcoPlus

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

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



Type	Con-nection (E)	Dimensions								Weight [kg]		Order Code
		A [mm]	C [mm]	D [mm]	K [mm]	L [mm]	M [mm]	H [mm]	I [mm]			
Flamcovent Smart EcoPlus 22	22 mm	104	164	120	78	118	56	194	174	1.0	1	30012
Flamcovent Smart EcoPlus ¾	Rp ¾"	104	164	100	78	118	56	194	174	1.0	1	30011
Flamcovent Smart EcoPlus 1	Rp 1"	117	189	106	91	157	63	233	220	1.2	1	30013
Flamcovent Smart EcoPlus 1 ¼	Rp 1 ¼"	117	199	110	96	157	63	233	220	1.4	1	30014
Flamcovent Smart EcoPlus 1 ½	Rp 1 ½"	134	224	129	109	191	72	279	263	1.9	1	30015
Flamcovent Smart EcoPlus 2	Rp 2"	134	237	140	117	191	72	279	263	2.3	1	30016

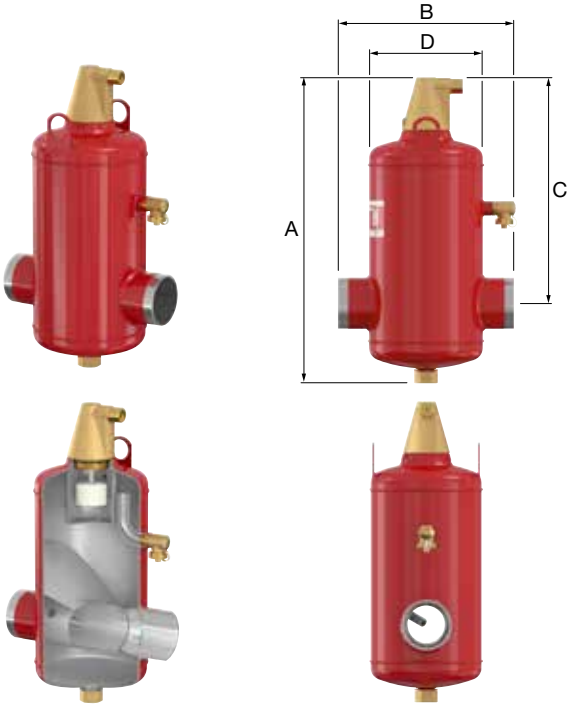
Flamcovent Smart S - 10.0 bar

Optimum deaeration combined with energy retention.

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

- Up to 60% better performance compared to conventional air separators.
- Extremely low flow resistance resulting in less energy consumption.
- Standard flow speed up to 3 m/s.
- Constant performance during the entire lifespan.
- Low maintenance.

- Including a welded connection.
- Maximum working pressure: 10 bar.
- Suitable for systems with a maximum flow temperature of 120 °C.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- In accordance with Pressure Equipment Directive 2014/68/EU.



Type	Capacity [l]	Connection [DN]	Connection [mm]	Dimensions A [mm]	Dimensions B [mm]	Dimensions C [mm]	Dimensions D [mm]	K_v * [m³/h] (ΔP = 1 bar)	Weight [kg]		Order Code
Flamcovent Smart 50 S	8	50	60.3	472	260	338	175	93	9	1	31101
Flamcovent Smart 65 S	8	65	76.1	472	260	338	175	140	10	1	31102
Flamcovent Smart 80 S	25	80	88.9	612	370	435	270	209	17	1	31103
Flamcovent Smart 100 S	25	100	114.3	612	370	435	270	311	20	1	31104
Flamcovent Smart 125 S	59	125	139.7	740	525	510	360	459	36	1	31105
Flamcovent Smart 150 S	60	150	168.3	740	525	510	360	675	37	1	31106
Flamcovent Smart 200 S	123	200	219.1	975	650	670	450	1340	57	1	31107
Flamcovent Smart 250 S	287	250	273.0	1290	850	892	600	1952	125	1	31108

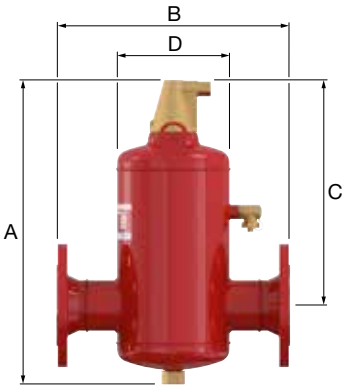
* $K_v = Q / \sqrt{\Delta P}$ Q: Flow [m³/h] ΔP: Pressure drop over the product [bar]
Flow factor K_v: Rate of flow [m³/h] which results in a 1 bar pressure drop across the product. This is different then the maximum allowed flow rate of the product.

CE

Flamcovent Smart F - 10.0 bar

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

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



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

* $K_v = Q / \sqrt{\Delta P}$ Q: Flow [m³/h] ΔP: Pressure loss over the product [bar]
Flow factor K_v: Rate of flow [m³/h] which results in a 1 bar pressure drop across the product. This is different then the maximum allowed flow rate of the product.
** 4 hole flanged version.

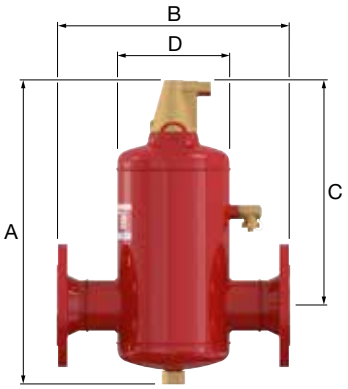
CE

8

Flamcovent Smart F - 16.0 bar

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

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



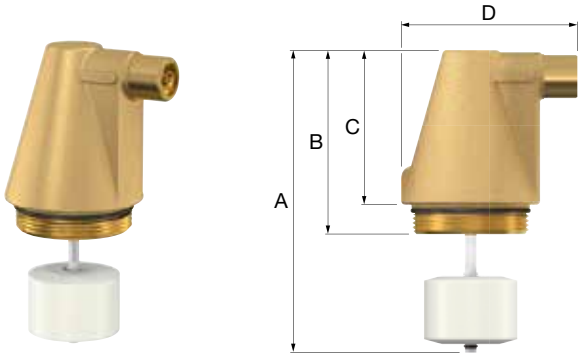
Type	Capacity [l]	Connection		Dimensions				K_v * [m³/h] (ΔP = 1 bar)	Weight [kg]		Order Code
		[DN]	[mm]	A [mm]	B [mm]	C [mm]	D [mm]				
Flamcovent Smart 50 F **	8	50	60.3	472	350	338	175	93	17	1	31061
Flamcovent Smart 65 F **	8	65	76.1	472	350	338	175	140	18	1	31062
Flamcovent Smart 80 F	25	80	88.9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

* $K_v = Q / \sqrt{\Delta P}$ Q: Flow [m³/h] ΔP: Pressure loss over the product [bar]
Flow factor K_v: Rate of flow [m³/h] which results in a 1 bar pressure drop across the product. This is different then the maximum allowed flow rate of the product.
** CE Marked.

Spare vent cap L

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

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

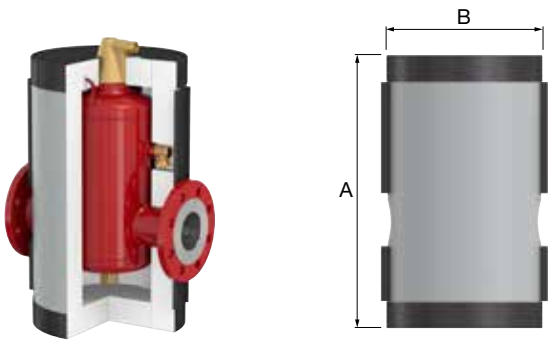


Type	Used for	Dimensions					Order Code
		A [mm]	B [mm]	C [mm]	D [mm]		
Spare vent cap L	Flamcovent (Smart) DN 50 - 600, Flamcovent Clean (Smart) DN 50 - 600, FlexBalance (Plus)	155	94	79	90	1	28555

Flamcovent IsoPlus

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

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



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

DIRT SEPARATORS

For use in sealed heating and cooling systems.
Dirt separators protect the boilers, pumps and fittings from damage caused by the deposit of dirt particles. Dirt separators also offer benefits in the event of application in old systems or when an open system is converted to a closed system.

- Prevents deposit of dirt particles in the boiler.
- The removal of dirt particles from the system water extends the service life of pumps, control equipment and other system accessories.

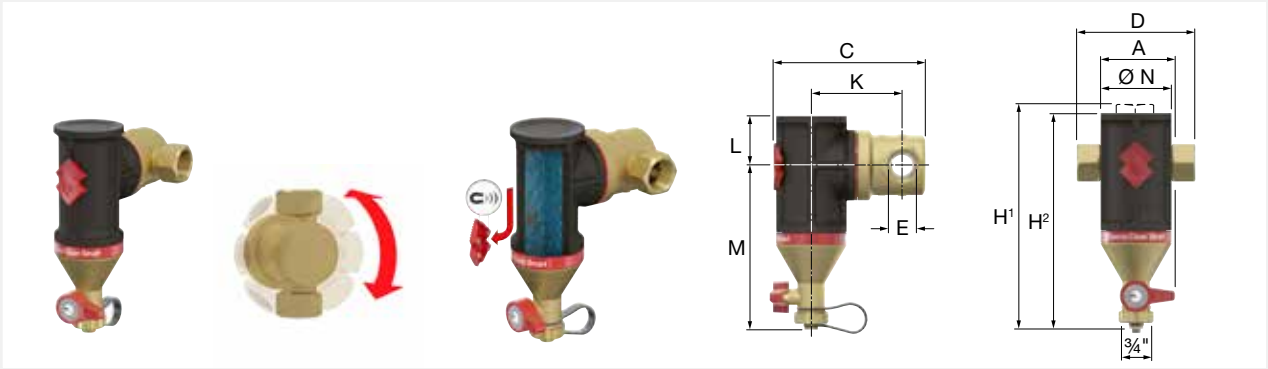
Flamco Clean Smart

More compact, lighter, cleaner and even more efficient.

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

- 60% better performance compared to conventional separators.
- Flow velocity up to 3 m/s (9.8 ft/s).
- .Four neodymium supermagnets are incorporated into the logo.
- Can be used with all kinds of pipework.
- Compact dimensions, light weight.
- Extremely low flow resistance and low loss of energy.
- Consistent performance throughout its service life.

- Minimum/Maximum working temperature: -10 °C / 120 °C (14 °F / 248 °F).
- Maximum working pressure: 10 bar (145 psi).
- Suitable for addition of glycol-based anti-freeze up to 50%.



Type	Connection (E)	Dimensions A [mm]	C [mm]	D [mm]	K [mm]	L [mm]	M [mm]	H/H1 [mm]	H2 [mm]	Ø N [mm]	Weight [kg]		Order Code
Flamco Clean Smart 22	22 mm	63	136	120	78	37	140	200	177	60	0.98	1	30022
Flamco Clean Smart ³/₄	Rp ³/₄"	63	133	100	78	37	140	190	177	60	0.94	1	30021
Flamco Clean Smart 1	Rp 1"	76	155	106	91	44	179	231	223	75	1.11	1	30023
Flamco Clean Smart 1 ¹/₄	Rp 1 ¹/₄"	76	165	110	96	44	179	233	223	75	1.26	1	30024
Flamco Clean Smart 1 ¹/₂	Rp 1 ¹/₂"	94	193	129	109	54	212	277	266	92	1.72	1	30025
Flamco Clean Smart 2	Rp 2"	94	206	140	117	54	212	282	266	92	2.15	1	30026

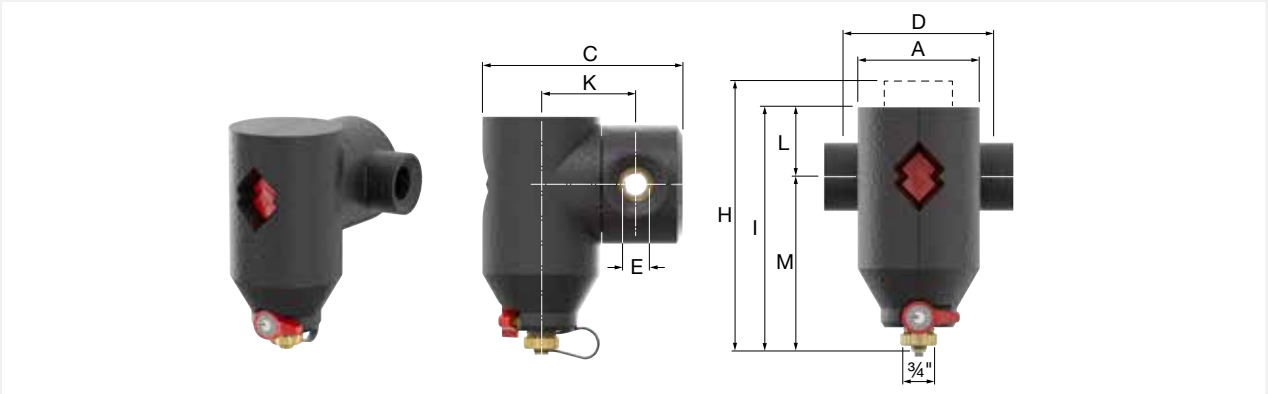
Flamco Clean Smart NPT

Type	Connection (E)	Dimensions A ["]	C ["]	D ["]	K ["]	L ["]	M ["]	H/H1 ["]	H2 ["]	Ø N ["]	Weight [lbs]		Order Code
Flamco Clean Smart ³/₄ NPT	³/₄" FNPT	2.48	5.24	3.94	3.07	1.46	5.51	7.48	6.97	2.36	2.07	1	30221
Flamco Clean Smart 1 NPT	1" FNPT	2.99	6.10	4.17	3.58	1.73	7.05	9.09	8.78	2.95	2.45	1	30223
Flamco Clean Smart 1 ¹/₄ NPT	1 ¹/₄" FNPT	2.99	6.50	4.33	3.78	1.73	7.05	9.17	8.78	2.95	2.78	1	30224
Flamco Clean Smart 1 ¹/₂ NPT	1 ¹/₂" FNPT	3.70	7.60	5.08	4.29	2.13	8.35	10.91	10.47	3.62	3.79	1	30225
Flamco Clean Smart 2 NPT	2" FNPT	3.70	8.11	5.51	4.61	2.13	8.35	11.10	10.47	3.62	4.74	1	30226

Flamco Clean Smart EcoPlus

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

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

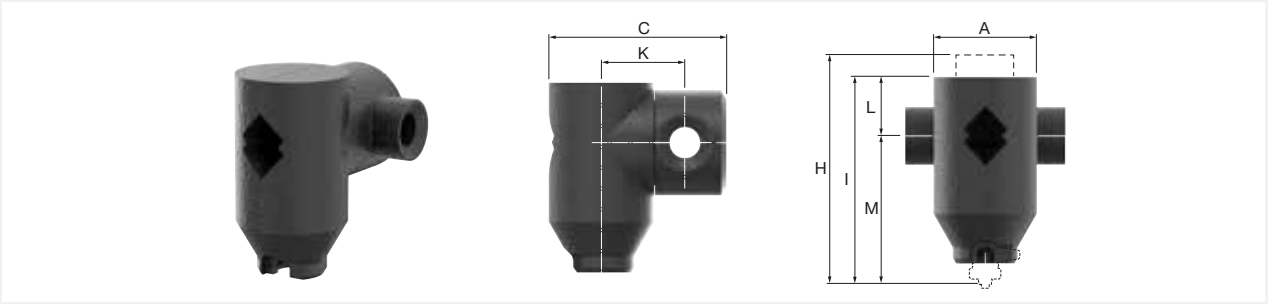


Type	Con-nection (E)	Dimensions A [mm]	C [mm]	D [mm]	K [mm]	L [mm]	M [mm]	H [mm]	I [mm]	Weight [kg]		Order Code
Flamco Clean Smart EcoPlus 22	22 mm	97	164	120	78	56	140	216	196	1.05	1	30032
Flamco Clean Smart EcoPlus ³/₄	Rp ³/₄"	97	164	100	78	56	140	216	196	1.01	1	30031
Flamco Clean Smart EcoPlus 1	Rp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

EcoPlus Pack Flamco Clean Smart

EPP EcoPlus insulation pack for the Flamco Clean Smart.

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



Type	Dimensions A [mm]	C [mm]	K [mm]	L [mm]	M [mm]	H [mm]	I [mm]	Weight [kg]		Order Code
EcoPlus Pack Flamco Clean Smart ³/₄	97	164	78	56	140	216	196	0.07	1	30261
EcoPlus Pack Flamco Clean Smart 1	112	189	91	63	178	255	241	0.11	1	30263
EcoPlus Pack Flamco Clean Smart 1 ¹/₄	112	199	96	63	178	255	241	0.11	1	30264
EcoPlus Pack Flamco Clean Smart 1 ¹/₂	131	224	109	73	212	300	285	0.16	1	30265
EcoPlus Pack Flamco Clean Smart 2	131	237	117	73	212	300	285	0.16	1	30266

Magnets Smart 22 mm - 2"

- Set of five magnets per bag.

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

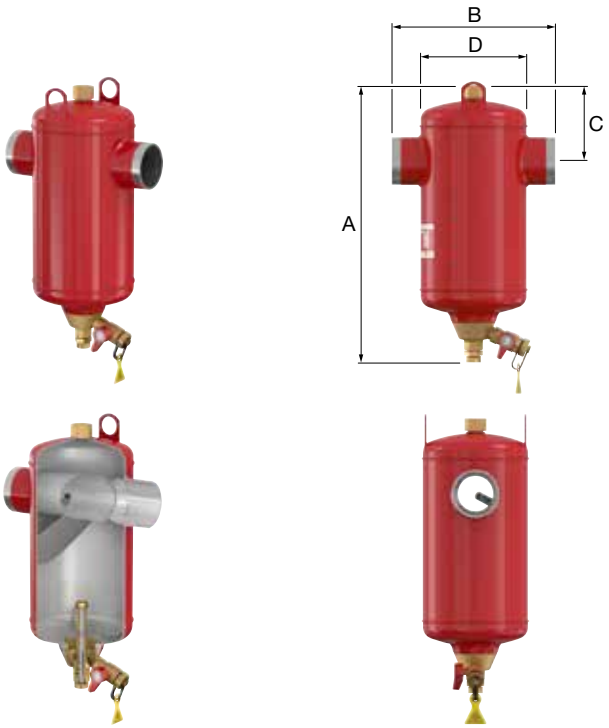
Flamco Clean Smart S - 10.0 bar

Optimum dirt separation combined with energy efficiency.

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

- Up to 60% better performance compared to conventional dirt separators.
- Extremely low flow resistance resulting in less energy consumption.
- Standard flow speed up to 3 m/s.
- Twenty-five neodymium supermagnets are incorporated into the dirt scraper.
- Constant performance during the entire lifespan.
- Low maintenance.

- Including a welded connection.
- Maximum working pressure: 10 bar.
- Suitable for systems with a maximum flow temperature of 120 °C.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- In accordance with Pressure Equipment Directive 2014/68/EU.



Type	Capacity [l]	Connection [DN]	Connection [mm]	Dimensions A [mm]	Dimensions B [mm]	Dimensions C [mm]	Dimensions D [mm]	K_v * [m³/h] (ΔP = 1 bar)	Weight [kg]		Order Code
Flamco Clean Smart 50 S	8	50	60.3	475	260	129	175	93	9	1	31121
Flamco Clean Smart 65 S	8	65	76.1	475	260	129	175	140	10	1	31122
Flamco Clean Smart 80 S	25	80	88.9	620	370	172	270	209	17	1	31123
Flamco Clean Smart 100 S	25	100	114.3	620	370	172	270	311	20	1	31124
Flamco Clean Smart 125 S	59	125	139.7	790	525	219	360	459	36	1	31125
Flamco Clean Smart 150 S	60	150	168.3	790	525	224	360	675	37	1	31126
Flamco Clean Smart 200 S	123	200	219.1	970	650	361	450	1340	57	1	31127
Flamco Clean Smart 250 S	287	250	273.0	1272	850	395	600	1952	125	1	31128

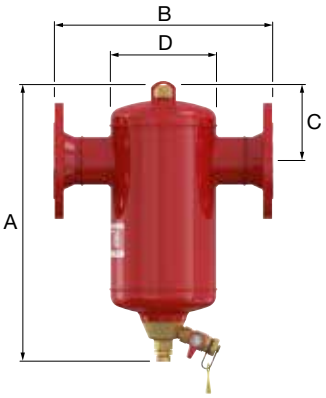
* $K_v = Q / \sqrt{\Delta P}$ Q: Flow [m³/h] ΔP: Pressure loss over the product [bar]
Flow factor K_v: Rate of flow [m³/h] which results in a 1 bar pressure drop across the product. This is different then the maximum allowed flow rate of the product.

CE

Flamco Clean Smart F - 10.0 bar

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

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



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

* $K_v = Q / \sqrt{\Delta P}$ Q: Flow [m³/h] ΔP: Pressure loss over the product [bar]
Flow factor K_v: Rate of flow [m³/h] which results in a 1 bar pressure drop across the product. This is different then the maximum allowed flow rate of the product.
** 4 hole flanged version.

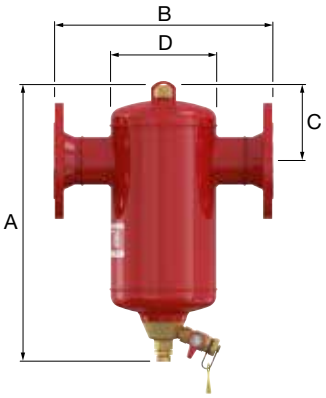
CE

8

Flamco Clean Smart F - 16.0 bar

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

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



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

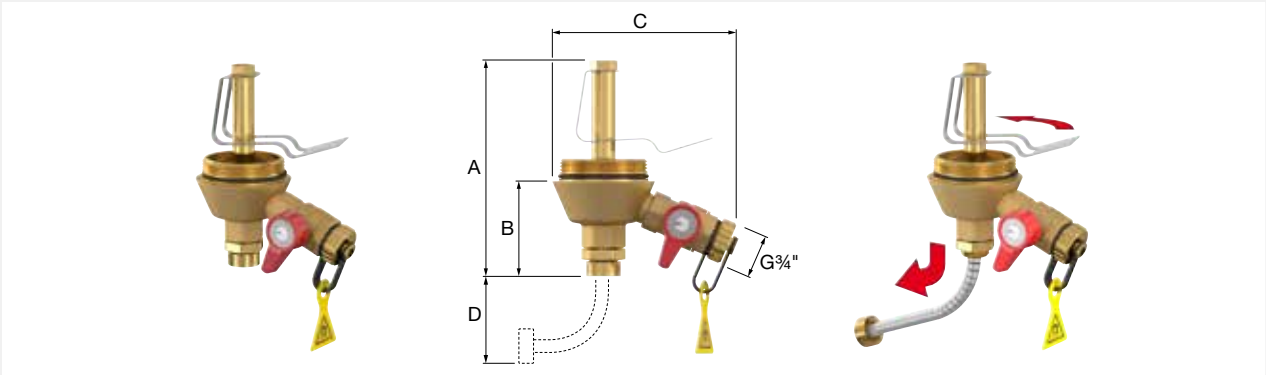
* $K_v = Q / \sqrt{\Delta P}$ Q: Flow [m³/h] ΔP: Pressure loss over the product [bar]
Flow factor K_v: Rate of flow [m³/h] which results in a 1 bar pressure drop across the product. This is different then the maximum allowed flow rate of the product.
** CE Marked.

Dirt collector

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

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

By pulling the magnet downwards the magnetite particles are attracted to the bottom side of the dirt scraper. There they can be removed easily via the drain valve.
The removable magnet is designed in such a manner that minimum space is needed under the dirt separator in order to remove it.

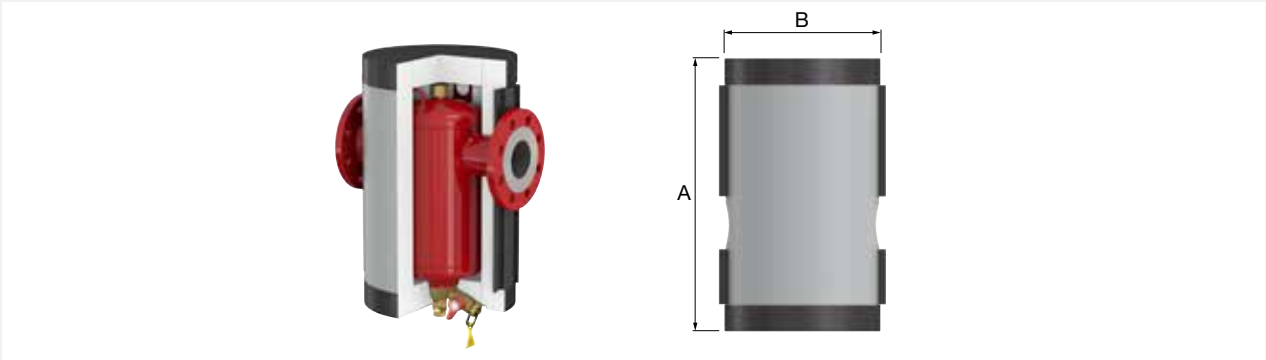


Type	Connection	Dimensions A [mm]	B [mm]	C [mm]	D [mm]	Weight [kg]		Order Code
Dirt Collector	G 2" M	148	66	128	60	0.9	1	31250

Flamco Clean IsoPlus

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

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



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

COMBINED AIR & DIRT SEPARATORS

For use in sealed heating and cooling systems.
Air and dirt separators protect the boilers, pumps and fittings from damage caused by the deposit of dirt particles, increase comfort and improve the yield. Air and dirt separators also offer benefits in the event of application in old systems or when an open system is converted to a closed system.

- Increases comfort and yield.
- Prevents deposit of dirt particles in the boiler.
- The removal of air and dirt from the system water extends the service life of pumps, control equipment and other system accessories.

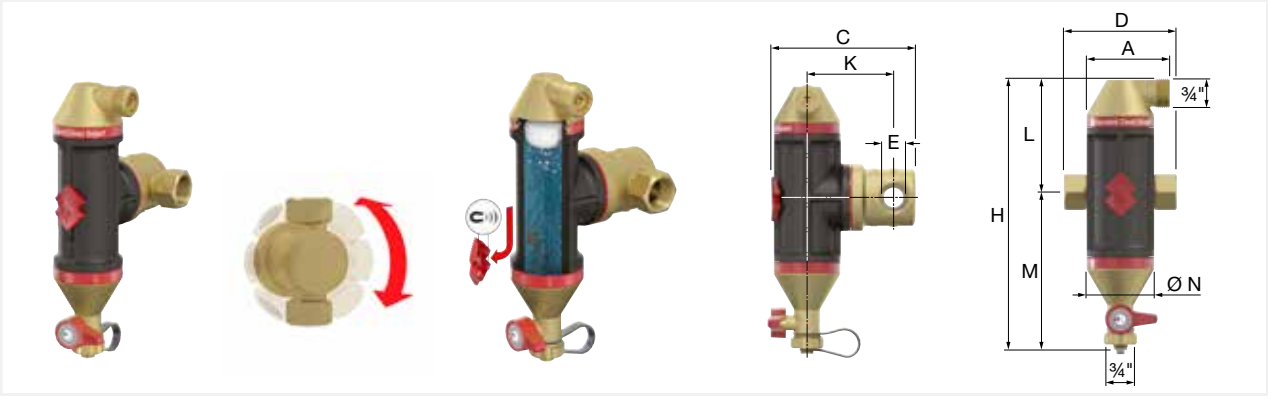
Flamcovent Clean Smart

More compact, lighter, cleaner and even more efficient.

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

- 60% better performance compared to conventional separators.
- Flow velocity up to 3 m/s (9.8 ft/s.).
- Four neodymium supermagnets are incorporated into the logo.
- Can be used with all kinds of pipework.
- Compact dimensions, light weight.
- Extremely low flow resistance and low loss of energy.
- Consistent performance throughout its service life.

- Maximum working pressure: 10 bar (145 psi).
- Minimum/Maximum working temperature: -10 °C / 120 °C (14 °F / 248 °F).
- Suitable for addition of glycol-based anti-freeze up to 50%.



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

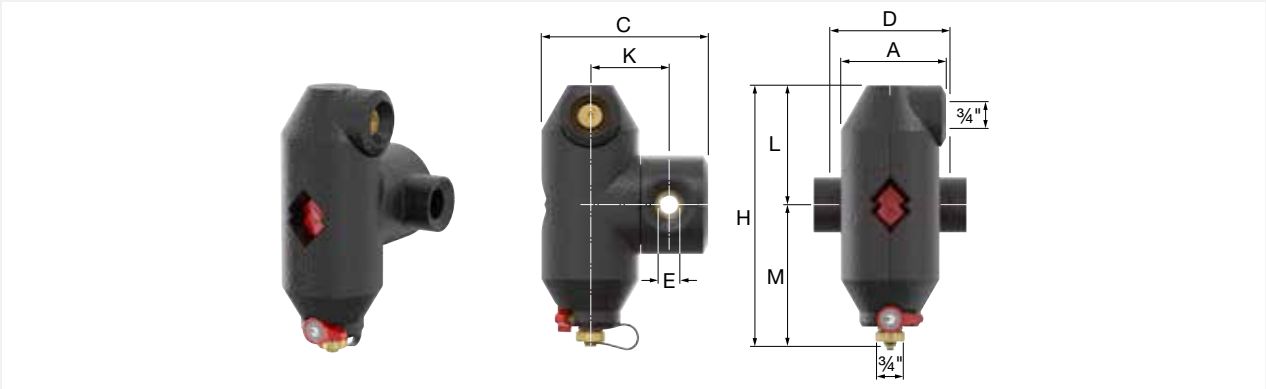
Flamcovent Clean Smart NPT

Type	Connection (E)	Dimensions A ["]	C ["]	D ["]	K ["]	L ["]	M ["]	H/H1 ["]	Ø N ["]	Weight [lbs]		Order Code
Flamcovent Clean Smart ³/₄ NPT	³/₄" FNPT	2.91	5.24	3.94	3.07	3.98	5.51	9.49	2.36	2.65	1	30241
Flamcovent Clean Smart 1 NPT	1" FNPT	3.23	6.10	4.17	3.58	5.47	7.05	12.52	2.95	3.31	1	30243
Flamcovent Clean Smart 1 ¹/₄ NPT	1 ¹/₄" FNPT	3.23	6.50	4.33	3.78	5.47	7.05	12.52	2.95	3.53	1	30244
Flamcovent Clean Smart 1 ¹/₂ NPT	1 ¹/₂" FNPT	3.70	7.60	5.08	4.29	6.81	8.35	15.16	3.62	4.85	1	30245
Flamcovent Clean Smart 2 NPT	2" FNPT	3.70	8.11	5.51	4.61	6.81	8.35	15.16	3.62	5.73	1	30246

Flamcovent Clean Smart EcoPlus

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

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

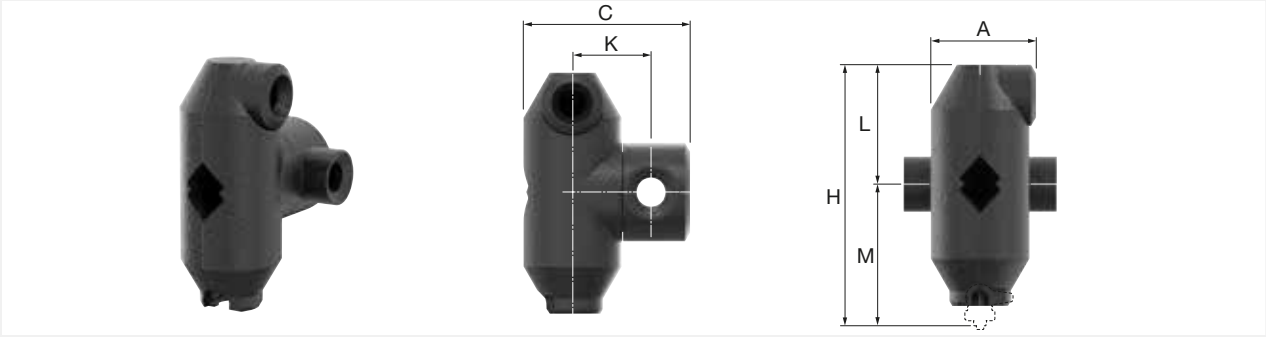


Type	Con-nection (E)	Dimensions A [mm]	C [mm]	D [mm]	K [mm]	L [mm]	M [mm]	H [mm]	Weight [kg]		Order Code
Flamcovent Clean Smart EcoPlus 22	22 mm	104	164	120	78	118	140	258	1.3	1	30052
Flamcovent Clean Smart EcoPlus ¾	Rp ¾"	104	164	100	78	118	140	258	1.3	1	30051
Flamcovent Clean Smart EcoPlus 1	Rp 1"	117	189	106	91	157	178	335	1.6	1	30053
Flamcovent Clean Smart EcoPlus 1 ¼	Rp 1 ¼"	117	199	110	96	157	178	335	1.7	1	30054
Flamcovent Clean Smart EcoPlus 1 ½	Rp 1 ½"	134	224	129	109	191	212	403	2.4	1	30055
Flamcovent Clean Smart EcoPlus 2	Rp 2"	134	237	140	117	191	212	403	2.8	1	30056

EcoPlus Pack Flamcovent Clean Smart

EPP EcoPlus insulation pack for the Flamcovent Clean Smart.

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



Type	Dimensions A [mm]	C [mm]	K [mm]	L [mm]	M [mm]	H [mm]	Weight [kg]		Order Code
EcoPlus Pack Flamcovent Clean Smart ¾	104	164	78	118	140	258	0.07	1	30271
EcoPlus Pack Flamcovent Clean Smart 1	117	189	91	157	178	335	0.13	1	30273
EcoPlus Pack Flamcovent Clean Smart 1 ¼	117	199	96	157	178	335	0.13	1	30274
EcoPlus Pack Flamcovent Clean Smart 1 ½	134	224	109	191	212	403	0.19	1	30275
EcoPlus Pack Flamcovent Clean Smart 2	134	237	117	191	212	403	0.20	1	30276

Magnets Smart 22 mm - 2"

- Set of five magnets per bag.

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

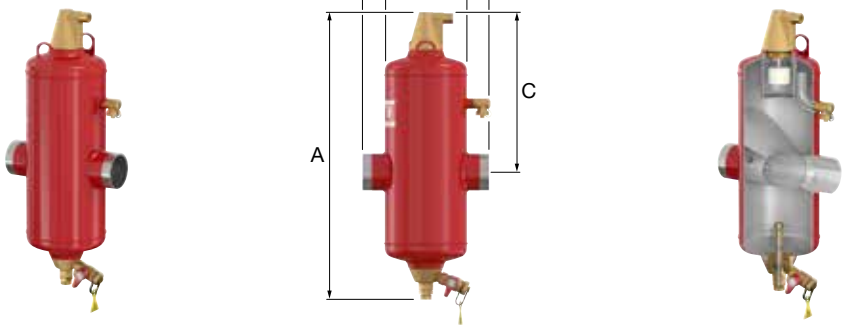
Flamcovent Clean Smart S - 10.0 bar

Optimum air and dirt separation combined with energy efficiency.

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

- Up to 60% better performance compared to conventional air and dirt separators.
- Extremely low flow resistance resulting in less energy consumption.
- Standard flow speed up to 3 m/s (9.8 ft/s).
- Twenty-five neodymium supermagnets are incorporated into the dirt scraper.
- Constant performance during the entire lifespan.
- Low maintenance.

- Including a welded connection.
- Maximum working pressure: 10 bar.
- Suitable for systems with a maximum flow temperature of 120 °C.
- Suitable for addition of glycol-based anti-freeze up to 50%.
- In accordance with Pressure Equipment Directive 2014/68/EU.



Type	Capacity [l]	Connection [DN]	Connection [mm]	Dimensions A [mm]	Dimensions B [mm]	Dimensions C [mm]	Dimensions D [mm]	K_v * [m³/h] (ΔP = 1 bar)	Weight [kg]		Order Code
Flamcovent Clean Smart 50 S	10	50	60.3	603	260	338	175	93	11	1	31141
Flamcovent Clean Smart 65 S	10	65	76.1	603	260	338	175	140	11	1	31142
Flamcovent Clean Smart 80 S	33	80	88.9	795	370	435	270	209	20	1	31143
Flamcovent Clean Smart 100 S	33	100	114.3	795	370	435	270	311	23	1	31144
Flamcovent Clean Smart 125 S	78	125	139.7	967	525	510	360	459	42	1	31145
Flamcovent Clean Smart 150 S	78	150	168.3	967	525	510	360	675	47	1	31146
Flamcovent Clean Smart 200 S	158	200	219.1	1280	650	705	450	1340	63	1	31147
Flamcovent Clean Smart 250 S	370	250	273.0	1620	850	892	600	1952	132	1	31148

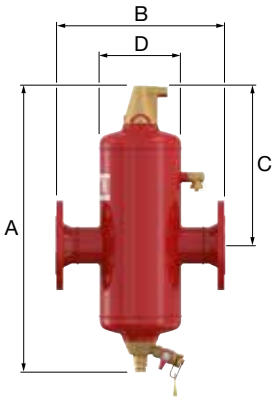
* $K_v = Q / \sqrt{\Delta P}$ Q: Flow [m³/h] ΔP: Pressure loss over the product [bar]
Flow factor K_v: Rate of flow [m³/h] which results in a 1 bar pressure drop across the product. This is different then the maximum allowed flow rate of the product.

CE

Flamcovent Clean Smart F - 10.0 bar

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

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



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

* $K_v = Q / \sqrt{\Delta P}$ Q: Flow [m³/h] ΔP: Pressure loss over the product [bar]
Flow factor K_v: Rate of flow [m³/h] which results in a 1 bar pressure drop across the product. This is different then the maximum allowed flow rate of the product.
** 4 hole flanged connection.

CE

Flamcovent Clean Smart F - 16.0 bar

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

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

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

* $K_v = Q / \sqrt{\Delta P}$ Q: Flow [m³/h] ΔP: Pressure loss over the product [bar]
Flow factor K_v: Rate of flow [m³/h] which results in a 1 bar pressure drop across the product. This is different then the maximum allowed flow rate of the product.
** CE Marked.

Flamcovent Clean Smart F - ANSI flanges

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

- Minimum/Maximum working temperature: -10 °C / 120 °C (14 °F / 248 °F).
- Maximum working pressure: 10 bar (145 psi).
- ANSI flange connection sizes (4 hole).
- Available in ASME approved and non-ASME approved executions.

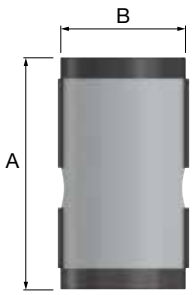
Type	Capa-city [gal]	Connection		Dimensions				C_v [gal/min]	Weight [lbs]		Order Code
		[DN]	["]	A ["]	B ["]	C ["]	D ["]				
Flamcovent Clean Smart 65 F	2.6	65	2.5	23.74	13.78	13.11	6.89	162	35	1	30360
Flamcovent Clean Smart 80 F	8.7	80	3.0	31.30	18.50	17.13	10.63	242	55	1	30361
Flamcovent Clean Smart 100 F	8.7	100	4.0	31.30	18.50	17.13	10.63	360	64	1	30632
Flamcovent Clean Smart 125 F	20.6	125	5.0	38.07	25.00	20.28	14.17	531	106	1	30363
Flamcovent Clean Smart 150 F	20.6	150	6.0	38.07	25.00	20.28	14.17	780	115	1	30364
Flamcovent Clean Smart 65 F *	2.6	65	2.5	23.74	13.78	13.11	6.89	162	35	1	30370
Flamcovent Clean Smart 80 F *	8.7	80	3.0	31.30	18.50	17.13	10.63	242	55	1	30371
Flamcovent Clean Smart 100 F *	8.7	100	4.0	31.30	18.50	17.13	10.63	360	64	1	30372
Flamcovent Clean Smart 125 F *	20.6	125	5.0	38.07	25.00	20.28	14.17	531	106	1	30373
Flamcovent Clean Smart 150 F *	20.6	150	6.0	38.07	25.00	20.28	14.17	780	115	1	30374

* ASME approved.

Flamcovent Clean IsoPlus

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

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

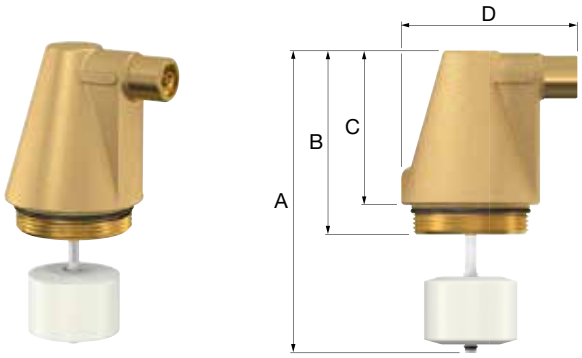


Type	Dimensions		Weight [kg]		Order Code
	A [mm]	B [mm]			
Flamcovent Clean IsoPlus 50	502	280	1.4	1	28860
Flamcovent Clean IsoPlus 65	502	280	1.5	1	28861
Flamcovent Clean IsoPlus 80	694	380	2.3	1	28862
Flamcovent Clean IsoPlus 100	694	380	2.4	1	28863
Flamcovent Clean IsoPlus 125	866	470	3.5	1	28864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

Spare vent cap L

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

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

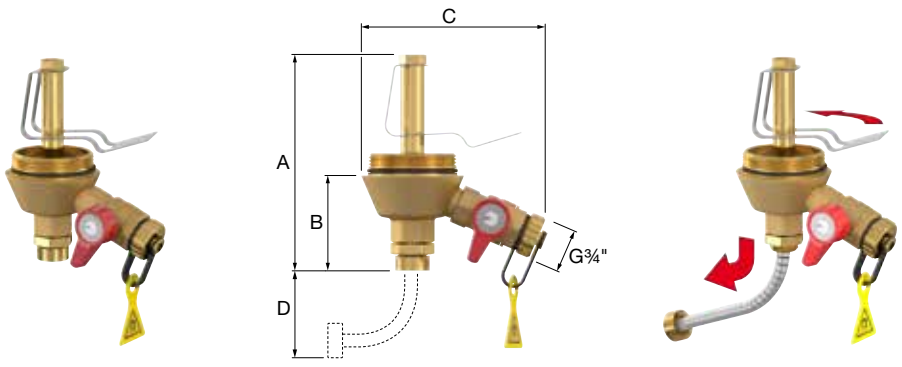


Type	Used for	Dimensions					Order Code
		A [mm]	B [mm]	C [mm]	D [mm]		
Spare vent cap L	Flamcovent (Smart) DN 50 - 600, Flamcovent Clean (Smart) DN 50 - 600, FlexBalance (Plus)	155	94	79	90	1	28555

Dirt collector

Removeable dirt collector for Flamco Clean (Smart) and Flamcovent Clean Smart consisting of several parts:
- A double scraper - one at the bottom of the collection vessel and one in the cone of the dirt scraper.
- Magnet holder with 25 neodymium super magnets.
- Drain valve with operating lever and maintenance label.

By pulling the magnet downwards the magnetite particles are attracted to the bottom side of the dirt scraper. There they can be removed easily via the drain valve.
The removable magnet is designed in such a manner that minimum space is needed under the dirt separator in order to remove it.



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

Flamco Vacuum Degassers

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

PSD

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

Flexfiller Plus / Midifill Plus

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

PressDS Plus

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

General Technical Data

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

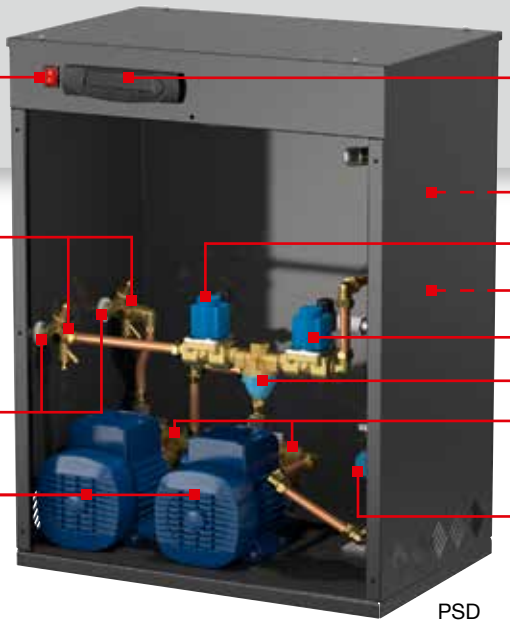
Type		Number of pumps	Pressure Rating [PN]	Max. Delivery Pressure [bar]	Max. Delivery Flow Rate [l/min]	Floor Standing / Wall Mounted	Break Tank Capacity [l]	System Volume (guide) [l]
PSD	Midi PSD	1	10	5.0	12	wall	N/A	< 50000
	250D	2	10	6.0	18	floor	N/A	< 300000
	280D	2	10	8.0	18	floor	N/A	< 300000
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

The Flamco active deaeration range is designed to utilise Henry's Law on the solubility of gasses. By creating a low pressure zone (a pressure step) within the equipment, dissolved gasses are dragged out of solution and vented to atmosphere. Flamco equipment is fully configurable and is able to achieve vacuum pressures as low as -0.95 bar (gauge), typically however Chilled systems are degassed to -0.5 bar (gauge) and heating systems to 0.0 bar (gauge). Flamco also offer a CIBSE approved CPD training module on air removal to help determine exactly what level of pressure step is required for different systems.

Features and Options

		Function			Mechanical Features															Electrical Features																												Volt Free Contacts 8A/230V								
Type		Degasser	Pressurisation	Dosing	Cabinet	Wall mounted	Floor mounted	Duty pump	Vacuum Cylinder	Duty / Standby pumps	Pump inlet Strainer	Pump Non return valve	Category 5 A/B air gap to BS13077	WRAS approved float	Additive Tank	Break Tank	Cold fill pressure 3.5-6.0 bar	Cold fill pressure 6.0-8.0 bar	Cold fill pressure 8.0-16.0 bar	Microprocessor control with LED display	Pressure transducer control	Password protection	pump trip and fail monitoring	Pump check routine	System quick-fill mode	System flood detection	Service due reminder	Adjustable differential	Cascade - duty / assist	Manuel run	Turbo Mode	Perge Seconds	Low water alarm	High water alarm	Excessive starts alarm	Hours run	Pump activation counter	Pump interrupted counter	Alarm logging	Audible alarm	Anti seize run (60 days)	Automatic duty rotation (twin pumps units)	MODBUS	BACnet	RS485 Connectivity	Boiler interlock (N/C)	Common alarm (N/C)	Fail safe	Low pressure (N/O)	High pressure (N/O)	Sensor Health (N/O)	Pump trip with VF contacts (N/O)	High/low alarm set points with auto reset with VF contacts (N/O)
PSD	Midi PSD	•			•	•		•	•		•	•					•			•	•	•	•	•	•	•		•	•	•						•	•			•	o	•	•	•	•	•	•	•	•	•
	250D	•			•		•	•	•	•	•	•					•			•	•	•	•	•	•	•	o	•	•	•						•	•		•	•	o	•	•	•	•	•	•	•	•
	280D	•			•		•	•	•	•	•	•						•		•	•	•	•	•	•	•	o	•	•	•						•	•		•	•	o	•	•	•	•	•	•	•	•
	2160D	•			•		•	•	•	•	•	•							•	•	•	•	•	•	•	•	o	•	•	•						•	•		•	•	o	•	•	•	•	•	•	•	•
Flexfiller Plus	Midifill Plus	•	•		•	•		•	•		•	•	•	•		•	•			•	•	•	•	•	•	•		•	•	•	•	•	•	•		•	•	•			•	o	•	•	•	•	•	•	•	•
	250D	•	•		•		•	•	•	•	•	•	•	•		•	•			•	•	•	•	•	•	•	o	•	•	•	•	•	•	•		•	•	•	•	•	•	o	•	•	•	•	•	•	•	•
	280D	•	•		•		•	•	•	•	•	•	•	•		•		•		•	•	•	•	•	•	•	o	•	•	•	•	•	•	•		•	•	•	•	•	•	o	•	•	•	•	•	•	•	•
	2160D	•	•		•		•	•	•	•	•	•	•	•		•			•	•	•	•	•	•	•	•	o	•	•	•	•	•	•	•		•	•	•	•	•	•	o	•	•	•	•	•	•	•	•
PressDS Plus	250	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•			•	•	•	•	•	•	•	o	•	•	•	•	•	•	•		•	•	•	•	•	•	o	•	•	•	•	•	•	•	•
	280	•	•	•	•		•	•	•	•	•	•	•	•	•	•		•		•	•	•	•	•	•	•	o	•	•	•	•	•	•	•		•	•	•	•	•	•	o	•	•	•	•	•	•	•	•
	2160	•	•	•	•		•	•	•	•	•	•	•	•	•	•			•	•	•	•	•	•	•	•	o	•	•	•	•	•	•	•		•	•	•	•	•	•	o	•	•	•	•	•	•	•	•

N/O = Normally Open
N/C = Normally Closed
o = Option



Power On/Off Switch

Digital Controller

Automatic Air Vent with Air-Intake Preventer

Isolation Valves

Solenoid Valve

Vacuum Degassing Cylinder

Variable Bypass Valve

Reducing Valve

System Connections

Non Return Valve

Double Pump

Prescor B Safety Valve

PSD

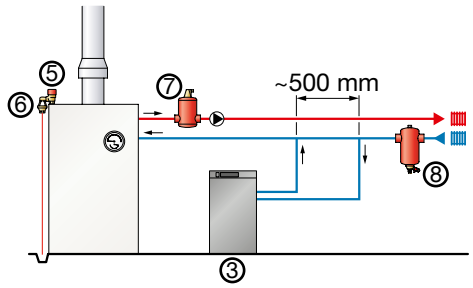
Installation and Pump Details

Installation and Placement

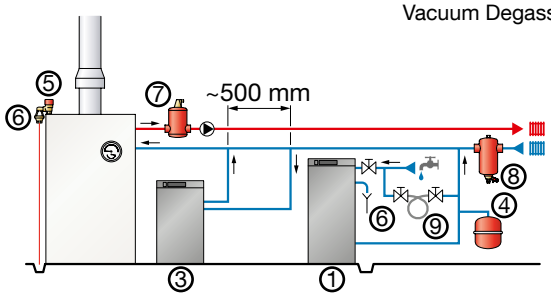
The vacuum degasser should be installed in the return header of the system, on the suction side of the circulating pump, in a frost-free and humidity free area. The point of connection will be the same as the system expansion vessel to provide a neutral pressure reading. The two system connections must be installed on the return pipe approximately 0.5 metre apart.

System Schematics

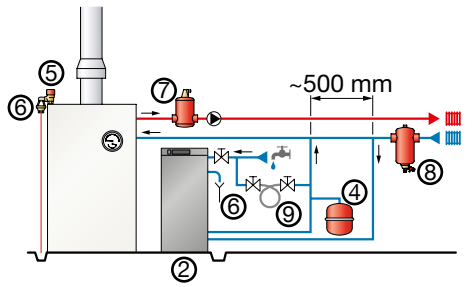
with Vacuum Degasser Unit



with separate Top-Up Unit and Vacuum Degasser Unit



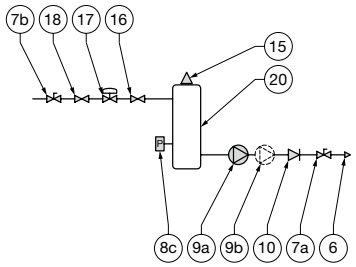
with combined Top-Up/Vacuum Degasser Unit



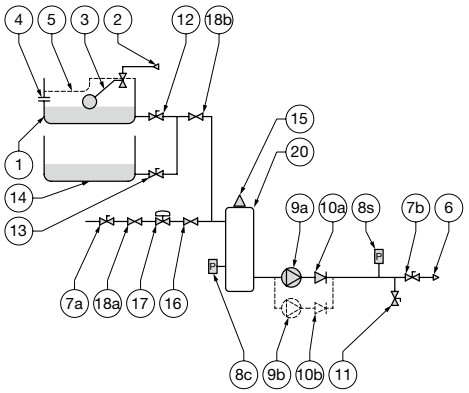
Nr	Description
1	Flexfiller Top-Up Unit
2	Flexfiller Plus / PressDS Plus Combined Unit
3	PSD Pressure Step Degasser
4	Flexcon Expansion Vessel
5	Prescor Safety Valve
6	Tundish
7	Flamcovent Smart Deaerator
8	Flamco Clean Smart Dirt Separator
9	Filling Loop (Optional)

Product Schematics

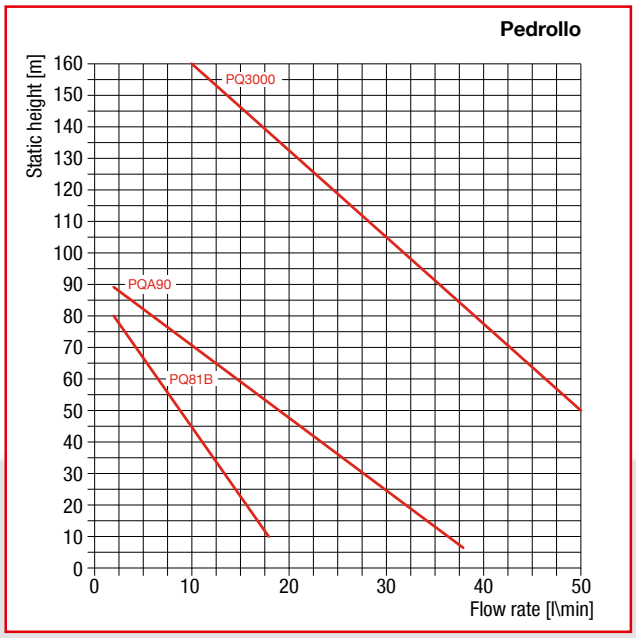
PSD



PressDS Plus

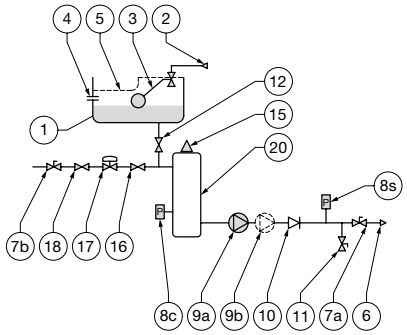


Pump Details



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

Flexfiller Plus



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

Spare Parts Vacuum Degassers

Type		Spare Part																																
		Controller	Mini Transformer	Rocker switch	Pressure Transducer (0-10 Bar, 1-6V)	Pressure Sensor 16b (1-6V)	Combined Isolation & Drain Valve	½" Non-Return Valve	½" x 15mm C x MI Coupling	Float Valve	Mini Float Valve	Overflow Connection	Float Switch L90 cm wire	Float Switch L55 cm wire	Float switch for glycol tank	Mesh Strainer	Flanged Tank Connector 15 mm	Extended Tank Connector ½" x 15 mm	DN15 Balancing Valve - Glycol / Water	½" Tee Brass	½" x 15 mm MI Elbow	PSD Controller	Vacuum Cylinder 4.8ltr	Vacuum Cylinder Midi	Vacuum Pressure Sensor	Solenoid Valve ½" (Slam shut)	Solenoid Valve ½" 1mm Hole (Bypass)	AC Solenoid Coil Clip-on BB240AS	RSF86Y100R Cynergy3	Pressure Reducing Valve	PSD & SPC Air Vent With Air Intake Preventor	Gauze	22 mm x ½" F Coupling	Prescor B 6 bar ¾" Inlet 1" Outlet	Prescor ½" 3 Bar Safety Relief Valve	Flexible Hose	Pump Pedrollo PQ81B	Pump Pedrollo PQA90	Pump Pedrollo PQ3000
		Article number																																
		Micro Control	EL-TRANS-001	BSS F014	1-6V TRANSDUCER	060G3853	FCCG NO	FC SC1	BSS F16	BSS P33	BSS M003	BSS M021	EL-TK-FSW-L90	EL-TK-FSW-L55	FLOAT SWT GLYCOL	N/A	BSS F18	BSS F11	FC044	BSS P61	BSS F12	PSD Controller	PSD SS Cylinder	MIDI CYLINDER	Vac Transducer	PSD S001A	PSD S001A Mod	PSD S001B/C	PSD Float Switch	FC PRV 050WG	FC Ventsuper AIV	FC336	FC361	FCBP 75	FCSV050	BSS Flexhose	BSS PQ81b	FC039	FC042
PSD	Midi PSD		•	•			•	•	•												•	•	•	•	•	•	•	•	•	•		•	•	•		
	250		•	•			•	•	•												•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	280		•	•			•	•	•												•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	2160		•	•			•	•	•												•	•	•	•	•	•	•	•	•	•	•	•	•	•		•
Flexfiller Plus	Midifill Plus	•	•	•	•		•	•	•		•	•		•		•	•				•	•		•	•	•	•	•	•	•	•		•	•	•		
	250D	•	•	•	•		•	•	•	•		•	•			•		•			•	•	•		•	•	•	•	•	•	•	•		•	•		
	280D	•	•	•	•		•	•	•	•		•	•			•		•			•	•	•		•	•	•	•	•	•	•	•		•		•	
	2160D	•	•	•		•	•	•	•	•		•	•			•		•			•	•	•		•	•	•	•	•	•	•	•		•			•
PressDS Plus	250D	•	•	•	•		•	•	•		•	•			•	•	•		•	•	•	•	•		•	•	•	•	•	•	•	•		•	•		
	280D	•	•	•	•		•	•	•		•	•			•	•	•		•	•	•	•	•		•	•	•	•	•	•	•	•		•		•	
	2160D	•	•	•		•	•	•	•		•	•			•	•	•		•	•	•	•	•		•	•	•	•	•	•	•	•		•			•

PSD PRESSURE STEP DEGASSERS

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

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

Application of Use:
- Commercial.
- Industrial.
- Residential.

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

Operating Conditions:
- Design Pressure: 10.0 bar @ 100 °C.
- System Temperature Range: 0 - 90 °C.
- Ambient Temperature Range: 0 - 45 °C.
- Max. temperature at point of connection: 70 °C.
- Fuse Rating: 13 Amps.
- Safety Rating: IP 54.
- Max. Turbo Runtime: 168 hours (1 week).
- Max. Normal Downtime: 180 minutes (3 hours).
- Volt Free Contacts: Common Fault Contact.
- Relative humidity 95% non-condensing.
- Noise Rating Data: < 75 dBA.

Material of Construction:
- Cabinet: Mild steel CR4.
- Cylinder: Stainless Steel 304.
- Pump: PEDROLLO (Unit dependant. See pump details for more information).
- Valves: Brass.
- Connection: Brass / Polypropylene.
- Pipework: Braided flexihose / EPDM.
- Finish: Powder Coating.

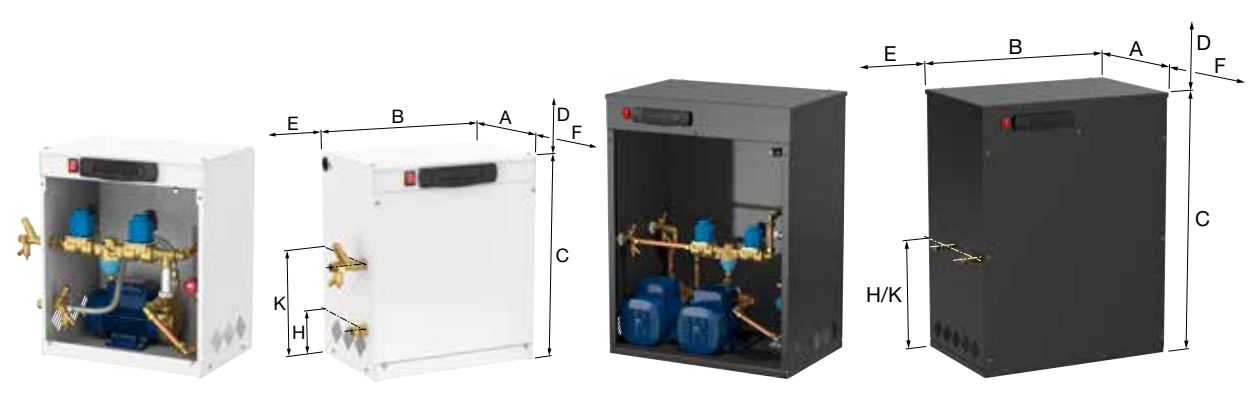
PSD

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

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

Product Features:

- For system volumes up to 30,0000 litres (Flamco Midi PSD: 50,000 litres).
- System quick-fill mode.
- Password protection for parameter entry.
- Pressure settings in 0.1 bar increments.
- Service reminder option (12 months).
- Pump pulse option (2 second pulse if inactive for 60 days).
- Flood protection options.
- Event logging for pump start, pump run hours counter, electrical interruption and common alarm.
- Volt free contacts for common fault.
- Pump fault, pressure transducer.
- Vacuum degassing, turbo and normal interval modes.
- Electric pump, 230V 50Hz 1ph (2160D: 415V 50Hz 3ph).



Type	Pump Quantity	Mounting	Connections [mm]	Pressure Rating [PN]	Operating Pressure [bar]	Power Consumption [kW]	Full Load Current [A]	Nom. Weight [kg]		Order Code
Midi PSD 150D	1	Wall	2 x 15 (Rp ½")	10	1 - 5	0.5	3.4	31	1	17106
PSD 250D	2	Floor	2 x 15 (Rp ½")	10	1 - 6	2 x 0.5	2 x 3.4	40	1	17375
PSD 280D	2	Floor	2 x 15 (Rp ½")	10	1 - 8	2 x 0.75	2 x 5.6	46	1	17105
PSD 2160D	2	Floor	2 x 15 (Rp ½")	16	8 - 16	2 x 2.2	2 x 6.6	64	1	17104

Dimensions PSD

Type	Dimensions							
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	H [mm]	K [mm]
Midi PSD 150D	280	410	480	500	150	800		
PSD 250D	310	465	790	500	150	800	445	445
PSD 280D - 2160D	390	600	790	500	150	800	445	445

PSD PRESSURE STEP DEAERATORS (USA - 110V)

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

System Volume: < 39,625 gallons

Application of Use:
- Commercial.
- Industrial.
- Residential.

Certifications and Standards Applied:
- PED 97/23/EC Sound Engineering Practice.
- IEE - Electrical Safety Guidance.
- EMC 2004/108/EC.
- BS 7074 Parts 1 to 3.
- Machine Directive 95/16/EC.
- Electronic Components have been tested and comply with the EMC Directives.
- EN 61000-6-2: Generic Standards - Immunity standard for industrial environments.
- EN 61000-6-3: Generic Standards - Emission standard for residential, commercial and light industrial environment.
- CE marked components, where applicable.
- IP54 (BS EN60529) Rated Controller.

Operating Conditions:
- Design Pressure: 145 psi @ 212 °F / 100 °C.
- System Temperature Range: 32 - 194 °F / 0 - 90 °C.
- Ambient Temperature Range: 32 - 113 °F / 0 - 45 °C.
- Max. temperature at point of connection: 158 °F / 70 °C (Pressure step ‘Stop’ Pressure to be set no lower than 0.0 psi Gauge).
- Fuse Rating: 10 Amps.
- Safety Rating: IP 54.
- Max. Turbo Runtime: 168 hours (1 week).
- Max. Normal Downtime: 180 minutes (3 hours).
- Volt Free Contacts: Common Fault Contact.
- Relative humidity 95% non-condensing.
- Noise output: < 75 dBA.

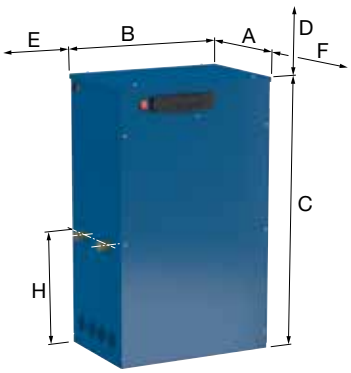
Material of Construction:
- Cabinet: Mild Steel AISI 1010.
- Pump: WRAS Approved / Insulation Class F.
- Cylinder: Stainless Steel 304.
- Valves: Brass.
- Connection: Brass / Polypropylene.
- Pipework: Braided flexihose / Copper.
- Finish: Powder Coating - Blue (RAL 5007).

PSD USA 110V

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

Product Features:

- For system volumes up to 39,625 gallons.
- System quick-fill mode.
- Password protection for parameter entry.
- Pressure settings in 1 psi increments.
- Service reminder option (12 months).
- Pump exercising option (2 second pulse if inactive for 60 days).
- Event logging for pump start, pump run hours counter, electrical.
- Interruption and common alarm.
- Auxilary contacts for common fault.
- Pump fault, pressure transducer.
- Vacuum deaerating, turbo and normal interval modes.
- Pump inlet strainer and pump check valve.
- Glycol mixture up to 50%.
- Vacuum cylinder.
- Adjustable differential.
- MODBUS and RS485 connectivity.
- Electric pump, 110V 60Hz 1ph.



Type	Pump Quantity	Mounting	Connections (Iso threads)	Pressure Rating [psi]	Operating Pressure [psi]	Power Consumption [W]	Full Load Current [A]	Nom. Weight [lbs]		Order Code
PSD USA 110V 250D	2	Floor	1/2" NPT	150	14 - 87	1430	3.4	88	1	17377

Dimensions PSD USA 110V

Type	Dimensions						
	A ["]	B ["]	C ["]	D ["]	E ["]	F ["]	H ["]
PSD USA 110V 250D	12.2	18.3	31.1	19.68	5.9	31.49	17.51

COMBINED PRESSURISATION AND DEGASSING PRODUCT RANGE

Flexfiller Plus & Midifill Plus

Compact, totally enclosed combined digital pressurisation unit with vacuum degasser for use on sealed systems in order to provide a minimum system pressure requirement and effective dissolved gas removal.
Available with single pump (Midifill Plus) or double pump (for duty/standby configuration).

PressDS Plus

Compact, totally enclosed combined digital pressurisation unit with vacuum degasser and additive tank for use on sealed systems in order to provide a minimum system pressure requirement and effective dissolved gas removal and adding additive to system. The correct fluid mix is blended on demand at the time of system top-up.
Available with double pump (for duty/standby configuration).

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

Application:
- Commercial.
- Industrial.
- Residential.

Certifications and Standards Applied:
- PED 2014/68/EU Sound Engineering Practice.
- IEE - Electrical Safety Guidance.
- EMC 2004/108/EC.
- BS7074 Parts 1 to 3.
- Machinery Directive 95/16/EC.
- Electronic Components have been tested and comply with the EMC Directives.
- EN61000-6-2: Generic Standards – Immunity standard for industrial environments.
- EN61000-6-3: Generic Standards – Emission standard for residential, commercial and light industrial environment.
- CE marked components, where applicable.
- WRAS approved float valve to BS1212 part 2.
- IP54 (BS EN60529) rated controller.

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

Flexfiller Plus & Midifill Plus

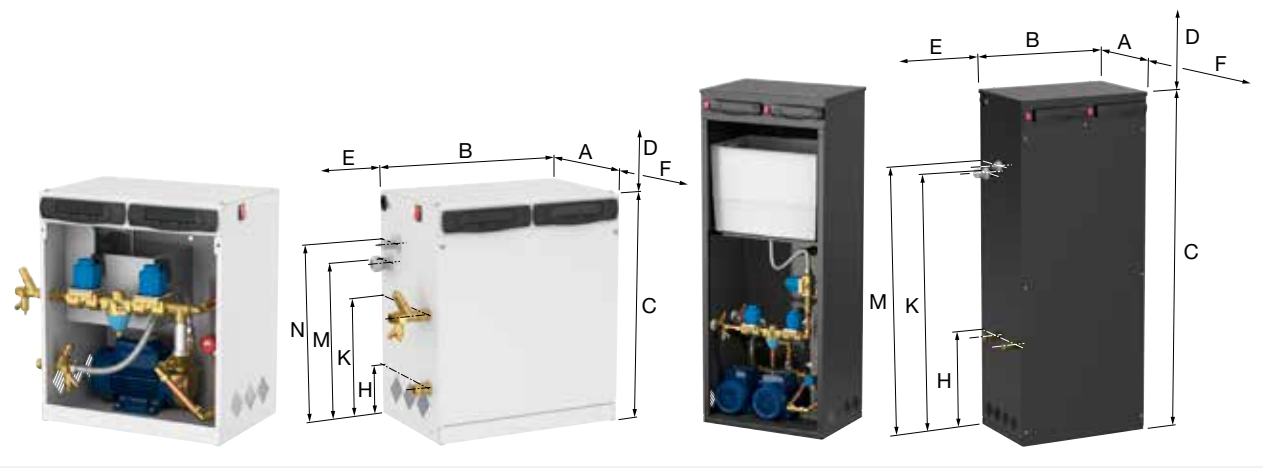
The Flexfiller Plus and Midifill Plus are compact, totally enclosed combined digital pressurisation units with vacuum degasser for use on sealed systems in order to provide a minimum system pressure requirement and effective dissolved gas removal.

Product Features:

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

Operating Conditions:

- System Temperature Range: 0 - 90 °C.
- Ambient Temperature Range: 0 - 45 °C.
- Maximum system temperature at the Point of connection: 70 °C.
- Safety Rating: IP 54.
- Maximum Turbo Runtime: 168 hours (1 week).
- Maximum Normal Downtime: 180 minutes (3 hours).
- Relative humidity 95% non-condensing.
- Noise Rating Data: < 75 dBA.



Type	Pump quantity	Mounting	Dimensions System [mm]	Dimensions Overflow [mm]	Pressure Rating [PN]	Operating Pressure [bar]	Power Consumption [kW]	Full Load Current [A]		Order Code
Midifill Plus 150D	1	Wall	2 x 15 (1/2")	22	10	1 - 5	0.5	3.4	1	45053
Flexfiller Plus 250D	2	Floor	2 x 15 (1/2")	22	10	1 - 6	2 x 0.52	2 x 3.4	1	45045
Flexfiller Plus 280D	2	Floor	2 x 15 (1/2")	22	10	1 - 8	2 x 0.75	2 x 5.6	1	45121
Flexfiller Plus 2160D	2	Floor	2 x 15 (1/2")	22	16	8 - 16	2 x 2.2	2 x 2.2	1	45043

Dimensions Flexfiller Plus & Midifill Plus

Type	Dimensions A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	H [mm]	K [mm]	M [mm]	N [mm]
Midifill Plus 150D	280	410	480	500	150	800				
Flexfiller Plus 250D	320	470	1160	500	150	800	455	915	955	-
Flexfiller Plus 280D	320	600	1160	500	150	800	455	915	955	-
Flexfiller Plus 2160D	320	600	1160	500	150	800	455	915	955	-

PressDS Plus

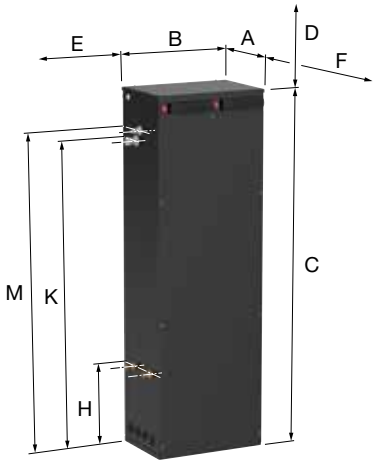
The PressDS Plus (Pressurisation/Degassing/Dosing System) is a compact, totally enclosed combined digital pressurisation unit with vacuum degasser and additive tank for use on sealed systems in order to provide a minimum system pressure requirement, effective dissolved gas removal and adding additives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

Product Features:

- For system volumes up to 300,000 litres.
- Break Tank: 4 litre break tank with type AB Air Gap Fluid Cat 5.
- MODBUS Communication output.
- System quick-fill mode.
- Password protection for parameter entry.
- Pressure settings in 0.1 bar increments.
- Service reminder option (12 months).
- Pump pulse option (2 second pulse if inactive for 60 days).
- Flood protection options.
- Event logging for pump start, individual pump run hours counter, electrical interruption and common alarm.
- Volt free contacts for common fault, high pressure, low pressure, pump fault, pressure transducer (Top-up controller only).
- Individual controllers for pressurisation and degassing function.
- Vacuum degassing, turbo and normal interval modes.
- 18 litre additive tank.
- Mix ratios from 1% to 50% user configurable balancing valves.
- Top-up pressurisation unit (<18.0 l/min).
- Electric pump, 230V 50Hz 1ph (2160D: 415V 50Hz 3ph).

Operating Conditions:

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



Type	Pump quantity	Connections		Pressure Rating [PN]	Operating Pressure [bar]	Power Rating [kW]	Full Load Current [A]	Nom. Weight [kg]		Order Code
		System [mm]	Overflow [mm]							
PressDS Plus 250D	2	2 x 15 (½")	22	10	1 - 6	2 x 0.52	2 x 3.4	62.7	1	45102
PressDS Plus 280D	2	2 x 15 (½")	22	10	1 - 8	3 x 0.52	3 x 3.4	71.5	1	45119
PressDS Plus 2160D	2	2 x 15 (½")	22	16	8 - 16	4 x 0.52	4 x 3.4	91.3	1	45120

Dimensions PressDS Plus

Type	Dimensions								
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	H [mm]	K [mm]	M [mm]
PressDS Plus 250D	470	320	1475						
PressDS Plus 280D	600	320	1475						
PressDS Plus 2160D	600	320	1475						

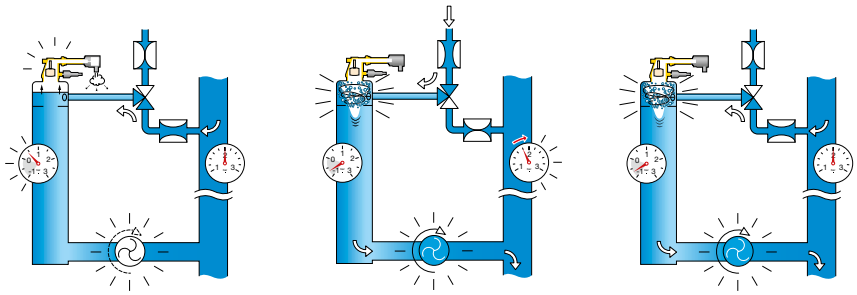
VACUMAT ECO DEGASSING AND TOP-UP AUTOMATS

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

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

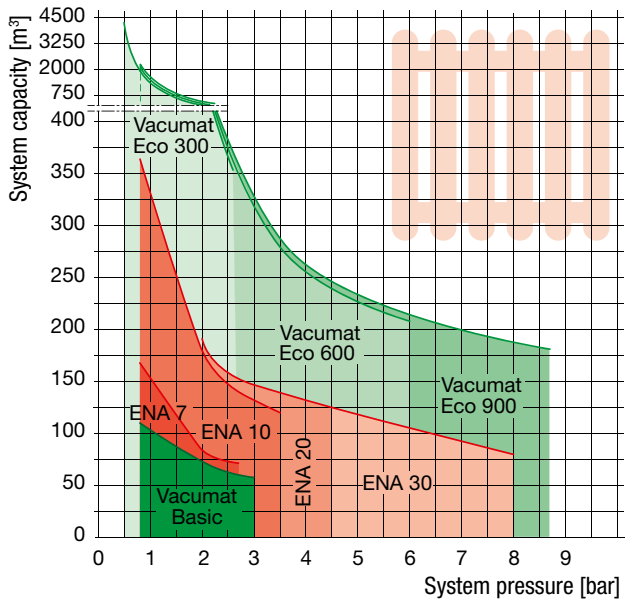
How the Vacumat Eco works

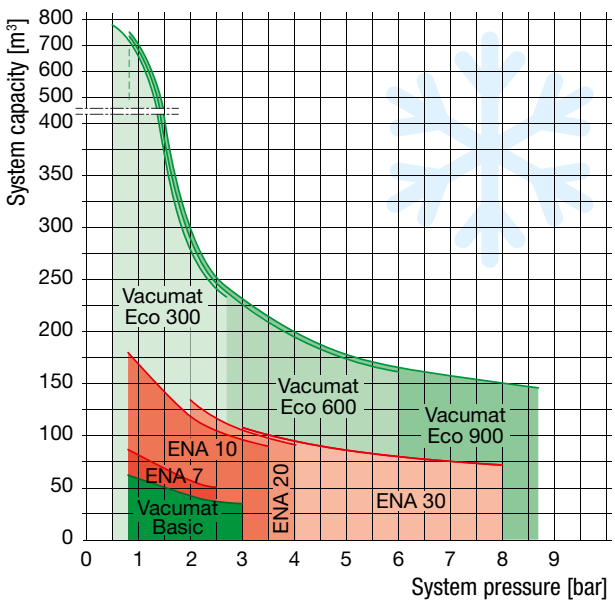
1. Creating a vacuum
Because the pump extracts more water from the column than can flow in a vacuum is created towards the boiling point. Gas is released and collects above the water line.
2. Deaeration
The pressure in the column is briefly raised by reducing the speed of the pump so that released gases can be vented.
3. Topping up
If the system pressure is too low, deaerated water is added until the correct pressure is reached.



Vacumat Eco - Selection graphs heating/cooling

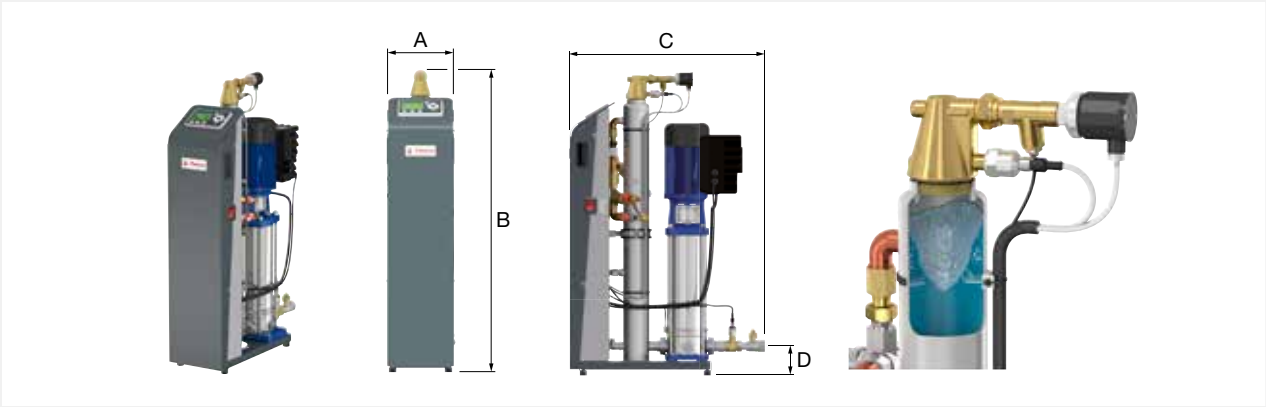
The Vacumat Eco can be used for a large system capacity and therefore in more situations. In contrast to the ENA series, the appliance makes use of the new technology of sensitive deaeration. This allows the process to run quickly, quietly and extremely economically.





Vacumat Eco

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



Type	System operating pressure [bar]	Connections			Dimensions				Weight [kg]		Order Code
		To system	From system	To supply	A [mm]	B [mm]	C [mm]	D [mm]			
Vacumat Eco 300	0.6 - 2.7	Rp 1"	Rp 1/2"	Rp 1/2"	260	1030	670	100	37.5	1	17003
Vacumat Eco 600	0.8 - 5.4	Rp 1"	Rp 1/2"	Rp 1/2"	260	1030	670	100	41.5	1	17006
Vacumat Eco 900	0.8 - 8.7	Rp 1"	Rp 1/2"	Rp 1/2"	260	1030	670	100	51.5	1	17009

8

Vacumat Eco - Performance

Specifications		Vacumat Eco		
		300	600	900
Nominal pressure [PN]		10	10	10
Working pressure range [bar]		0.6 - 2.7	0.8 - 5.4	0.8 - 8.7
Max. glycol		30%	30%	30%
System flow temperature [°C]		3 - 120	3 - 120	3 - 120
System water temperature range for deaeration [°C]		3 - 90	3 - 90	3 - 90
Top-up temperature [°C]		3 - 90	3 - 90	3 - 90
Ambient temperature range [°C]		3 - 45	3 - 45	3 - 45
Electrical requirements [V]		1 ~ 230 V 50/60 Hz	1 ~ 230 V 50/60 Hz	1 ~ 230 V 50/60 Hz
Power supply [kW]		0.4	1.1	1.1
Degree of protection / motor position valves		IP 54 / IP 42	IP 54 / IP 42	IP 54 / IP 42
Nominal current [A]		2.85	5.18	6.80
Noise output [dB(A)]		52	55	~55
Saturation level of gasses [ml/l] (acc. to VDI 2035-2 and 4708-2)	Min	15	15	15
	Med	12	12	12
	Max	8	8	8

Impulse Output Water Meter

- PN 10, 90 °C.
- 50 Hz.

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

VACUMAT BASIC DEGASSING AND TOP-UP AUTOMAT

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

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

Vacumat Basic

- Max system volume: 115 m^3.
- Complies with the following guidelines:
  Machinery Directive 2006/42/EC.
  PED 2014/68/EU.

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

Vacumat Basic - Performance

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

Vacumat Basic Floor Console

For mounting the Vacumat Basic on the floor.

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

NFE 1 Top-up Unit

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

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

Type	L. [mm]	Connection to		K_{VS} (Backflow-preventer) [m³/h]	Weight [kg]		Order Code
		Potable water	System				
NFE 1.1	355	Rp ½"	G ¾"	2	3	1	23780
NFE 1.2 *	355	Rp ½"	G ¾"	2	3	1	23781

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

8

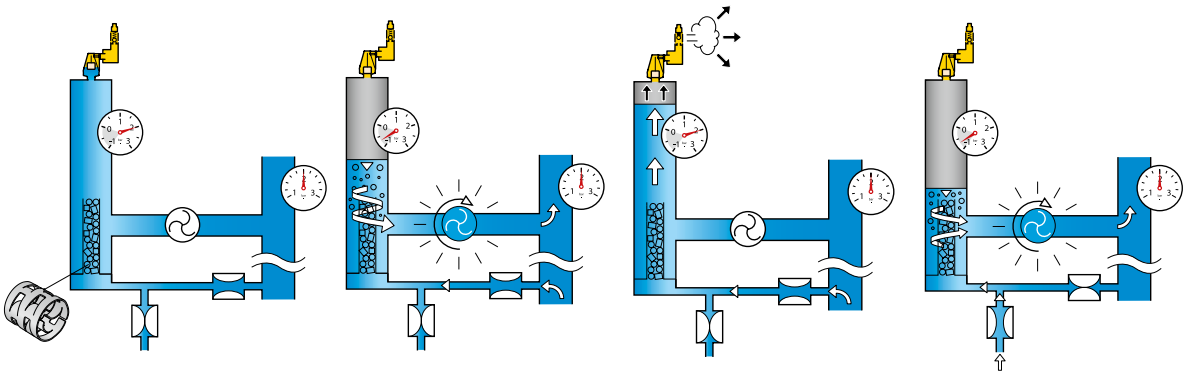
ENA DEGASSING AND TOP-UP AUTOMATS

For active degassing and automatic topping up of closed heating and cooling systems.
The ENA is a pressure step degasser that makes use of vacuum for highly efficient degassing of closed systems. Moreover, the ENA ensures automatic topping-up of the system after the top-up water has been degassed.
Can be easily used in combination with a Flexcon diaphragm pressure expansion vessel or pressure expansion automat.

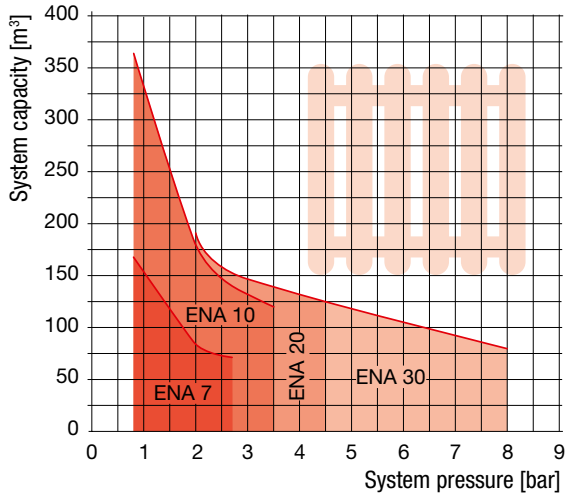
- Active degassing by patented PALL-Ring technology.
- The menu of the control unit is available in 18 languages.
- Easy to use.
- Fully assembled and ready to connect.
- Compact and robust design.
- Controller can be programmed as required. Connection to BMS possible (RS 485).

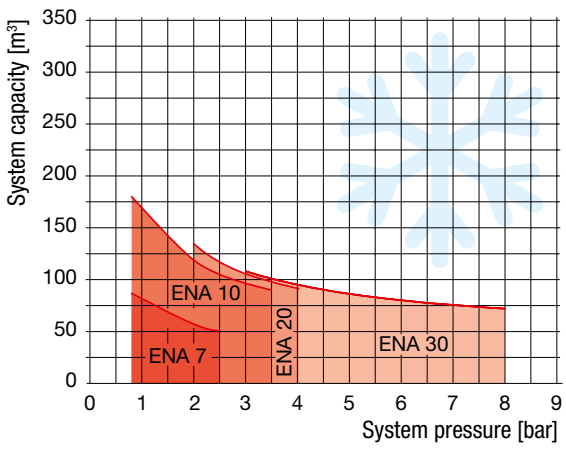
How the ENA works

1. Not active
When the ENA is inactive, the stainless steel column is filled with water and the pressure is equal to the system pressure.
2. Creating a vacuum
As the pump draws more water out of the column than can flow back in a vacuum is created. Gas is released and collects on the surface of the water.
3. Water intake
The pump stops and the column fills up again with water. The gas is then expelled via the automatic air vent.
4. Topping-up
If water is lost from the system installation the volume and, as a consequence, the pressure will drop. Water for topping-up is deaerated in the column and fed into the system in small doses (until the correct pressure has been restored).



ENA - Selection graphs heating/cooling





ENA 7 - 30

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

Type	Max. work. press. [bar]	Operating pressure [bar]	Syst. conn.	Dimensions W. [mm]	Dimensions D. [mm]	Dimensions H. [mm]	Weight [kg]		Order Code
ENA 7	8	0.8 - 2.7	Rp ³/₄"	740	325	1270	40	1	17070
ENA 10	8	0.8 - 3.5	Rp ³/₄"	740	325	1270	40	1	17090
ENA 20	8	2.0 - 4.5	Rp ³/₄"	740	325	1270	45	1	17091
ENA 30	10	3.0 - 8.0	Rp ³/₄"	710	525	1270	60	1	17092

NFE 1 Top-up Unit

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

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

Type	L. [mm]	Connection to Potable water	Connection to System	K_{vs} (Backflow-preventer) [m³/h]	Weight [kg]		Order Code
NFE 1.1	355	Rp ½"	G ¾"	2	3	1	23780
NFE 1.2 *	355	Rp ½"	G ¾"	2	3	1	23781

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

NFE 2 Top-up Unit

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

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

Type	L. [mm]	Connection to		Weight [kg]		Order Code
		Potable water	System			
NFE 2.1	200	Rp ½"	G ¾"	2	1	23782
NFE 2.2 *	200	Rp ½"	G ¾"	2	1	23783

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

Gas Sensor

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

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

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

T-plus

9

The T-plus is an ideal product for the expansion, conversion or overhaul of an existing system. No longer is it necessary to isolate, drain, de-pressurise or freeze a pipe when an extra branch is required. This prevents costly down time. The new branch can be fitted in seconds, even in hard-to-reach places. Time is money and installers will immediately appreciate the difference that T-plus makes. There are two models in the Flamco range (steel and copper) which can be used with a wide range of tubes and pipes for water, air and other non-flammable fluids.

T-plus Cast Iron

P. 266

T-plus Brass

P. 267

T-PLUS

The T-plus is specially designed to create perfect branches quickly and easily, whilst the system remains in operation.

The design of the T-plus is unique and responds precisely to the requirements of installers and their customers. The combination of a plunger, striking pin and a trigger sets the new standard in the creation of branches for systems in operation.

The new branching mechanism (the trigger) means perfect installation everywhere, everytime. Once the pin is removed, the charge ignites and the striking pin shoots straight forward. This makes a clean cut in the pipe creating the branch. This makes it possible to make branches even where there is little available space. There is no need to use a hammer any more.

Main advantages
- Saves installation time and costs.
- Create branches while the system is still in operation.
- Draining is not necessary, so no air and dirt can get into the system.
- A perfect branch every time due to the trigger.
- Easy to create a branch, even where space is restricted.
- Optimum pipe seal.
- Anti-corrosion coating.
- Single use (one shot) trigger mechanism. The trigger is included with the T-plus.

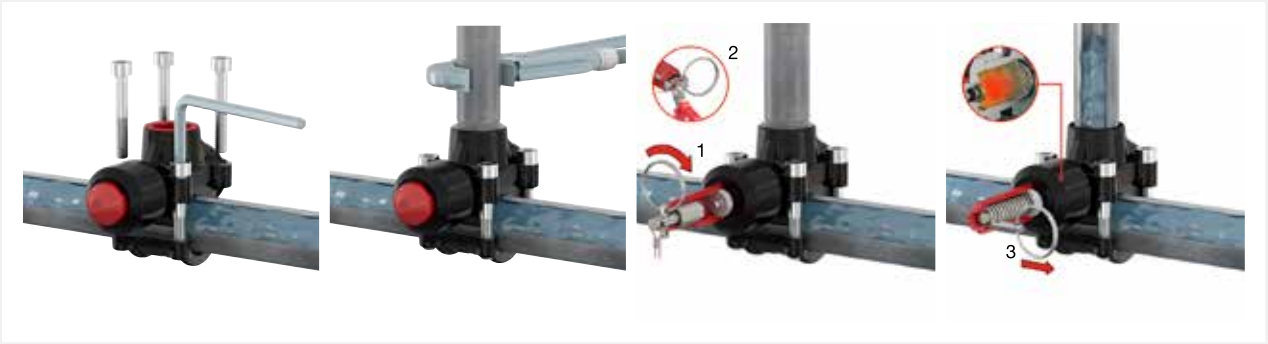
Areas of application
- Central heating and cooling installations.
- Potable installations.
- Solar installations.
- Fire protection systems.
- Industrial applications such as compressed air systems.

There are two types of T-plus available: a cast-iron version for thick-walled steel pipes and a brass version for copper pipes, thin-walled steel tubes, central heating pipes and stainless-steel pipes.

Installing the T-plus

The T-plus makes things easy for installers. We developed a new mechanism for making the perfect branch in just four steps. No matter how small the available space is, installers can always deliver optimum quality with the T-plus.
Creating a branch has never been easier.

(1) Position the ring in the most comfortable direction for you to pull.
(2) Cut through the seal.
(3) Pull the pin.

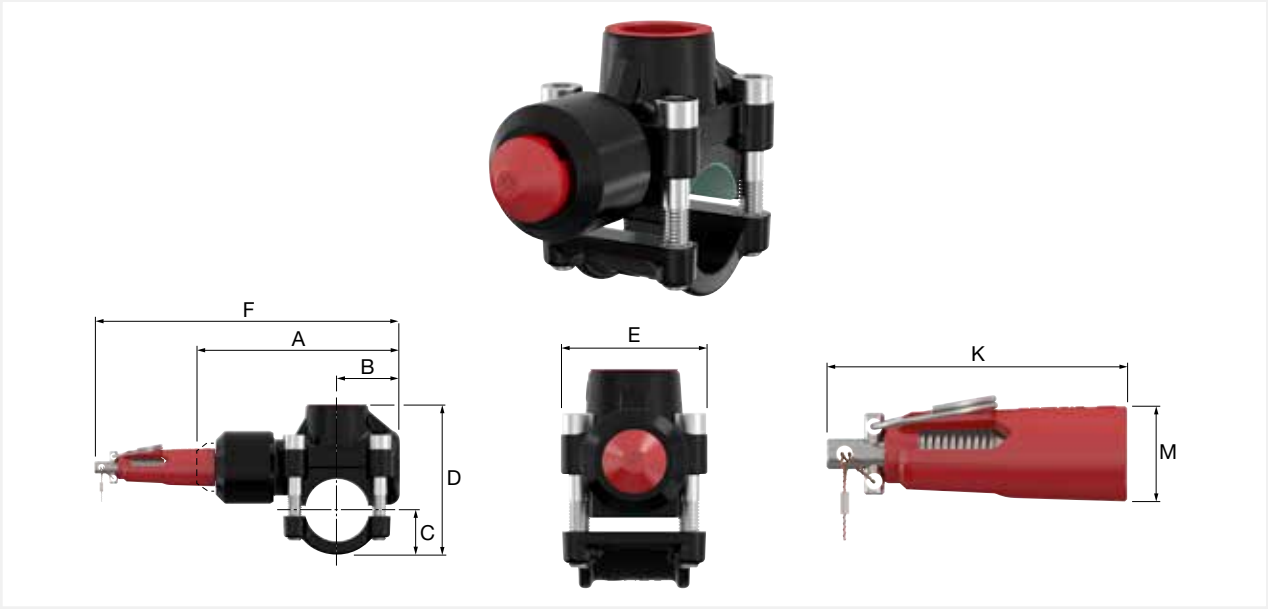


T-plus Cast Iron

For steel pipes (St33, St34, St35, St37) from ½" to 3":

- Threaded pipes: NEN 3257 C Heavy, DIN 2441, BS 1387 Heavy (or lighter)/ISO 9329-1.
- Seamless steel pipes: DIN 2448/1629 Bl.3, St 35 / ISO 9330-1.
- Welded steel pipes: DIN 2458/1626 Bl.2, St 35.
- Material numbers:
  1.0035 (St33)
  1.0034, 10305 (St34)
  1.0308, 10345 (St35)
  1.0036, 1.0037, 1.0038, 1.0039, 1.0255, 1.0254 (St37).

- Maximum working pressure: 25 bar.
- Maximum permissible temperature: 120 °C.
- Simple preparatory installation with click-in nuts (on models from 1½").



Type	Ø Pipe		Branch connection	Permissible wall thickness		Torque [Nm]		Order Code
	Nom.	Ext. [mm]		Min. [mm]	Max. [mm]			
T-plus DN 15 x Rp ½	½"	21.3	Rp ½"	2.0	3.25	10	1	90615
T-plus DN 20 x Rp ½	¾"	26.9	Rp ½"	2.0	3.25	10	1	90620
T-plus DN 25 x Rp ¾	1"	33.7	Rp ¾"	2.0	4.05	16	1	90626
T-plus DN 32 x Rp 1	1 ¼"	42.4	Rp 1"	2.0	4.05	16	1	90632
T-plus DN 40 x Rp 1 ¼	1 ½"	48.3	Rp 1 ¼"	2.3	4.05	30	1	90640
T-plus DN 50 x Rp 1 ¼	2"	60.3	Rp 1 ¼"	2.3	4.50	30	1	90650
T-plus DN 65 x Rp 1 ¼	2 ½"	76.1	Rp 1 ¼"	2.6	4.50	30	1	90665
T-plus DN 80 x Rp 1 ¼	3"	88.9	Rp 1 ¼"	2.9	5.00	30	1	90680

T-Plus Cast Iron - Dimensions

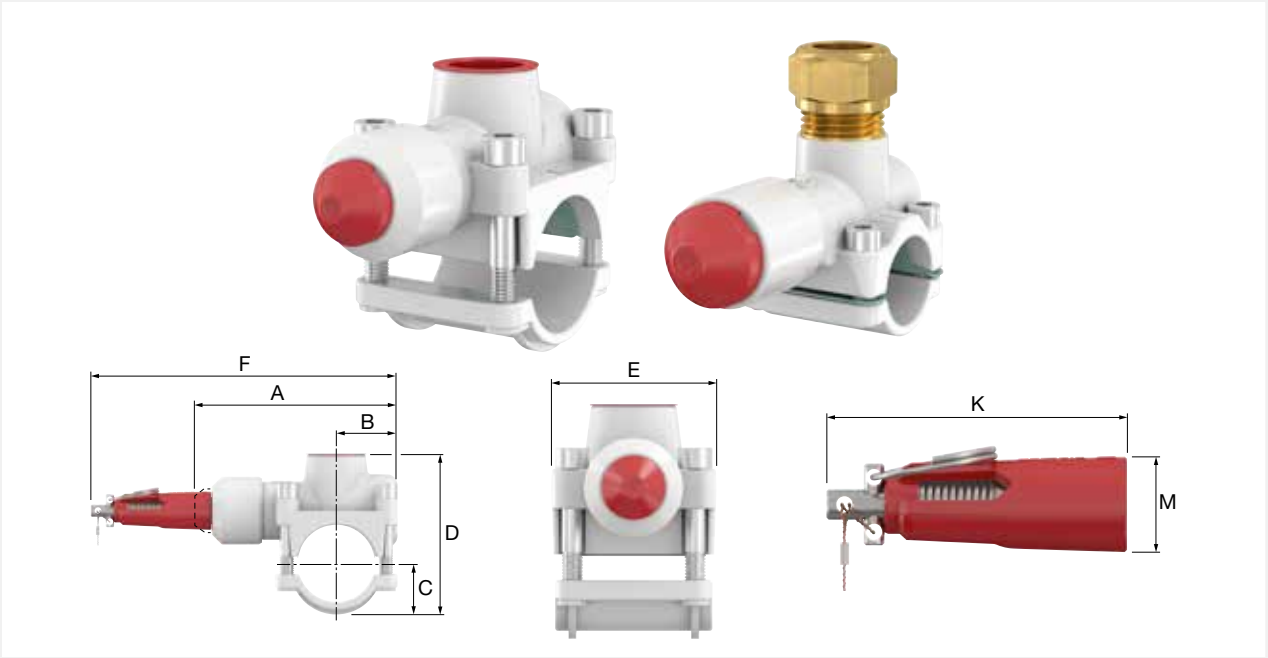
Type	Dimensions							
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F + 13 [mm]	K [mm]	M [mm]
T-plus DN 15 x Rp ½	100	28	19	67	47	166	66	21
T-plus DN 20 x Rp ½	113	34	21	77	50	179	66	21
T-plus DN 25 x Rp ¾	115	35	25	83	56	181	66	21
T-plus DN 32 x Rp 1	130	38	29	102	69	196	66	21
T-plus DN 40 x Rp 1 ¼	165	55	35	123	83	231	66	21
T-plus DN 50 x Rp 1 ¼	167	55	43	136	83	233	66	21
T-plus DN 65 x Rp 1 ¼	190	66	52	153	83	256	66	21
T-plus DN 80 x Rp 1 ¼	190	66	58	168	83	256	66	21

T-plus Brass

For thin-walled steel pipes (St33, St34, St35, St37), copper pipes (R290, R250) and SST pipes (1.4401, 1.4521):

- Thin-walled steel pipes according to NEN 1982, EN 10305 and DIN 2391.
  Material numbers: 1.0033 (St33), 1.0031, 1.0034 (St34), 1.0214, 1.0308 (St35), 1.0220, 1.0225, 1.0237 and 1.0261.
- Hard (R290) / semi-hard (R250) copper pipes according to EN 1057.
- Stainless steel pipes according to NEN 1982, EN 10312 and DIN 2391 made of AISI 316 (1.4401) and AISI 444 (1.4521).

- Maximum working pressure: 16 bar.
- Maximum permissible temperature: 120 °C.



Type	Ø Pipe ext. dia. [mm]	Branch con-nection	Suitable for			Max. permissible wall thickness			Torque [Nm]		Order Code
			Thin-walled steel	Copper	SST	Thin-walled steel [mm]	Copper [mm]	SST [mm]			
T-plus 14 x G 1/2 M	14	G 1/2" M	-	✔	-	-	1.25	-	6	1	90514
T-plus 15 x G 1/2 M	15	G 1/2" M	✔	✔	✔	1.25	1.25	1.00	6	1	90515
T-plus 16 x G 1/2 M	16	G 1/2" M	-	✔	-	-	1.25	-	6	1	90516
T-plus 18 x G 1/2 M	18	G 1/2" M	✔	✔	✔	1.25	1.25	1.00	6	1	90518
T-plus 22 x G 1/2 M *	22	G 1/2" M	✔	✔	✔	1.50	1.25	1.25	6	1	90522
T-plus 28 x Rp 3/4	28	Rp 3/4"	✔	✔	✔	1.50	1.50	1.25	10	1	90528
T-plus 35 x Rp 3/4	35	Rp 3/4"	✔	✔	✔	1.50	1.50	1.50	10	1	90535
T-plus 42 x Rp 3/4	42	Rp 3/4"	✔	✔	-	1.50	1.50	-	10	1	90542

* Complete with coupling 15 mm compr. fittings.

T-plus Brass - Dimensions

Type	Dimensions							
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F + 13 [mm]	K [mm]	M [mm]
T-plus 14 x G 1/2 M	75	17	13	48	35	141	66	21
T-plus 15 x G 1/2 M	75	17	13	51	35	141	66	21
T-plus 16 x G 1/2 M	75	17	12	46	35	141	66	21
T-plus 18 x G 1/2 M	88	24	14	51	40	154	66	21
T-plus 22 x G 1/2 M	88	24	15	58	40	154	66	21
T-plus 28 x Rp 3/4	105	29	22	76	57	171	66	21
T-plus 35 x Rp 3/4	108	30	25	82	56	174	66	21
T-plus 42 x Rp 3/4	115	35	29	89	63	181	66	21

Alphabetic Index

Symbols

A

B

C

D

E

F

G

H

I

K

L

M

N

O

P

R

S

T

U

V

W

Notes

Notes

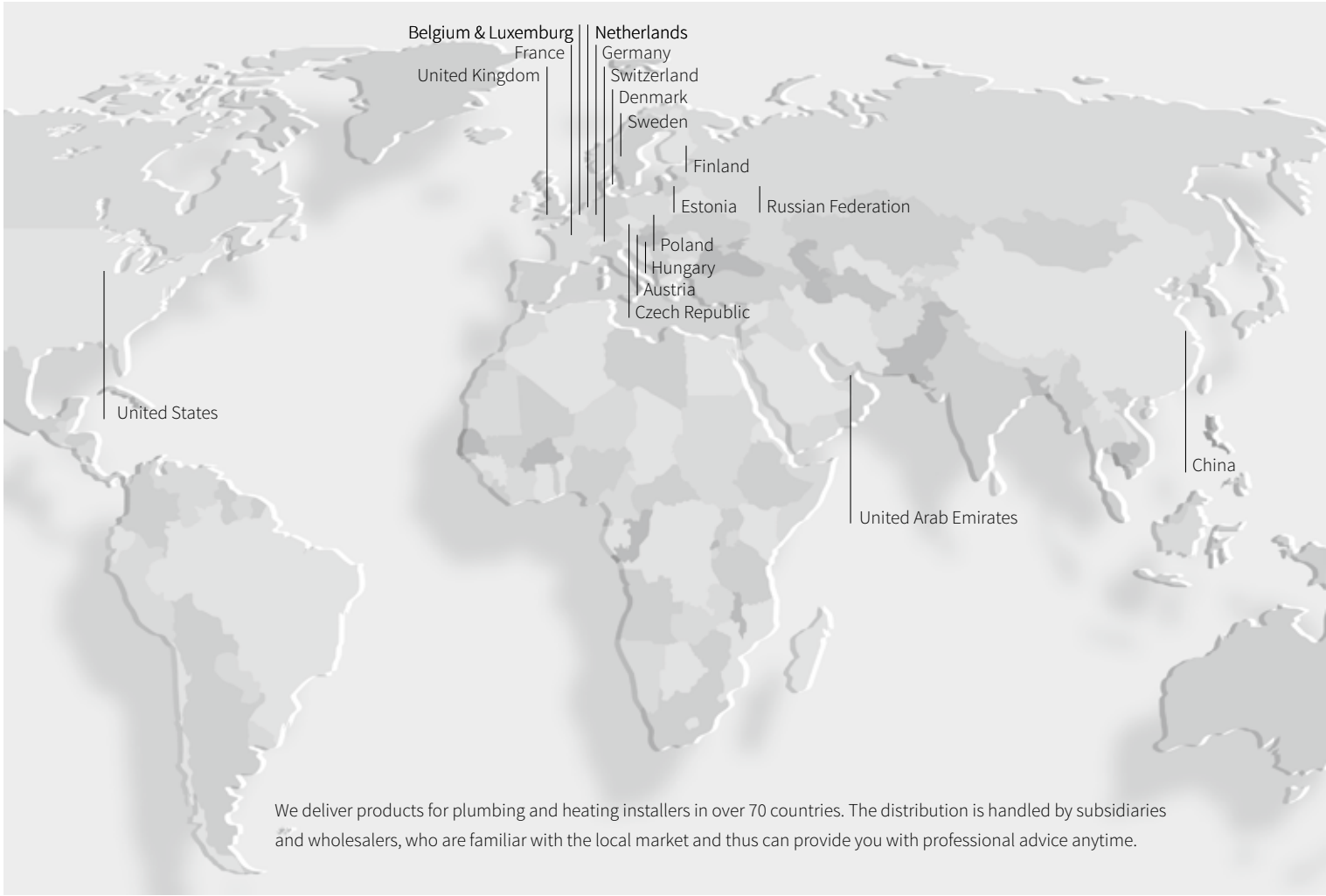
Notes

Notes

Flamco B.V.
www.flamcogroup.com

Meibes System-Technik GmbH
www.meibes.de

Simplex Armaturen & Systeme GmbH
www.simplex-armaturen.de



We deliver products for plumbing and heating installers in over 70 countries. The distribution is handled by subsidiaries and wholesalers, who are familiar with the local market and thus can provide you with professional advice anytime.

Flamco
meibes
simplex

Flow of Innovation

Flamco B.V.
Amersfoortseweg 9
3750 GM Bunschoten
The Netherlands
E info@flamcogroup.com
I www.flamcogroup.com

aalberts