

PRODUCT CATALOGUE

SPIROTOP®

SPIROVENT®

SPIROTRAP®

SPIROCOMBI®

SPIROCROSS®

SPIROEXPAND®

SPIROPURE®

SPIROPLUS®

SPIROCARE®

ACCESSORIES

EN

Introduction	4
Product group overview	18
Application	20
SpiroLife Exceptional guarantee	22
Navigation guide	23
SpiroTop Automatic air vents	33
SpiroVent Microbubble deaerators	37
SpiroTop Solar / SpiroVent Solar Automatic air vents and deaerators for solar installations	45
SpiroVent Superior Vacuum degassers	49
SpiroTrap Particle and dirt separators	55
SpiroCombi Deaerators and dirt separators	63
SpiroCross Hydraulic deaerators and dirt separators	71
SpiroExpand Pressurisation	77
SpiroPure Demineralization	93
SpiroPlus Flushing agents and additives	95
SpiroCare Analysis and advice	99
Others Accessories, useful information	101

Fluid conditioning – the pressure is rising for planners and plant manufacturers!

The development of technical solutions for heating and cooling systems is progressing faster and faster, thus mounting the pressure on planners and plant manufacturers.





The results of these developments are consistently positive for investors, operators and owners, and lead to heating and cooling systems and their components becoming more and more efficient, effective and powerful. This conserves valuable resources, increases efficiency, saves a lot of energy and ultimately reduces the operating and energy procurement costs. However, this also means that the tasks for you as a planner, plant manufacturer or engineer are becoming increasingly complex at the same time.


As with a racing car, all components have to be optimally selected so that the full potential of the entire system is realised, and you can reap the rewards of your investment.

It is therefore clear that detailed and systematic planning and consideration of all components – including the heating or cooling water – as well as all influencing factors, whether from a mechanical, physical or chemical point of view, are now more important than ever before.

Each system is only as good
as its weakest component

Heat boilers, heat pumps, cooling units, high efficiency pumps, hydraulic valves and heat exchangers are now highly optimised in terms of efficiency, and already seem to be at the pinnacle of their performance.





In the case of modern pumps, for example, this is achieved by means of smaller clearances, whereas, for a better hydraulic alignment, control valves are now used which only have minimal openings.

It is easy to imagine that the quality and composition of heating or cooling water as a medium of heat transfer can influence the efficient and, above all, trouble-free operation of heating and cooling systems in a way that is often underestimated.

Today, each and every component of the system has an important function, and the weakest link in the chain defines the overall quality. This is a valid reason for paying close attention to the often underestimated and unloved system fluid and its optimal conditioning. This is good news for operators, owners, controllers and service staff!

The system fluid – the lifeblood of every heating and cooling system

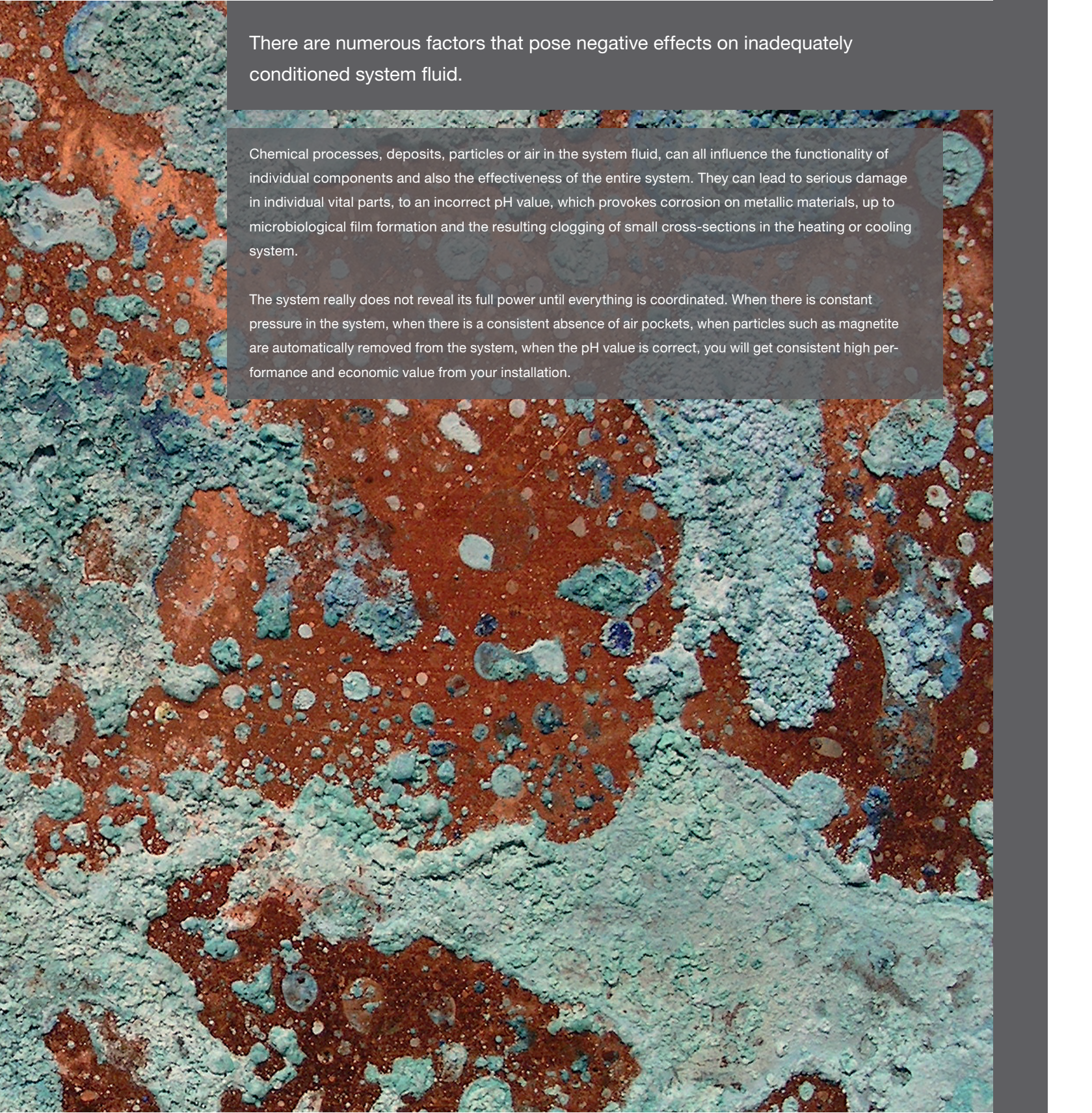


If we were to attempt to make an anatomical comparison, we could consider heating and cooling generators, the pumps and valves in heating and cooling systems, as the central and vital body organs, such as the heart and lungs, and the system fluid as the blood.

As the condition of blood in the human body is of key importance for all organs to work efficiently and to survive the elements of everyday life, so is the fluid in a HVAC system. When the blood is in good condition, the organs can work and the whole organism is capable of surviving. The same is true when it comes to HVAC systems. The moment the quality of the system water fails to meet the standards and guidelines, significant errors, serious damage and loss of efficiency may occur. This may lead to legal or regulatory implications and can have a negative effect on warranty, operational costs as well as repair and maintenance costs.

Corrosion is just one of many consequences of inadequate water conditioning





There are numerous factors that pose negative effects on inadequately conditioned system fluid.

Chemical processes, deposits, particles or air in the system fluid, can all influence the functionality of individual components and also the effectiveness of the entire system. They can lead to serious damage in individual vital parts, to an incorrect pH value, which provokes corrosion on metallic materials, up to microbiological film formation and the resulting clogging of small cross-sections in the heating or cooling system.

The system really does not reveal its full power until everything is coordinated. When there is constant pressure in the system, when there is a consistent absence of air pockets, when particles such as magnetite are automatically removed from the system, when the pH value is correct, you will get consistent high performance and economic value from your installation.

System breakdown due to a heating obstruction

Even with the best system water, unpleasant effects such as corrosion and the resulting corrosion particles in the system water of heating, cooling and processing systems cannot be completely prevented.



The risk of contamination of plant water is commonly underestimated or overseen completely by planners and operators because the corrosive particles such as magnetite and other dirt generated in the system are often so small that they cannot be seen with the naked eye. Initially, even systems designed without a dirt separator such as the SpiroTrap, work smoothly. However, in the medium to long term, the continuous deposition of particles and dirt on system-sensitive components such as heat exchangers, pumps, valves and throttle valves causes serious problems. In addition to significantly increased energy consumption, this leads to the impairment of important functions and to recurring faults, combined with the need for additional maintenance and economic consequences for the operator. In the end, it can even lead to a heating obstruction – that is, the failure of the entire system.

SPIROTECH SOLUTIONS FOR DIRT SEPARATION

Spirotech offers a comprehensive range of SpiroTrap dirt separators – from small brass models for all residential dwellings, to extremely robust and powerful steel models for large-scale industrial use. With the SpiroTrap MB3/MBL and SpiroTrap Magnet series, Spirotech also has extremely powerful dirt separators with unique magnetic technology. They guarantee fast and optimal magnetite and dirt separation.

Beside non-magnetic particles, even the smallest magnetite particles are removed, maximising system performance and protecting costly system components. Thanks to the smart design, collected dirt can be removed quickly and easily during operation. In addition, with the SpiroCombi, Spirotech offers a hybrid variant which simultaneously separates air and dirt.




SPIROTRAP® MB3



SPIROTRAP® MAGNET

From circulation problems to a blockage

There are many possibilities for air to enter the system water in heating, cooling and processing systems. In part, depending on the pressure and temperature in the system, air is already present in water.



Air in the system is frequently responsible for costly and high-maintenance failures. It causes loud noises in radiators, heat exchangers, pipes and pumps. It makes it extremely difficult to adjust systems, and promotes corrosion and thus the formation of dirt and magnetite. Air in the system leads to a significant reduction in heating and cooling performance, and premature wear and tear on major system components, or, much worse: a blockage. This, in turn, could lead to the complete failure of the system, with all the hassle that comes with it, such as dissatisfied tenants, operators or investors. It is therefore predictable what will happen in the medium to long term if a system is designed and operated without individual solutions for air removal, such as the SpiroTop automatic air vent, the SpiroVent microbubble deaerator and the SpiroVent Superior vacuum degasser.



SPIROTECH SOLUTIONS FOR AIR REMOVAL

Spirotech offers a comprehensive portfolio of consulting, solutions and services for three different types of air inclusion in heating, cooling and processing systems. The SpiroTop automatic air vent series is ideal for removing free air from the system. For separating and removing micro-bubbles from process fluid, Spirotech offers its customers the SpiroVent series. And for releasing, separating and removing free air, trapped air and even dissolved air, from the process fluid, there is the SpiroVent Superior vacuum degasser.



SPIROTOP®



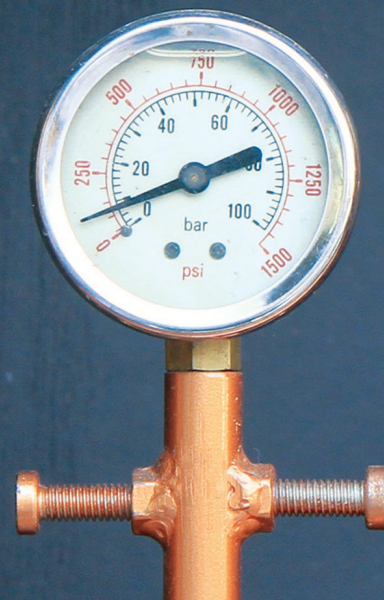
SPIROVENT®



SPIROVENT® SUPERIOR

Heating rhythm disturbances and pressure fluctuations

It is undisputed that many of the problems with heating and ventilation systems are caused by poor pressure retention. This can lead to a number of serious consequences.



Whether a heating, cooling or processing system is being built from scratch or it is being refurbished, the right design, installation and maintenance are decisive for an efficient and economical operation. Poorly designed or serviced pressure maintenance inevitably leads to higher operating costs: It must be constantly fed in, which leads to air problems and a higher rate of system wear (cavitation on pumps).

Maximum performance is achieved exclusively via tailor-made solutions that integrate both vacuum degassing and pressure maintenance, such as the SpiroExpand series. This is the only way to avoid heating rhythm disturbances and pressure fluctuations.

SPIROTECH SOLUTIONS, COMBINING PRESSURE MAINTENANCE AND VACUUM DEGASSING

The SpiroExpand series covers a full range of solutions, for the most basic setup to the most extended, complicated system. SpiroExpand is tailored to all requirements and dimensions from XS to XXL in different product lines. The additional water required in the system is degassed in the SpiroExpand series prior to system entry, offering the system substantial long-term protection – not only during adjustment but during the entire operating period of the system. SpiroExpand can dramatically increase system performance. The premature failure of important system components can thus be avoided. Extended with dirt separation and degassing, the system functions just as operators and users wish.



SPIROEXPAND®



**SPIROEXPAND®
MULTICONTROL**

Product group overview

Page 33

SPIROTOP®



BRASS



HIGH TEMPERATURE



HIGH PRESSURE



STAINLESS STEEL

Page 37

SPIROVENT®

(The hi-flow solutions are available both in a flange design and a weldable version.)



BRASS HORIZONTAL



BRASS HORIZONTAL

Page 63

SPIROCOMBI®

(The hi-flow solutions and demountable solutions are available both in a flange design and a weldable version.)



SPIROCOMBI
MB3



STEEL
FLANGE DESIGN



MAGNET
FLANGE DESIGN



DEMOUNTABLE
FLANGE DESIGN



HI-FLOW DEMOUNTABLE
FLANGE DESIGN



STEEL
WELD ENDS



MAGNET
WELD ENDS



DEMOUNTABLE
WELD ENDS

SPIROTRAP®

(The hi-flow solutions and demountable solutions are available both in a flange design and a weldable version.)



BRASS
HORIZONTAL



SPIROTRAP MB3



STEEL
FLANGE DESIGN



MAGNET
FLANGE DESIGN



SPIROTRAP MBL



STEEL
WELD ENDS



MAGNET
WELD ENDS

SPIROCROSS®



BRASS



MAGNET FLANGE
DESIGN



STEEL
WELD ENDS



SPIROCROSS R

Page 55

Page 71

REMARK

Unless indicated otherwise, SpiroTop, SpiroVent, SpiroTrap, SpiroCombi and SpiroCross products are suitable for water and water-glycol mixtures (max. 50 %).

ONLINE

TOTAL SOLUTION

Spirotech offers an extensive range of total solutions. For more information, please visit our website: www.spirotech.com

Page 45

SPIROTOP® SOLAR/SPIROVENT® SOLAR



SPIROVENT RV2



STEEL
FLANGE DESIGN



STEEL
WELD ENDS



SPIROTOP
SOLAR



SPIROVENT
SOLAR HORIZONTAL



SPIROVENT
SOLAR VERTICAL

Page 95

SPIROPLUS®



MILD CLEANER



PROTECTOR

Page 99

SPIROCARE®



PROLAB



SYSTEM ANALYSIS

Page 93

SPIROPURE®



HOMEFILL BASIC



PROFILL 23.0

SPIROVENT® SUPERIOR



SUPERIOR S250



SUPERIOR S400



SUPERIOR S600



SUPERIOR S10



SUPERIOR S16

Page 49

SPIROEXPAND®



EXPANSION SYSTEMS



EXPANSION VESSELS

OTHERS



FLUSH CONNECTOR



INSULATION SET
SPIROVENT / SPIROTRAP

Page 77

Page 101

GEOTHERMAL ENERGY

- Solar circuit
- Local and district heating system

BIOGAS SYSTEMS

- Local heating system
- Heating and cooling circuit

SOLAR POWER PLANT

- Cooling system
- Local and district heating system

The right solution for every application

Whether you are converting an existing system or planning to develop a new heating, cooling or processing system, Spirotech offers the right solution for every need. Almost all our products are scalable to your requirements.

POWER PLANT

- Cooling circuits
- Local and district heating system



DETACHED HOUSE

- Heating circuit
- Heat pump
- Solar system



APARTMENT BUILDING

- Heating circuit
- Heat pump
- Solar system



INDUSTRY

- Heating circuits
- Cooling and refrigeration circuits
- Process circuits
- Local heating system
- Tempering systems



OFFICE BUILDING/ UNIVERSITY/COLLEGE/ SCHOOL

- Heating circuit
- Cooling circuit
- Air conditioning



DATA CENTRE

- Cooling and refrigeration circuits
- Air conditioning



HEALTH CENTRE/ HOSPITAL

- Heating circuits
- Cooling and refrigeration circuits
- Air conditioning



SpiroLife – exceptional guarantee up to 20 years



SpiroLife offers exceptional guarantees for our air and dirt separation products. A 20-year guarantee, unique in the industry, is offered on all standard brass products*.



Our high-quality solutions for deaeration, dirt separation, pressurisation and system water analysis are based on smart concepts, which have proven themselves repeatedly over decades. Of course, such exceptional and reliable products come with exceptional guarantee terms. Our aim is to provide the best possible quality for our clients and end-users, which makes us confident we can safely offer extended warranties.

SPIROLIFE GUARANTEES

- **SPIROLIFE-GUARANTEE 20-YEAR GUARANTEE**

On standard Spirotech brass products with operational temperatures up to 110 °C (*except marked otherwise)

- **SPIROLIFE-GUARANTEE 5-YEAR GUARANTEE**

On steel products and on brass products with operational temperatures in excess of 110 °C.

- **SPIROLIFE-GUARANTEE 2-YEAR GUARANTEE**

On SpiroVent Superior vacuum degassers and on SpiroExpand.

Our robust products and services bring you energy savings, increased reliability and enhanced comfort. You can also be assured of maximum uptime, reduced maintenance costs and a longer service life for all your heating, cooling and process installations.



*Please note that guarantees are subject to correct selection, installation, maintenance and use of the products, in accordance with our regulations, data sheets and user manuals and do not cover normal wear and tear.

1 SPIROCOMBI®

Steel solution

SPIROCOMBI® - Steel solution without magnet - Hi-flow

Art.-No.	DN	OD	H	h1	h	D	L/LF	e1	ext.	e	int.	e2	ext.	x	y	Nom. flow rate	Nom. flow rate	Δp at nom. flow	Volume	Weight
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]							[mm]	[mm]	[m³/h]	[l/s]	[kPa]	[ltr]	[kg]
HC050L	50	60.3	910	505	405	159	260	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	25.00	6.94	11.7	10.0	18.0
HC050F	50	60.3	910	505	405	159	350	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	25.00	6.94	11.7	10.0	23.0
HC065L	65	76.1	910	505	405	159	260	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	40.00	11.11	11.9	10.0	18.0
HC065F	65	76.1	910	505	405	159	350	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	40.00	11.11	11.9	10.0	24.0
HC080L	80	88.9	1,145	620	525	219	370	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	54.00	15.00	12.4	37.0	36.0
HC080F	80	88.9	1,145	620	525	219	470	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	54.00	15.00	12.4	37.0	43.0
HC100L	100	114.3	1,145	620	525	219	370	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	94.00	26.11	14.7	37.0	36.0
HC100F	100	114.3	1,145	620	525	219	475	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	94.00	26.11	14.7	37.0	45.0
HC125L	125	139.7	1,570	825	745	324	525	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	144.00	40.00	16.9	115.0	90.0
HC125F	125	139.7	1,570	825	745	324	635	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	144.00	40.00	16.9	115.0	102.0
HC150L	150	168.3	1,570	825	745	324	525	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	215.00	59.72	19.2	115.0	90.0
HC150F	150	168.3	1,570	825	745	324	635	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	215.00	59.72	19.2	115.0	105.0
HC200F	200	219.1	1,985	1,040	955	406	775	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	360.00	100.00	23.4	230.0	195.0
HC250F	250	273.0	2,680	1,385	1,295	508	890	G¾	(M)	Rp2	(F)	R½	(M)	>200	>50	575.00	159.72	27.5	500.0	343.0
HC300F	300	323.9	3,190	1,640	1,550	610	1,005	G¾	(M)	Rp2	(F)	R½	(M)	>200	>50	810.00	225.00	31.2	830.0	484.0

Op. pressure
max. 10 bar

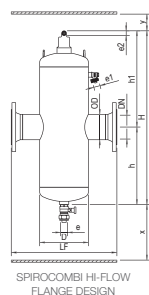
Temperature
max. 110 °C

Nom. flow velocity
3 m/s

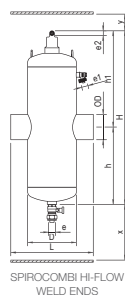
without magnet

Products in the range are available up to DN800 and are made to order. Weld ends **not available** in UK

L = Weld ends / F = Flange design (PN 16)



SPIROCOMBI HI-FLOW
FLANGE DESIGN



SPIROCOMBI HI-FLOW
WELD ENDS

CUSTOM Please visit page 30 for further information on our custom products.

1 Name of product group
Title (i.e. reference to brass or steel units)

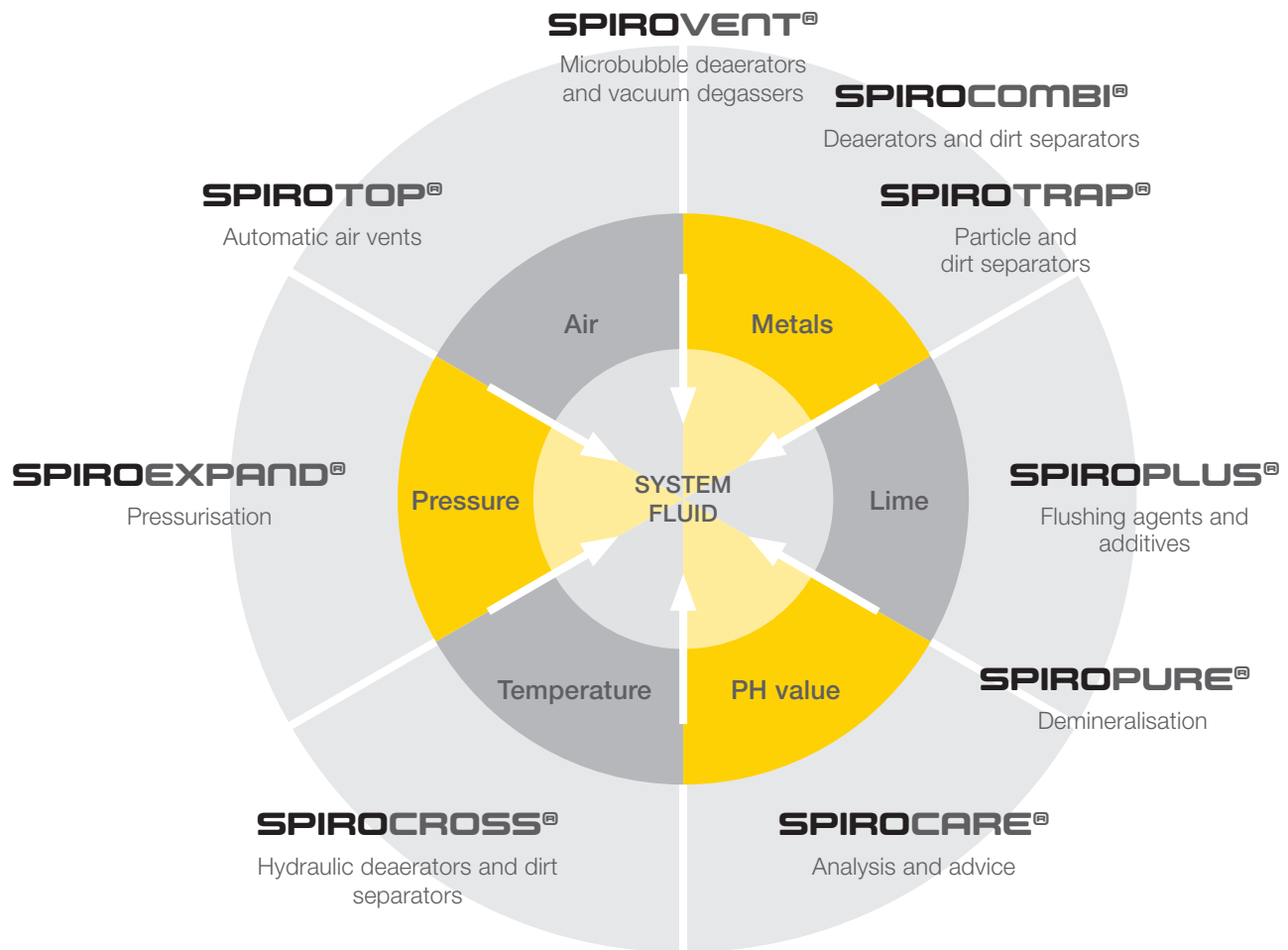
2 Header
measurements, article number, etc.

3 Category reference

4 Additional information
i.e. description of abbreviations

5 Highlighted features
i.e. deviation from cat. specs.

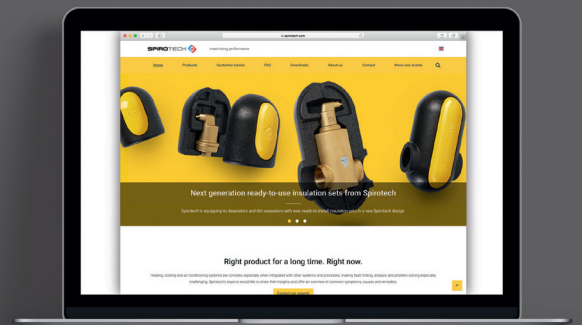
6 Technical drawing
illustrations



DO YOU WANT TO STAY UP TO DATE?

Visit our website at www.spirotech.com.

Here you will find all the up-to-date information, brochures, manuals and technical data sheets, as well as all customer stories and testimonials concerning fluid conditioning.



SPIROTECH ARTICLE NUMBER FOR AUTOMATIC AIR VENTS (EXAMPLE)

AB050/R002

A Housing type	B Type/design	050 Nominal diameter	R002 Special
Casting	Air vent	½" internal threads	R 002 FBA 004 007 008 Material AISI 316 180 °C AutoClose valve 25 bar, 200 °C 180 °C, Float AISI 316 10 bar, 180 °C

SPIROTECH ARTICLE NUMBER FOR STEEL DIRT SEPARATORS (EXAMPLE)

BE100FM

B Housing type	E Type/design	100 Nominal diameter	F Connections	R Option
B Steel Standard H Steel Hi-flow	E Dirt Separator F Demountable housing base	050 DN 50 065 DN 65 080 DN 80 100 DN 100 125 DN 125 150 DN 150 200 DN 200 250 DN 250 300 DN 300 350 DN 350 400 DN 400 450 DN 450 500 DN 500 600 DN 600	L Welding sockets F Flange	M Magnet R Material AISI 316

Following types are available from DN 50 on request:

	110 °C [max. Temp.]	180 °C [max. Temp.]	10 bar [Max. operating pressure]	16 bar [Max. operating pressure]	25 bar [Max. operating pressure]	Material S235	Material AISI 316
110 °C [max. Temp.]			S	O	O	S	O
180 °C [max. Temp.]			O	O	O	O	O
10 bar [Max. operating pressure]	S	O				S	O
16 bar [Max. operating pressure]	O	O				O	O
25 bar [Max. operating pressure]	O	O				O	O
Material S235	S	O	S	O	O		
Material AISI 316	O	O	O	O	O		

S Standard

O Option on request

Brass solution

Connection size		Brass solution	
[mm]	[int.]	[max. l/s]	[max. m³/h]
22	¾"	0,35	1.3
20	¾"	0,35	1.3
25	1"	0,55	2.0
32	1¼"	1,0	3.6
40	1¼"	1,4	5.0
50	2"	2,1	7.5


 Temperature
max. 110 °C

 Nom. flow velocity
1 m/s

Steel solution

Connection size		Steel solution		Δp at max. flow
[mm]	[int.]	[max. l/s]	[max. m³/h]	[kPa]
50	2"	3,5	12,5	3,5
65	2½"	5,5	20	2,7
80	3"	7,5	27	2,9
100	4"	13	47	3,7
125	5"	20	72	4,2
150	6"	30	108	4,9
200	8"	50	180	5,8
250	10"	80	288	6,9
300	12"	113	405	7,7


 Temperature
max. 110 °C

 Nom. flow velocity
1.5 m/s

Steel solution – Hi-flow (3 m/s)

50	2"	7	25	11,8
65	2½"	11	40	11,6
80	3"	15	54	12,4
100	4"	26	94	14,6
125	5"	40	144	16,8
150	6"	60	215	19,4
200	8"	100	360	23,1
250	10"	160	575	27,7
300	12"	225	810	31,0


 Temperature
max. 110 °C

 Nom. flow velocity
3 m/s

Steel solution – Standard flow (1,5 m/s)

350	14"	136	490	7,8
400	16"	178	640	8,4
450	18"	225	810	10
500	20"	276	995	11
600	24"	399	1.435	12


 Temperature
max. 110 °C

 Nom. flow velocity
1.5 m/s

Steel solution – Hi-flow (3 m/s)

350	14"	275	990	31
400	16"	358	1.290	34
450	18"	458	1.650	39
500	20"	575	2.070	43
600	24"	825	2.970	47


 Temperature
max. 110 °C

 Nom. flow velocity
3 m/s

SPIROTECH® – Selection charts based on boiler output

SELECTION CHART BASED ON BOILER OUTPUT

		10 KW	15 KW	20 KW	25 KW	30 KW	35 KW	40 KW	45 KW	50 KW	55 KW	60 KW	65 KW
20 K	SPIROTRAP MB	UE022WJ UE075WJ	UE022WJ UE075WJ	UE022WJ UE075WJ	UE022WJ UE075WJ	UE028WJ UE0100WJ	UE028WJ UE0100WJ	UE028WJ UE0100WJ	UE028WJ UE0100WJ	UE125WJ	UE125WJ	UE125WJ	UE150WJ
	SPIROTRAP	AE022 AE075	AE022 AE075	AE022 AE075	AE022 AE075	AE100	AE100	AE100	AE100	AE125	AE125	AE125	AE150
	SPIROVENT RV	UA022W	UA022W	UA022W	UA022W	UA028W	UA028W	UA028W	UA028W				
	SPIROVENT	AA022 AA075	AA022 AA075	AA022 AA075	AA022 AA075	AA100	AA100	AA100	AA100	AA125	AA125	AA125	AA150
15 K	SPIROTRAP MB	UE022WJ UE075WJ	UE022WJ UE075WJ	UE022WJ UE075WJ	UE028WJ UE0100WJ	UE028WJ UE0100WJ	UE125WJ	UE125WJ	UE125WJ	UE125WJ	UE150WJ	UE150WJ	UE150WJ
	SPIROTRAP	AE022 AE075	AE022 AE075	AE022 AE075	AE100	AE100	AE125	AE125	AE125	AE125	AE150	AE150	AE150
	SPIROVENT RV	UA022W	UA022W	UA022W	UA028W	UA028W							
	SPIROVENT	AA022 AA075	AA022 AA075	AA022 AA075	AA100	AA100	AA125	AA125	AA125	AA125	AA150	AA150	AA150
10 K	SPIROTRAP MB	UE022WJ UE075WJ	UE022WJ UE075WJ	UE028WJ UE100WJ	UE125WJ	UE125WJ	UE150WJ	UE150WJ	UE150WJ	UE150WJ	UE150WJ	UE200WJ	UE200WJ
	SPIROTRAP	AE022 AE075	AE022 AE075	AE100	AE125	AE125	AE150	AE150	AE150	AE150	AE150	AE200	AE200
	SPIROVENT RV	UA022W	UA022W	UA028W									
	SPIROVENT	AA022 AA075	AA022 AA075	AA100	AA125	AA125	AA150	AA150	AA150	AA150	AA150	AA200	AA200
7.5 K	SPIROTRAP MB	UE022WJ UE075WJ	UE028WJ UE0100WJ	UE125WJ	UE125WJ	UE125WJ	UE150WJ	UE150WJ	UE150WJ	UE200WJ	UE200WJ	UE200WJ	UE200WJ
	SPIROVENT RV	UA022W	UA028W										
	SPIROTRAP	AE022 AE075	AE100	AE125	AE125	AE125	AE150	AE150	AE150	AE200	AE200	AE200	AE200
	SPIROVENT	AA022 AA075	AA100	AA125	AA125	AA125	AA150	AA150	AA150	AA200	AA200	AA200	AA200

		70 KW	75 KW	80 KW	85 KW	90 KW	95 KW	100 KW	105 KW	110 KW	115 KW	120 KW	125 KW	130 KW	135 KW
20 K	SPIROTRAP MB	UE150WJ	UE150WJ	UE150WJ	UE150WJ	UE150WJ	UE150WJ	UE150WJ	UE150WJ	UE150WJ	UE150WJ	UE200WJ	UE200WJ	UE200WJ	UE200WJ
	SPIROTRAP	AE150	AE150	AE150	AE150	AE150	AE150	AE150	AE150	AE150	AE150	AE200	AE200	AE200	AE200
	SPIROVENT	AA150	AA150	AA150	AA150	AA150	AA150	AA150	AA150	AA150	AA150	AA200	AA200	AA200	AA200
15 K	SPIROTRAP MB	UE150WJ	UE150WJ	UE150WJ	UE150WJ	UE200WJ	UE200WJ	UE200WJ	UE200WJ	UE200WJ	UE200WJ	UE200WJ	UE200WJ	UE200WJ	
	SPIROTRAP	AE150	AE150	AE150	AE150	AE200	AE200	AE200	AE200	AE200	AE200	AE200	AE200	AE200	
	SPIROVENT	AA150	AA150	AA150	AA150	AA200	AA200	AA200	AA200	AA200	AA200	AA200	AA200	AA200	
10 K	SPIROTRAP MB	UE200WJ	UE200WJ	UE200WJ	UE200WJ										
	SPIROTRAP	AE200	AE200	AE200	AE200										
	SPIROVENT	AA200	AA200	AA200	AA200										
7.5 K	SPIROTRAP MB	UE200WJ	UE200WJ	UE200WJ	UE200WJ										
	SPIROTRAP	AE200	AE200	AE200	AE200										
	SPIROVENT	AA200	AA200	AA200	AA200										

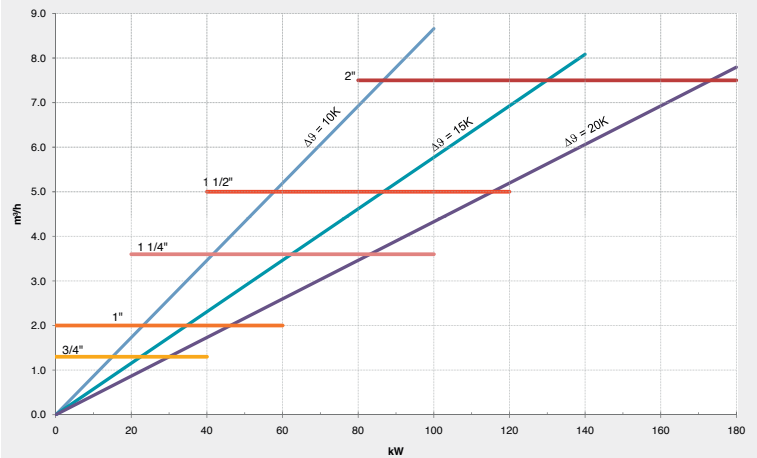
HEAT OUTPUT TABLE BASED ON FLOWS RATE

	Temperature spread			
	7.5 K	10 K	15 K	20 K
10 KW	1.146	860	573	430
15 KW	1.720	1.290	860	645
20 KW	2.293	1.720	1.146	860
25 KW	2.866	2.150	1.433	1.075
30 KW	3.439	2.580	1.720	1.290
35 KW	4.013	3.009	2.006	1.505
40 KW	4.586	3.439	2.293	1.720
45 KW	5.159	3.869	2.580	1.935
50 KW	5.732	4.299	2.866	2.150
55 KW	6.306	4.729	3.153	2.365
60 KW	6.879	5.159	3.439	2.580
65 KW	7.452	5.589	3.726	2.794
70 KW	8.025	6.019	4.013	3.009
75 KW	8.598	6.449	4.299	3.224
80 KW	9.172	6.879	4.586	3.439
85 KW	9.745	7.309	4.872	3.654
90 KW	10.318	7.739	5.159	3.869
95 KW	10.891	8.169	5.446	4.084
100 KW	11.465	8.598	5.732	4.299
105 KW	12.038	9.028	6.019	4.514
110 KW	12.611	9.458	6.306	4.729
115 KW	13.184	9.888	6.592	4.944
120 KW	13.758	10.318	6.879	5.159
125 KW	14.331	10.748	7.165	5.374
130 KW	14.904	11.178	7.452	5.589
135 KW	15.477	11.608	7.739	5.804
140 KW	16.050	12.038	8.025	6.019
145 KW	16.624	12.468	8.312	6.234
150 KW	17.197	12.898	8.598	6.449
155 KW	17.770	13.328	8.885	6.664
160 KW	18.343	13.758	9.172	6.879
165 KW	18.917	14.187	9.458	7.094
170 KW	19.490	14.617	9.745	7.309

Results in liters/h, heat requirement in kW

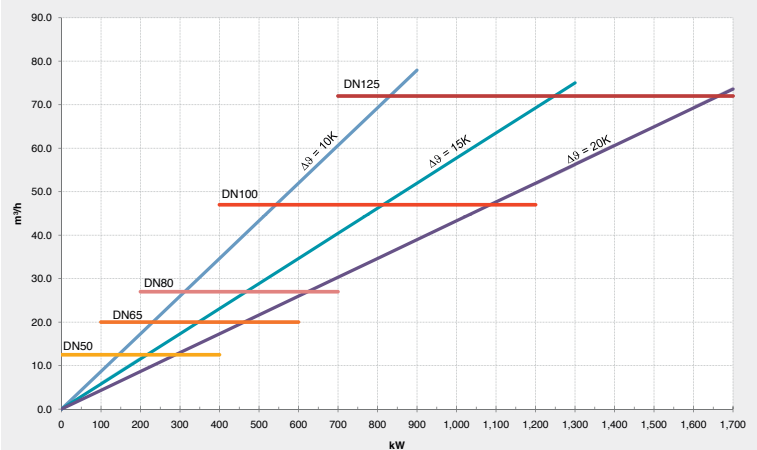
2" BRASS UNITS

Selection table SpiroVent/SpiroTrap up to 2" brass units



DN 125 STEEL UNITS

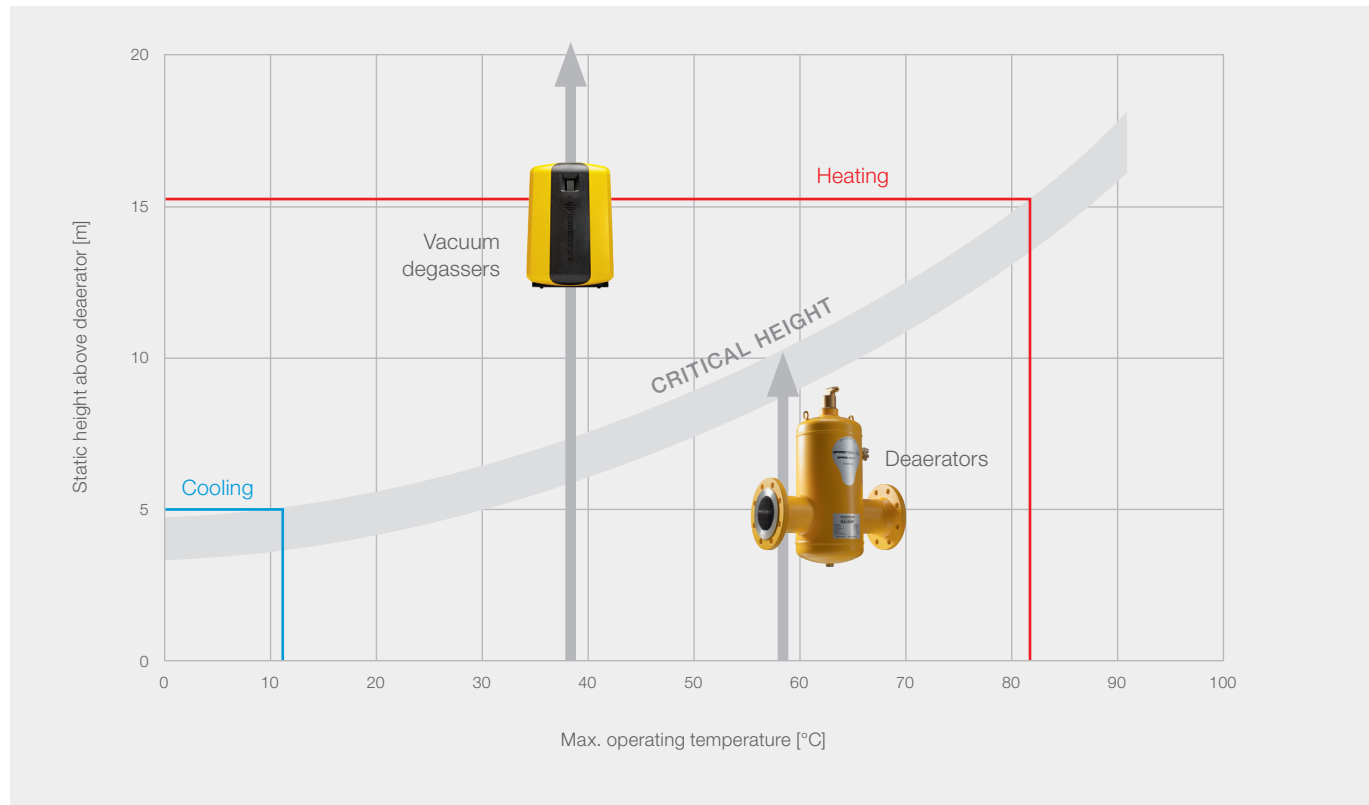
Selection table SpiroVent/SpiroTrap up to DN 125 steel units



STATIC HEIGHT DESIGN CRITERIA FOR SPIROTECH INLINE UNITS

In case of an excessive static head (pressure) above a deaerator, dissolved air cannot be released from the fluid. Under these circumstances it is very hard to predict where in the system air bubbles will emerge from the fluid. Apart from that, the point where microbubbles emerge can change depending on fluid temperature and hydrostatic

pressure (Henry's Law). Rule of thumb for maximal static height: heating ≤ 15 m, cooling ≤ 5 m. Above the critical height, a vacuum degasser is generally a more effective solution. For custom made advice, please contact us.



HENRY'S LAW APPLIES TO EVERY SYSTEM AND STATES THE FOLLOWING:

Gas will dissolve in a fluid until there is a balance between the partial pressure of the gas in the fluid and the partial pressure of the same gas outside the fluid. It also applies that in a fluid under the influence of pressure and temperature, a certain maximum amount of gas can be dissolved. This also means that as the temperature or pressure changes, gases can be emitted.

Therefore, temperature and pressure influence the property which allows water to absorb or emit air. A heating or cooling system is a constant string of pressure and temperature variations.

STANDARD SOLUTIONS

- Max. operating pressure up to 10 bar
- Fluid temperature up to 110 °C
- Nominal flow velocity up to 1.5 m/s.

Products which meet the specifications noted above are considered standard solutions.

SPECIAL SOLUTIONS

Products, which divert from the standard parameters. For example our Hi-flow product range, which is designed for a nominal flow velocity of 3 m/s.

CUSTOM SOLUTIONS

In addition to the models listed in the product catalogue, Spirotech offers customisation options (see table below). In case you experience any difficulties selecting from our options, or would like to discuss a more complex situation, please contact your local Spirotech office.

Product family	Material	Stainless steel		60 Hz	Insulation for cooling solutions	Closed cover	Demountable***		Leg support**	Housing		High pressure		High temperatures		Hi-flow	Magnet*	ANSI flange	Victaulic connection	Certificate for tracability	
		Spirotube (Spiroroll)	Piping / Vessel etc.				Bottom	Top		Stainless steel	Powder coating	16 bar	25 bar	180 °C	180–200 °C					With stamping	Without stamping
SPIROVENT®	Brass	x								x	x	x	x	x	x			x	x	x	x
	Steel	x						x	x	x	x	x	x	x	x			x	x	x	x
SPIROVENT® SUPERIOR	–		x	x	x	x															
SPIROTRAP®	Brass	x																			
	Steel	x					x		x	x	x	x	x	x	x	x	x	x	x	x	x
SPIROCOMBI®	Brass	x																			
	Steel	x					x		x	x	x	x	x	x	x	x	x	x	x	x	x
SPIROCROSS®	Brass	x																			
	Steel	x							x	x	x	x	x	x	x			x	x	x	x

REMARKS:

Please note, that not all options are available in any combination.

For ordering a custom product, please contact Spirotech.

* Up to DN 300 and up to 10 bar for SpiroTrap and SpiroCombi, no Hi-flow, up to 110 °C, if it is in combination with Stainless steel (SS) then only up to DN 200

** From DN 200 and bigger

*** SpiroVent and SpiroTrap up to DN 600, SpiroCombi up to DN 400 and SpiroCombi Hi-flow up to DN 300



Demountable

Hi-flow

SPIROTOP®

AUTOMATIC AIR VENTS

SPIROVENT®

MICROBUBBLE DEAERATORS

**SPIROTOP® SOLAR
SPIROVENT® SOLAR**

AUTOMATIC AIR VENTS AND DEAERATORS
FOR SOLAR INSTALLATIONS

SPIROVENT® SUPERIOR

VACUUM DEGASSERS

SPIROTRAP®

PARTICLE AND DIRT SEPARATORS

SPIROCOMBI®

DEAERATORS AND DIRT SEPARATORS

SPIROCROSS®

HYDRAULIC DEAERATORS AND DIRT SEPARATORS

SPIROEXPAND®

PRESSURISATION

SPIROPURE®

DEMINERALIZATION

SPIROPLUS®

FLUSHING AGENTS AND ADDITIVES

OTHERS

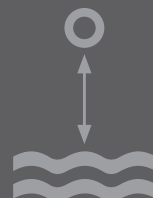
ACCESSORIES, SPARE PARTS, USEFUL INFORMATION

AUTOMATIC AIR VENTS

SPIROTOP®



Industry-leading
20-year guarantee



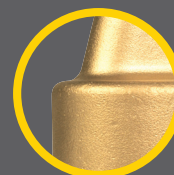
No valve contamination
due to distance from water



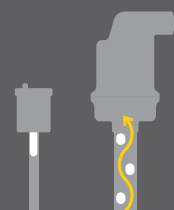
Special leak-free
valve construction



Extensive range of models



Sturdy brass and
stainless steel units



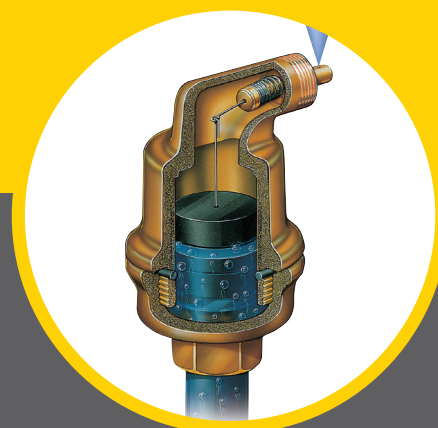
1/2" connection
prevents bubble blockage

All images used are for illustrative purposes only. Individual features like material used (i.e. brass or steel) may vary, as may guarantee.

BENEFITS OF SPIROTOP

The combination of the characteristics listed below ensures that the automatic SpiroTop will not leak:

- The special valve construction makes sure that the valve is closed completely
- The special valve seat has a very long life expectancy
- The robust floats are made of solid plastic so they cannot rupture
- The large air gap between the valve and the water (at least 40 mm) prevents valve contamination which is one of the main causes of leaks
- The ½" connection prevents the pipette effect



SPIROTOP AUTOMATIC AIR VENTS

SpiroTop automatic air vents quickly and effectively remove free air and allow for fast, reliable aeration when a system is drained. This prevents component damage and system failure. Available for pressures up to 25 bar and temperatures up to 200 °C.

PREVENT FUTURE COSTS

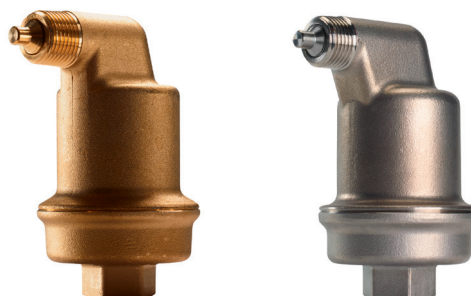
Air and other gases trapped at one or more high points in a system can obstruct the flow at these spots or even stop it altogether. If gases are not sufficiently removed, commissioning problems may occur, frequent manual venting will be required and pumps will need to run at a higher rate, using more energy due to a bigger pressure drop. Bubbles travel and by doing so they may interfere with the control valves authority. Eventually, expensive system components will be damaged, leading to system and process malfunctions or even total failure.

PREVENTING CONTAMINATION AND LEAKAGE

SpiroTop provides a solution for filling and venting systems, making and keeping the high points in pipe systems air-free and preventing air pockets from forming. The significant gap between the valve and the water (at least 40 mm) prevents valve contamination, one of the main causes of leaks. Thanks to a reliable venting mechanism and special construction, the valve closes completely and is protected against

leaking. The special valve seat has a very long life. A SpiroTop is connected to the system by a female ½" connection. With smaller connections, bubble blockage may occur and the device stops working adequately.

The most commonly used SpiroTop (AB050) comes with an industry-leading 20-year guarantee. All other models have a 5 year guarantee period.



SpiroTop is the reliable and worry-free solution ideal for:

- filling and draining systems
- making and keeping the highest points in systems air-free

SPIROTOP®

Brass solution

STANDARD**SPIROTOP®** – Brass solution for standard temperature and pressure

Art.-No.	Connection d	int.	H [mm]	b [mm]	B [mm]	D [mm]	y [mm]	e2 [mm]	ext.	Material: housing	Material: float	Weight [kg]
AB050	G½	(F)	112	52	86	65	>50	R½	(M)	Brass	PP	0,7

Op. pressure
max. 10 barTemperature
max. 110 °C

Suitable for cooling systems

SPECIAL**SPIROTOP®** – Brass solution for high pressure

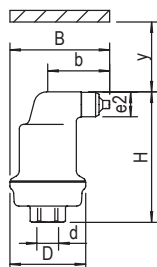
Art.-No.	Connection d	int.	H [mm]	b [mm]	B [mm]	D [mm]	y [mm]	e2 [mm]	ext.	Material: housing	Material: float	Weight [kg]
AB050/030	G½	(F)	112	52	86	65	>50	R½	(M)	Brass	PP	0,7

Op. pressure
max. 16 barTemperature
max. 110 °C**SPIROTOP®** – Brass solution for high temperature and high pressure

AB050/025	G½	(F)	134	52	86	65	>50	R½	(M)	Brass	TPX	1,0
-----------	----	-----	-----	----	----	----	-----	----	-----	-------	-----	-----

Op. pressure
max. 25 barTemperature
max. 150 °C**SPIROTOP®** – Brass solution for high temperature

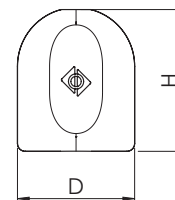
AB050/002	G½	(F)	112	52	86	65	>50	R½	(M)	Brass	TPX	0,7
AB050/007	G½	(F)	112	52	86	65	>50	R½	(M)	Brass	AISI 316	0,6

Op. pressure
max. 10 barTemperature
max. 180 °C

SPIROTOP

ACCESSORIES**SPIROTOP®** – Accessories for brass solution

Art.-No.	Description	Suitable for
TAB050	Insulation Set	AB050, AB050/030



TAB050

Have you thought of a dirt separator?
Learn more on page 13.

SPIROTOP®

Stainless Steel solution

SPIROTOP® – Stainless Steel solution for high temperature

Art.-No.	Connection d	int.	H [mm]	b [mm]	B [mm]	D [mm]	y [mm]	e2 [mm]	ext.	Material: housing	Material: float	Weight [kg]
AB050/R002	G½	(F)	112	52	86	65	>50	R½	(M)	AISI 316	TPX	0,7
AB050/R007	G½	(F)	112	52	86	65	>50	R½	(M)	AISI 316	AISI 316	0,6



Op. pressure
max. 10 bar



Temperature
max. 180 °C

SPIROTOP® – Stainless Steel solution for high temperature and high pressure

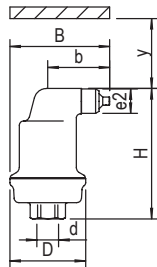
AB050/R004	G½	(F)	134	52	86	65	>50	R½	(M)	AISI 316	TPX	1,0
------------	----	-----	-----	----	----	----	-----	----	-----	----------	-----	-----



Op. pressure
max. 25 bar



Temperature
max. 200 °C



SPIROTOP



Have you thought of a dirt separator?
Learn more on page 13.

MICROBUBBLE DEAERATORS

SPIROVENT®



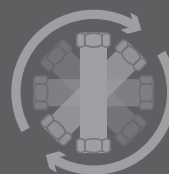
Industry-leading
20-year guarantee



Reduction of
maintenance and malfunction



Energy saving



Quick and easy, universal
installation (360°)



Sturdy brass
housing



Reliable, leak-free
venting system

All images used are for illustrative purposes only. Individual features like material used (i.e. brass or steel) may vary, as may guarantee.

BENEFITS OF SPIROVENT

- Removes all circulating air and microbubbles effectively
- Removes trapped air when installed at the correct location
- Greatly reduces the need for manual venting
- Constant low pressure drop
- No unnecessary shutdown
- Connection diameters from ¾" to DN 800 (see page 30 for additional options)
- A complete range, suitable for various pressures and temperatures
- Exceptional guarantee



Shortly after the first decade of Spirotech's existence a game-changing product family was announced. By introducing the SpiroVent in 1968, Spirotech laid the foundation of understanding microbubble deaeration and optimising performance of HVAC systems. 50 years later, the SpiroVent microbubble deaerator range stands stronger than ever. The once narrow product range, now offers a broad and well customizable portfolio. From ¾" up to DN 800, from brass to steel, from normal- to high-flow, a wide variety of microbubble deaerators are being manufactured in the Netherlands to satisfy customer needs.

Check the Spirotech website for more on the 50th anniversary of our beloved SpiroVent.

SPIROVENT MICROBUBBLE DEAERATORS

SpiroVent microbubble deaerators are installed inline and continuously remove free air and microbubbles from the system fluid.

A SpiroVent deaerator should always be installed at the hottest point within a system. In the case of a heating system, for example, this is the point where the water exits the boiler. In the case of a cooling system, it is in the return before the chiller unit. When installed in the correct location a SpiroVent has the capability to deaerate the entire system as it can make the water absorptive to remaining air in the system.

WHY USE SPIROVENT PRODUCTS?

Today's highly energy-efficient heating and cooling systems offer optimal performance with air-free system water. Automatic air vents and bleeding valves cannot remove microbubbles or circulating air. Venting devices on boilers and other devices will not remove air that is present elsewhere in the system. Furthermore, presence of air is the major cause of dirt formation corrosion and related negative effects on efficiency, failure sensitivity and wear and tear.

HOW DOES IT WORK?

The SpiroVent is a fully universal deaerator that works non-stop to effectively remove circulating air and microbubbles from system water. At the heart of the SpiroVent is the Spirotube separation element, which ensures that microbubbles are separated from the water flow, allowing them to rise up to the air chamber. The specially constructed air chamber provides sufficient volume to absorb pressure fluctuations and prevents valve contamination. This is one of the main causes of leaks. Thanks to the special construction and the solid valve seat, the leak-proof air release valve opens, releases the air and always closes perfectly. This avoids unwanted entry of air from outside the system.

UNIQUE FOR SPIROVENT RV2

The sturdy brass SpiroVent RV2 is equipped with a swivel connection making it very easy to install, also ideal for existing pipework because of the slide-over compression coupling. Thanks to the swivel connection, the SpiroVent RV2 is suitable for horizontal, vertical, and diagonal pipes.



Studies from Kiwa GASTEC, BSRIA, TNO and others show SpiroVent deaerators can save up to 6% on energy consumption.



SPIROVENT® RV2 – Brass solution with universal connection

Art.-No.	Conne- tion d	int.	Hv	Hh	b	L	D	h	h1	B	x	y	e2	ext.	Nom. flow rate [m³/h]	Nom. flow rate [l/s]	Δp at nom. flow [kPa]	Volume [litr]	Weight [kg]
UA022W	22 mm	(M)	205	177	125	120	62	32	145	143	>50	>50	M4	(F)	1,30	0,36	2,1	0,18	1,8
UA028W	28 mm	(M)	205	177	128	120	62	32	145	151	>50	>50	M4	(F)	2,00	0,56	3,8	0,18	1,8
UA075W	Rp¾	(F)	195	177	127	100	62	32	145	144	>50	>50	M4	(F)	1,30	0,36	2,1	0,38	1,6
UA100W	Rp1	(F)	195	177	131	100	62	32	145	154	>50	>50	M4	(F)	2,00	0,56	3,8	0,41	1,8
UA125W	Rp1¼	(F)	290	276	149	128	80	50	226	174	>50	>50	R½	(M)	3,60	1,00	2,5	1,12	4,0
UA150W	Rp1½	(F)	290	276	152	128	80	50	226	179	>50	>50	R½	(M)	5,00	1,40	4,0	1,16	4,0
UA200W	Rp2	(F)	310	296	159	128	80	50	246	194	>50	>50	R½	(M)	7,50	2,10	8,3	1,38	5,0


 Op. pressure
max. 10 bar

 Temperature
max. 110 °C

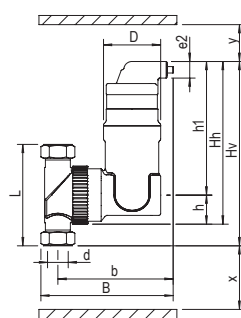
 Nom. flow velocity
1 m/s

SPIROVENT® – Brass solution with horizontal connection

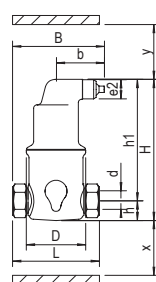
Art.-No.	Conne- tion d	int.	H	Hh	b	L	D	h	h1	B	x	y	e2	ext.	Nom. flow rate [m³/h]	Nom. flow rate [l/s]	Δp at nom. flow [kPa]	Volume [litr]	Weight [kg]
AA022	22 mm	-	154	-	52	105	65	21	133	106	>50	>50	R½	(M)	1,30	0,36	1,3	0,2	1,2
AA075	G¾	(F)	154	-	52	85	65	21	133	96	>50	>50	R½	(M)	1,30	0,36	1,3	0,2	1,0
AA100	G1	(F)	180	-	52	88	65	35	145	97	>50	>50	R½	(M)	2,00	0,56	1,3	0,2	1,3
AA125	G1¼	(F)	198	-	52	88	65	39	159	97	>50	>50	R½	(M)	3,60	1,00	1,3	0,3	1,4
AA150	G1½	(F)	234	-	52	88	65	42	192	97	>50	>50	R½	(M)	5,00	1,39	1,3	0,3	1,6
AA200	G2	(F)	276	-	52	132	100	59	217	119	>50	>50	R½	(M)	7,50	2,08	1,4	1,1	3,9


 Op. pressure
max. 10 bar

 Temperature
max. 110 °C

 Nom. flow velocity
1 m/s


SPIROVENT RV2


 SPIROVENT
HORIZONTAL

SPIROVENT® – Brass solution for high temperature

Art.-No.	Connec- tion d	int.	H	Hh	b	L	D	h	h1	B	x	y	e2	ext.	Nom. flow rate [m³/h]	Nom. flow rate [l/s]	Δp at nom. flow [kPa]	Volume [ltr]	Weight [kg]
AA022/002	22 mm	-	154	-	52	105	65	21	133	106	>50	>50	R½	(M)	1,30	0,36	n/a	0,2	1,2
AA075/002	G¾	(F)	154	-	52	85	65	21	133	96	>50	>50	R½	(M)	1,30	0,36	n/a	0,2	1,0
AA100/002	G1	(F)	180	-	52	88	65	35	145	97	>50	>50	R½	(M)	2,00	0,56	n/a	0,2	1,3
AA125/002	1¼	(F)	198	-	52	88	65	39	159	97	>50	>50	R½	(M)	3,60	1,00	n/a	0,3	1,4
AA150/002	G1½	(F)	234	-	52	88	65	42	192	97	>50	>50	R½	(M)	5,00	1,39	n/a	0,3	1,6

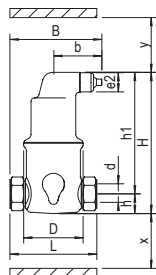

 Op. pressure
max. 10 bar

 Temperature
max. 180 °C

SPIROVENT® – Brass solution for high temperature and high pressure

Art.-No.	Connec- tion d	int.	H	Hh	b	L	D	h	h1	B	x	y	e2	ext.	Nom. flow rate [m³/h]	Nom. flow rate [l/s]	Δp at nom. flow [kPa]	Volume [ltr]	Weight [kg]
AA075/025	G¾	(F)	176	-	52	85	65	21	155	96	>50	>50	R½	(M)	1,30	0,36	n/a	0,2	1,4
AA100/025	G1	(F)	202	-	52	88	65	35	167	97	>50	>50	R½	(M)	2,00	0,56	n/a	0,2	1,6
AA125/025	G1¼	(F)	220	-	52	88	65	39	181	97	>50	>50	R½	(M)	3,60	1,00	n/a	0,3	1,8
AA150/025	G1½	(F)	256	-	52	88	65	42	214	97	>50	>50	R½	(M)	5,00	1,39	n/a	0,3	1,9


 Op. pressure
max. 25 bar

 Temperature
max. 150 °C

 SPIROVENT
HORIZONTAL

CUSTOM

Please visit page 30 for further information on our custom products.

SPIROVENT®

Stainless steel solution

SPIROVENT® – Stainless steel solution for high temperature

Art.-No.	Connection d	int.	H [mm]	b [mm]	L [mm]	D [mm]	h [mm]	h1 [mm]	B [mm]	x [mm]	y [mm]	e2	ext.	Material: housing	Material: float
AA125/R002	G1¼	(F)	198	52	88	65	39	159	97	>50	>50	R½	(M)	AISI 316	TPX
AA125/R007	G1¼	(F)	198	52	88	65	39	159	97	>50	>50	R½	(M)	AISI 316	AISI 316



Op. pressure
max. 10 bar



Temperature
max. 180 °C

SPIROVENT® – Stainless steel solution for high temperature and high pressure

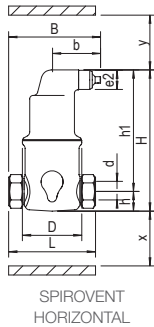
Art.-No.	Connection d	int.	H [mm]	b [mm]	L [mm]	D [mm]	h [mm]	h1 [mm]	B [mm]	x [mm]	y [mm]	e2	ext.	Material: housing	Material: float
AA125/R004	G1¼	(F)	220	52	88	65	39	181	97	>50	>50	R½	(M)	AISI 316	TPX



Op. pressure
max. 25 bar



Temperature
max. 200 °C

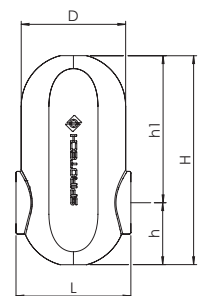


CUSTOM

Please visit page 30 for further information on our custom products.

SPIROVENT® – Accessories for brass solution

Art.-No.	Description	Suitable for
TAA150	Insulation set	AA022, AA075, AA100, AA125, AA150
TAR200	Insulation set G2/2" horizontal connection	AA200
TUR100	Insulation set universal connection 22/28 mm	UA022W, UA028W
TUR125	Insulation set Rp1¼	UA125W
TUR150	Insulation set Rp1½	UA150W
TUR200	Insulation set Rp2	UA200W



TAR200



Have you thought of a dirt separator?
Learn more on page 13.

SPIROVENT® – Steel solution – standard flow

Art.-No.	DN	OD	H	L/LF	D	h	h1	e1	ext.	x	y	e2	ext.	Nom. flow rate [m³/h]	Nom. flow rate [l/s]	Δp at nom. flow [kPa]	Volume [litr]	Weight [kg]
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]			[mm]	[mm]							
BA050L	50	60,3	470	260	159	120	350	G¾	(M)	>50	>50	R½	(M)	12,50	3,47	3,0	5,0	9,0
BA050F	50	60,3	470	350	159	120	350	G¾	(M)	>50	>50	R½	(M)	12,50	3,47	3,0	5,0	14,0
BA065L	65	76,1	470	260	159	130	340	G¾	(M)	>50	>50	R½	(M)	20,00	5,56	2,7	5,0	9,0
BA065F	65	76,1	470	350	159	130	340	G¾	(M)	>50	>50	R½	(M)	20,00	5,56	2,7	5,0	15,0
BA080L	80	88,9	580	370	219	150	430	G¾	(M)	>50	>50	R½	(M)	27,00	7,50	2,9	17,0	18,0
BA080F	80	88,9	580	470	219	150	430	G¾	(M)	>50	>50	R½	(M)	27,00	7,50	2,9	17,0	25,0
BA100L	100	114,3	580	370	219	160	420	G¾	(M)	>50	>50	R½	(M)	47,00	13,06	3,7	17,0	18,0
BA100F	100	114,3	580	475	219	160	420	G¾	(M)	>50	>50	R½	(M)	47,00	13,06	3,7	17,0	27,0
BA125L	125	139,7	750	525	324	195	555	G¾	(M)	>50	>50	R½	(M)	72,00	20,00	4,2	50,0	42,0
BA125F	125	139,7	750	635	324	195	555	G¾	(M)	>50	>50	R½	(M)	72,00	20,00	4,2	50,0	54,0
BA150L	150	168,3	750	525	324	210	540	G¾	(M)	>50	>50	R½	(M)	108,00	30,00	4,9	50,0	42,0
BA150F	150	168,3	750	635	324	210	540	G¾	(M)	>50	>50	R½	(M)	108,00	30,00	4,9	50,0	57,0
BA200F	200	219,1	1.000	775	406	290	710	G¾	(M)	>50	>50	R½	(M)	180,00	50,00	5,8	105,0	106,0
BA250F	250	273,0	1.250	890	508	385	865	G¾	(M)	>50	>50	R½	(M)	288,00	80,00	6,9	210,0	171,0
BA300F	300	323,9	1.465	1.005	610	450	1.015	G¾	(M)	>50	>50	R½	(M)	405,00	112,50	7,7	350,0	251,0

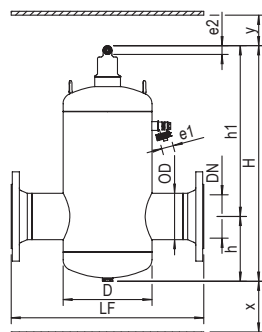
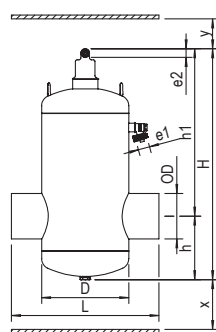

 Op. pressure
max. 10 bar

 Temperature
max. 110 °C

 Nom. flow velocity
1.5 m/s

 Products in the range are
available up to DN800
and are made to order –
prices on application.

L= Weld ends / F= Flange design (PN 16)


 SPIROVENT
FLANGE DESIGN

 SPIROVENT
WELD ENDS

SPIROVENT® – Steel solution – Hi-flow

Art.-No.	DN	OD	H	L/LF	D	h	h1	e1	ext.	x	y	e2	ext.	Nom. flow rate [m³/h]	Nom. flow rate [l/s]	Δp at nom. flow [kPa]	Volume [litr]	Weight [kg]
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]			[mm]	[mm]							
HA050L	50	60,3	630	260	159	120	510	G¾	(M)	>50	>50	R½	(M)	25,00	6,94	11,7	7,0	12,0
HA050F	50	60,3	630	350	159	120	510	G¾	(M)	>50	>50	R½	(M)	25,00	6,94	11,7	7,0	17,0
HA065L	65	76,1	630	260	159	130	500	G¾	(M)	>50	>50	R½	(M)	40,00	11,11	11,9	7,0	12,0
HA065F	65	76,1	630	350	159	130	500	G¾	(M)	>50	>50	R½	(M)	40,00	11,11	11,9	7,0	19,0
HA080L	80	88,9	780	370	219	150	630	G¾	(M)	>50	>50	R½	(M)	54,00	15,00	12,4	25,0	24,0
HA080F	80	88,9	780	470	219	150	630	G¾	(M)	>50	>50	R½	(M)	54,00	15,00	12,4	25,0	32,0
HA100L	100	114,3	780	370	219	160	620	G¾	(M)	>50	>50	R½	(M)	94,00	26,11	14,7	25,0	24,0
HA100F	100	114,3	780	475	219	160	620	G¾	(M)	>50	>50	R½	(M)	94,00	26,11	14,7	25,0	33,0
HA125L	125	139,7	1.030	525	324	195	835	G¾	(M)	>50	>50	R½	(M)	144,00	40,00	16,9	75,0	59,0
HA125F	125	139,7	1.030	635	324	195	835	G¾	(M)	>50	>50	R½	(M)	144,00	40,00	16,9	75,0	71,0
HA150L	150	168,3	1.030	525	324	210	820	G¾	(M)	>50	>50	R½	(M)	215,00	59,72	19,2	75,0	59,0
HA150F	150	168,3	1.030	635	324	210	820	G¾	(M)	>50	>50	R½	(M)	215,00	59,72	19,2	75,0	74,0
HA200F	200	219,1	1.340	775	406	290	1.050	G¾	(M)	>50	>50	R½	(M)	360,00	100,00	23,4	150,0	137,0
HA250F	250	273,0	1.750	890	508	385	1.365	G¾	(M)	>50	>50	R½	(M)	575,00	159,72	27,5	300,0	212,0
HA300F	300	323,9	2.060	1.005	610	450	1.610	G¾	(M)	>50	>50	R½	(M)	810,00	225,00	31,2	500,0	392,0

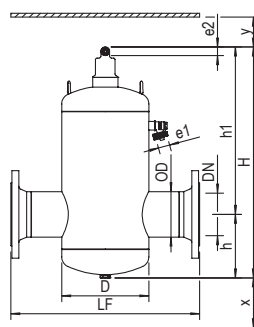
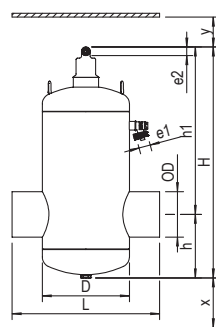

 Op. pressure
max. 10 bar

 Temperature
max. 110 °C

 Nom. flow velocity
3 m/s

Products in the range are available up to DN800 and are made to order – prices on application.

L = Weld ends / F = Flange design (PN 16)

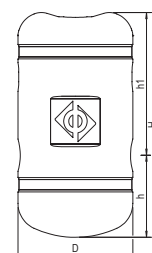

 SPIROVENT
FLANGE DESIGN

 SPIROVENT
WELD ENDS

CUSTOM

Please visit page 30 for further information on our custom products.

ACCESSORIES
SPIROVENT® – Accessories for steel solution

Art.-No.	Description	Suitable for
TB050	Insulation Set for SpiroVent DN 50 + 65	BA050F/L, BA065F/L
TB080	Insulation Set for SpiroVent DN 80 + 100	BA080F/L, BA100F/L
TB125	Insulation Set for SpiroVent DN 125 + 150	BA125F/L, BA150F/L


 SPIROVENT
INSULATION

 Have you thought of a dirt separator?
Learn more on page 13.

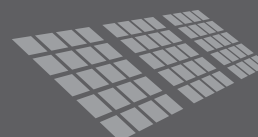
AUTOMATIC AIR VENTS AND DEAERATORS
FOR SOLAR INSTALLATIONS

**SPIROTOP®
SOLAR**

**SPIROVENT®
SOLAR**



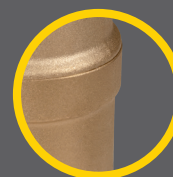
Industry-leading
5-year guarantee



Continuous deaeration
in solar installations



Energy saving



Sturdy brass
housing



Reliable, leak-free
venting system

All images used are for illustrative purposes only. Individual features
like material used (i.e. brass or steel) may vary, as may guarantee.

SPIROTOP® SOLAR SPIROVENT® SOLAR



BENEFITS OF SPIROTECH SOLAR SOLUTIONS

- Removes circulating air and microbubbles effectively
- Removes trapped air
- Greatly reduces commissioning times
- Minimal constant pressure drop
- No unnecessary shutdown
- The special valve seat has a very long life expectancy

SPIROTOP SOLAR/SPIROVENT SOLAR AUTOMATIC AIR VENTS AND DEAERATORS FOR SOLAR INSTALLATIONS

Air in a solar installation causes complaints, excessive wear, low efficiency and process interruptions. All of these are avoidable by using Spirotech Solar solutions. Furthermore, even the “boil dry” situation of the solar installation can be prevented.

AUTOCLOSE DEARATORS FOR IMPROVED EFFICIENCY

Thanks to a patented invention, Spirotech offers solar deaerators also with an AutoClose function.

As soon as the fluid temperature rises above its boiling point, the deaeration valve closes quickly and completely, preventing the escape of air and steam and thereby the risk of boiling dry of the system.

When the temperature has dropped sufficiently, the valve is reopened for deaeration and the deaeration process is restarted. This means permanent deaeration in the ideal location. Shut-off valves are now redundant.

Thanks to the AutoClose principle, solar installations can remain free of air permanently, increasing system efficiency and preventing all kinds of discomfort and complaints.



Benefits of AutoClose:

- prevents stagnation
- solar fluid will not prematurely degenerate
- system will not boil dry via the deaerator
- no more climbing the roof to deaerate
- permanent air-free, efficient installation
- suitable for new and existing installations

SPIROTOP® SOLAR

Art.-No.	Connection d	int.	H [mm]	b [mm]	B [mm]	D [mm]	y [mm]	e2 [mm]	ext.	Material: housing	Material: float
AB050/008	G½	(F)	112	52	86	65	>50	R½	(M)	Brass	TPX

SPIROTOP® SOLAR – AutoClose

AB050FBA08	G½	(F)	112	52	86	65	>50	R½	(M)	Brass	TPX
------------	----	-----	-----	----	----	----	-----	----	-----	-------	-----

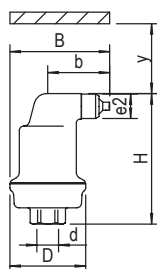


Op. pressure
max. 10 bar



Temperature
max. 180 °C

Note regarding AutoClose Products: Min. 20 % to max. 50 % Glykol



SPIROTOP
SOLAR

SPIROVENT® SOLAR – Brass solution with vertical connection for high temperature – AutoClose

Art.-No.	Connection d	int.	H [mm]	b [mm]	L [mm]	D [mm]	h [mm]	h1 [mm]	B [mm]	x [mm]	y [mm]	e2 [mm]	ext.	Nom. flow rate [m³/h]	Nom. flow rate [l/s]	Δp at nom. flow [kPa]	Volume [ltr]	Weight [kg]
AA022VFBA08	22 mm	-	218	129	104	65	52	166	150	>50	>50	R½	(M)	1,30	0,35	1,5	0,32	2,0
AA075VFBA08	G¾	(F)	208	129	84	65	42	166	150	>50	>50	R½	(M)	1,30	0,36	1,5	0,32	1,9
AA100VFBA08	G1	(F)	208	129	84	65	42	166	152	>50	>50	R½	(M)	2,00	0,56	2,4	0,32	1,9



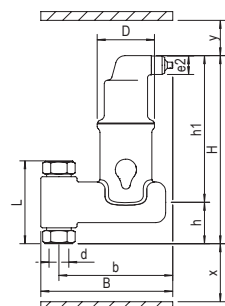
Op. pressure
max. 10 bar



Temperature
max. 180 °C

FBA = AutoClose / V = Vertical connection

Note regarding AutoClose Products: Min. 20 % to max. 50 % Glykol



SPIROVENT SOLAR
VERTICAL

SPIROVENT® SOLAR – Brass solution with horizontal connection for high temperature – AutoClose

SPECIAL

Art.-No.	Con- nection d	int.	H [mm]	b [mm]	L [mm]	D [mm]	h [mm]	h1 [mm]	B [mm]	x [mm]	y [mm]	e2 [mm]	ext.	Nom. flow rate [m³/h]	Nom. flow rate [l/s]	Δp at nom. flow [kPa]	Volume [ltr]	Weight [kg]
AA022FBA08	22 mm	-	154	52	105	65	21	133	106	>50	>50	R½	(M)	1,30	0,36	1,3	0,18	1,2
AA075FBA08	G¾	(F)	154	52	85	65	21	133	96	>50	>50	R½	(M)	1,30	0,36	1,3	0,18	1,0
AA100FBA08	G1	(F)	180	52	88	65	35	145	97	>50	>50	R½	(M)	2,00	0,56	1,3	0,21	1,3
AA125FBA08	G1¼	(F)	198	52	88	65	39	159	97	>50	>50	R½	(M)	3,60	1,00	1,3	0,25	1,4
AA150FBA08	G1½	(F)	234	52	88	65	42	192	97	>50	>50	R½	(M)	5,00	1,39	1,3	0,32	1,6



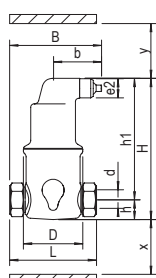
Op. pressure
max. 10 bar



Temperature
max. 180 °C

FBA= AutoClose / V= Vertical connection

Note regarding AutoClose Products: Min. 20 % to max. 50 % Glykol



SPIROVENT SOLAR
HORIZONTAL



Have you thought of a dirt separator?
Learn more on page 13.

VACUUM DEGASSERS

SPIROVENT® SUPERIOR



Industry leading
2-year guarantee



Quick and easy
installation



Energy saving



Works perfectly with all
common expansion systems



Protection against
excessive refilling



Significantly reduced
commissioning times

All images used are for illustrative purposes only. Individual features like material used (i.e. brass or steel) may vary, as may guarantee.

SUPERIOR

SPIROVENT® SUPERIOR



BENEFITS OF SPIROVENT SUPERIOR

- Removes all gases, free air, microbubbles and dissolved gases
- Absorptive fluid also ensures the removal of trapped gas bubbles
- Easy installation, which greatly reduces commissioning and handover
- Energy-efficient whilst still achieving the lowest possible gas concentration thanks to SmartSwitch
- Degassed (re)filling and sustained pressure
- Warns before (re)filling becomes excessive
- An extensive range for a wide variety of systems
- Can team up with all common expansion systems
- Two-year guarantee

SPIROVENT SUPERIOR

The SpiroVent Superior is a fully automatic vacuum degasser for heating, cooling and process systems. Because of the fully electronic control system, the Superior offers numerous options for reading system information, status and logged data.

HOW DOES IT WORK?

A pump takes a quantity of system fluid from the circulating flow. Closing a solenoid valve creates a vacuum so that the dissolved gases emerge from the water. These accumulate at the top of the vessel and are released via the air vent. The degassed and absorptive fluid is then returned into the system and will absorb gases again. There are various reasons why gas will always be able to enter a system. Therefore, vacuum degassing is not a one-time process but a continuous requirement.

As soon as any gases are removed, it is registered by the integrated SmartSwitch. If the SmartSwitch has not registered anything for a set amount of time, the SpiroVent Superior detects that the quantity of all gases, including dissolved gases, has reached the minimum value. The degassing process will then stop automatically and start again at the next pre-set time, so the device is only operated when necessary. As a result, energy consumption is kept to a minimum and the life of costly components is extended significantly.



When should a vacuum degasser be used?

- For systems with many branches and a low flow velocity.
- When the system has a small temperature differential.
- When an inline deaerator cannot be installed.
- When it cannot be predicted where gases are released from the water or when that point has a very low flow rate.

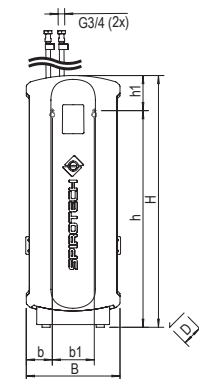
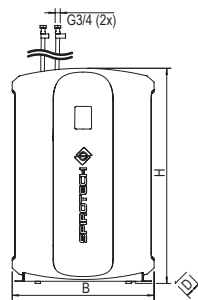
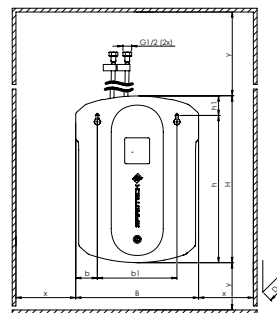
SPIROVENT® SUPERIOR – SpiroVent Superior vacuum degasser for heating and cooling systems

STANDARD

Art.-No.	Type	H	B	D	x	y	con- nection inlet	int.	con- nection outlet	int.	con- nection main- refill	int.	Max. system volume	Temp. range	Op. pres- sure	Weight	Max. glykol
		[mm]	[mm]	[mm]	[mm]	[mm]							[m³]	[°C]	[bar]	[kg]	[%]
MV02A50	S250	524	386	252	>250	>250	G½	(F)	G½	(F)	-	-	5	15–70	0,5-2,5	11	-
MV04A50	S400	930	346	334	>600	>600	G¾	(F)	G¾	(F)	-	-	100	0–90	1–4	34	40
MV04B50	S400B	930	346	334	>600	>600	G¾	(F)	G¾	(F)	G¾	(F)	100	0–90	1–4	35	40
MV04R50	S400-R	930	346	334	>600	>600	G¾	(F)	G¾	(F)	G¾	(F)	100	0–90	1–4	34	40
MV06A50	S600	1.020	673	360	>600	>600	G¾	(F)	G¾	(F)	-	-	325	0–90	2,5–6	62	40
MV06AL50	S600-L	1020	673	360	>600	>600	G¾	(F)	G¾	(F)	-	-	325	0–90	1–3	62	40
MV06B50	S600-B	1.020	673	360	>600	>600	G¾	(F)	G¾	(F)	G¾	(F)	325	0–90	2,5–6	63	40
MV06BL50	S600-BL	1020	673	360	>600	>600	G¾	(F)	G¾	(F)	-	-	325	0–90	1–3	62	40
MV06R50	S600-R	1.020	673	360	>600	>600	G¾	(F)	G¾	(F)	G¾	(F)	325	0–90	2,5–6	64	40
MV06RL50	S600-RL	1020	673	360	>600	>600	G¾	(F)	G¾	(F)	-	-	325	0–90	1–3	62	40
MA10A50	S10A	1.272	744	400	-	-	G¾	(F)	G¾	(F)	-	-	300	0–90	5–10	77	40
MA10R50	S10A-R	1.272	744	400	-	-	G¾	(F)	G¾	(F)	G¾	(F)	300	0–90	5–10	79	40

 Temperature
max. 90 °C

A = Degasser only, B = Break tank, R = Direct refill, L = Low pressure


SPIROVENT
SUPERIOR S400

SPIROVENT
SUPERIOR S600

SPIROVENT
SUPERIOR S250

SUPERIOR
CUSTOM

Please visit page 30 for further information on our custom products.


Have you thought of a dirt separator?
Learn more on page 13.

SPIROVENT® SUPERIOR

SPIROVENT® SUPERIOR – SpiroVent Superior vacuum degasser for heating and cooling systems

SPECIAL

Art.-No.	Type	H	B	D	x	y	con- nection inlet	int.	con- nection outlet	int.	con- nection main- refill	int.	Max. system volume	Temp. range	Op. pres- sure	Weight	Max. glykol
		[mm]	[mm]	[mm]	[mm]	[mm]							[m³]	[°C]	[bar]	[kg]	[%]
MV04A50I	S400-I	930	346	334	>600	>600	G¾	(F)	G¾	(F)	-	-	100	0-90	1-4	34	40
MV04B50I	S400-BI	930	346	334	>600	>600	G¾	(F)	G¾	(F)	G¾	(F)	100	0-90	1-4	35	40
MV04R50I	S400-RI	930	346	334	>600	>600	G¾	(F)	G¾	(F)	G¾	(F)	100	0-90	1-4	34	40
MV06A50I	S600-I	1.020	673	360	>600	>600	G¾	(F)	G¾	(F)	-	-	325	0-90	2,5-6	62	40
MV06AL50I	S600-LI	1020	673	360	>600	>600	G¾	(F)	G¾	(F)	-	-	325	0-90	1-3	62	40
MV06B50I	S600-BI	1.020	673	360	>600	>600	G¾	(F)	G¾	(F)	G¾	(F)	325	0-90	2,5-6	65	40
MV06BL50I	S600-BLI	1020	673	360	>600	>600	G¾	(F)	G¾	(F)	-	-	325	0-90	1-3	62	40
MV06R50I	S600-RI	1.020	673	360	>600	>600	G¾	(F)	G¾	(F)	G¾	(F)	325	0-90	2,5-6	63	40
MV06RL50I	S600-RLI	1020	673	360	>600	>600	G¾	(F)	G¾	(F)	-	-	325	0-90	1-3	62	40
MA10A50I	S10AI	1.272	744	400	-	-	G¾	(F)	G¾	(F)	-	-	300	0-90	5-10	79	40
MA10R50I	S10A-RI	1.272	744	400	-	-	G¾	(F)	G¾	(F)	G¾	(F)	300	0-90	5-10	81	40
MA16A50	S16A	1.272	744	400	-	-	G¾	(F)	G¾	(F)	-	-	300	0-90	9-16	82	40
MA16R50	S16A-R	1.272	744	400	-	-	G¾	(F)	G¾	(F)	G¾	(F)	300	0-90	9-16	90	40
MA16A50I	S16AI	1.272	744	400	-	-	G¾	(F)	G¾	(F)	-	-	300	0-90	9-16	92	40
MA16R50I	S16A-RI	1.272	744	400	-	-	G¾	(F)	G¾	(F)	G¾	(F)	300	0-90	9-16	92	40

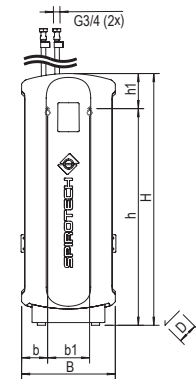


Temperature
max. 90 °C

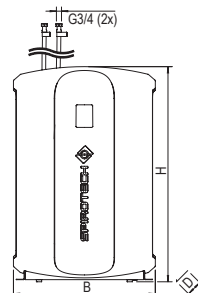


Insulated versions suitable for cooling systems

A = Degasser only
B = Break tank
R = Direct refill
I = Insulated



SPIROVENT
SUPERIOR S400



SPIROVENT
SUPERIOR S600



Have you thought of a dirt separator?
Learn more on page 13.

CUSTOM

Please visit page 30 for further information on our custom products.

SPIROVENT® SUPERIOR – Accessories
ACCESSORIES

Art.-No.	Description	Suitable for
G60.638	Self-dosing package for SpiroVent Superior	Fill and S4
G60.639	Self-dosing package for SpiroVent Superior	S6 and S10
G60.640	Self-dosing package for SpiroVent Superior	Standalone product
G60.644	Cartridge 4 l (14.560 l/°dH)*	G60.638 / G60.639 / G60.640
G60.645	Cartridge 7 l (25.480 l/°dH)*	G60.638 / G60.639 / G60.640
G60.646	Cartridge 14 l (50.960 l/°dH)*	G60.638 / G60.639 / G60.640
G60.647	Cartridge 30 l (109.200 l/°dH)*	G60.638 / G60.639 / G60.640
TMA05	Backflow preventer with controllable low pressure zone (½" IG)	Products with automatic refill
TMA06	Backflow preventer with controllable low pressure zone (¾" IG)	Products with automatic refill

PARTICLE AND DIRT SEPARATORS

SPIROTRAP®



Industry leading
up to 20-years guarantee



High-efficient
dirt separation



Energy saving



Safe, high-powered
magnet



Constant,
low pressure drop



Quick and easy
cleaning

All images used are for illustrative purposes only. Individual features like material used (i.e. brass or steel) may vary, as may guarantee.

SPIROTRAP®

BENEFITS OF SPIROTRAP

- Very small particles, from 5 µm (= 0.005 mm) are separated and removed
- Dirt can be drained while the system is in operation
- No shut-off valves or bypass required
- Constant low pressure drop
- Maintenance only takes a few seconds and is not a dirty job compared to a filter solution
- No unnecessary downtime
- Connection diameters from ¾" to DN 800 (see page 30 for additional options)
- A complete range, suitable for various pressures and temperatures



SPIROTRAP PARTICLE AND DIRT SEPARATORS

Today's highly energy-efficient heating and cooling systems can only offer optimal performance with dirt-free water. In untreated systems, dirt can accumulate in multiple places throughout the system. Studies and practical experience show that magnetite in particular, leads to greatly reduced energy efficiency and therefore higher energy costs. Ensuring quick and efficient dirt removal is essential. Spirotech offers an extensive range of SpiroTrap dirt separators from small brass solutions to heavy duty steel units, specifically designed for the removal of dirt.

AVAILABLE VERSIONS:

- Normal flow brass (designed for a nominal flow velocity up to 1 m/s)
- Normal flow steel (designed for a nominal flow velocity up to 1.5 m/s)
- Hi-flow (designed for a nominal flow velocity up to 3 m/s)
- Magnetic (separators with internal or external magnet)
- Demountable (If the level of contamination is such that it needs to be possible to replace or clean the separating element).



MAXIMISING PERFORMANCE – PROTECT COMPONENTS WITH SPIROTRAP MB3/MBL

The unique magnetic field booster technology guarantees fast and optimal dirt separation. Beside non-magnetic dirt even the smallest magnetite particles are removed, maximising system performance as well as protecting costly system components.

Thanks to the ingenious design, collected dirt can be removed quickly and easily. The sturdy brass SpiroTrap MB3 and SpiroTrap MBL are equipped with a swivel connection that makes them very easy to install and suitable for horizontal, vertical and even diagonal pipes. The units with compression couplings have a unique slide-over installation, allowing for quick and easy installation in existing systems.

For connections from 1¼" up to 2", we offer the SpiroTrap MBL. For even larger applications, we recommend our SpiroTrap Magnet (in steel).

Kiwa GASTEC has objectively proven that Spirotech's SpiroTrap MB3, which maximises magnetite removal, can bring up to 7.4 % energy savings.



SPIROTRAP®

Brass solution

SPIROTRAP® MBC – Brass solution with universal connection

Art.-No.	Con- nection d	int.	Hv [mm]	Hh [mm]	D [mm]	L [mm]	M [mm]	Nom. flow rate [m³/h]	Nom. flow rate [l/s]	Δp at nom. flow [kPa]	Volume [litr]	Weight [kg]
UE022WH	22 mm	-	150	121	73	120	110	1,30	0,36	2,1	0,2	1,4
UE028WH	28 mm	-	150	121	83	120	121	2,00	0,56	3,8	0,3	1,6
UE075WH	Rp¾	(F)	140	121	73	100	112	1,30	0,36	2,1	0,2	1,4
UE100WH	Rp1	(F)	140	121	83	100	124	2,00	0,56	3,8	0,3	1,6



Op. pressure
max. 10 bar



Temperature
max. 110 °C



Nom. flow velocity
1 m/s



with magnet

SPIROTRAP® MB3/MBL – Brass solution with universal connection

Art.-No.	Con- nection d	int.	Hv [mm]	Hh [mm]	D [mm]	L [mm]	b [mm]	B [mm]	h [mm]	h1 [mm]	x [mm]	y [mm]	e [mm]	ext.	Nom. flow rate [m³/h]	Nom. flow rate [l/s]	Δp at nom. flow [kPa]	Volume [litr]	Weight [kg]
UE022WJ	22 mm	-	177	149	84	112	123	141	117	32	>110	>50	G¾	(M)	1,30	0,36	2,1	0,4	2,2
UE028WJ	28 mm	-	177	149	84	112	127	149	117	32	>110	>50	G¾	(M)	2,00	0,56	3,8	0,4	2,3
UE075WJ	Rp¾	(F)	162	149	84	90	125	142	117	32	>110	>50	G¾	(M)	1,30	0,36	2,1	0,4	2,2
UE100WJ	Rp1	(F)	162	149	84	90	129	152	117	32	>110	>50	G¾	(M)	2,00	0,56	3,8	0,4	2,3
UE125WJ	Rp1¼	(F)	224	210	84	128	138	163	160	50	>110	>50	G¾	(M)	3,60	1,00	2,2	0,8	3,6
UE150WJ	Rp1½	(F)	224	210	84	128	141	168	160	50	>110	>50	G¾	(M)	5,00	1,39	2,6	0,8	3,7
UE200WJ	Rp2	(F)	224	210	84	128	148	183	160	50	>110	>50	G¾	(M)	7,50	2,08	5,8	0,8	3,9



Op. pressure
max. 10 bar



Temperature
max. 110 °C



Nom. flow velocity
1 m/s



with magnet

SPIROTRAP® – Brass solution with horizontal connection

Art.-No.	Con- nection d	int.	H [mm]	D [mm]	L [mm]	b [mm]	B [mm]	h [mm]	h1 [mm]	x [mm]	y [mm]	e [mm]	ext.	Nom. flow rate [m³/h]	Nom. flow rate [l/s]	Δp at nom. flow [kPa]	Volume [litr]	Weight [kg]
AE022	22 mm	-	118	65	106	-	-	96	22	>70	>50	G¾	(M)	1,30	0,36	1,3	0,2	1,2
AE075	G¾	(F)	118	65	85	-	-	96	22	>70	>50	G¾	(M)	1,30	0,36	1,3	0,2	1,0
AE100	G1	(F)	143	65	88	-	-	108	35	>70	>50	G¾	(M)	2,00	0,56	1,3	0,2	1,3
AE125	G1¼	(F)	161	65	88	-	-	122	39	>70	>50	G¾	(M)	3,60	1,00	1,3	0,3	1,4
AE150	G1½	(F)	197	65	88	-	-	155	42	>70	>50	G¾	(M)	5,00	1,39	1,3	0,3	1,6
AE200	G2	(F)	240	65	132	-	-	180	60	>70	>50	G¾	(M)	7,50	2,08	1,4	1,1	3,9



Op. pressure
max. 10 bar



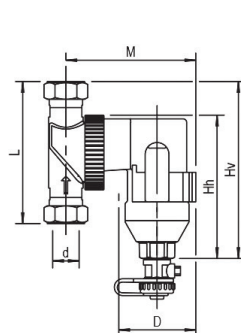
Temperature
max. 110 °C



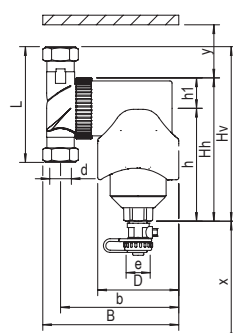
Nom. flow velocity
1 m/s



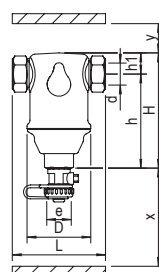
with magnet



SPIROTRAP
MBC



SPIROTRAP
MB3



SPIROTRAP
HORIZONTAL



Have you thought
of an automatic
air vent (AAV)
and microbubble
deaeration? Learn
more on page 15.

CUSTOM

Please visit page 30 for further information on our custom products.

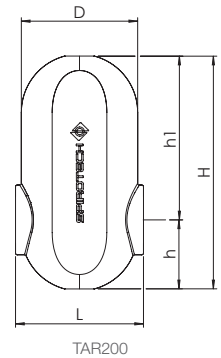
SPIROTRAP®

Brass solution

ACCESSORIES

SPIROTRAP® – Accessories for brass solution

Art.-No.	Description	Suitable for
TAR200	Insulation Set SpiroTrap for 2" horizontal connection	AE200
TAE150	Insulation Set SpiroTrap for horizontal connection	AE022, AE075, AE100, AE125, AE150
TUR100	Insulation Set SpiroTrap MB3 for universal connection	UE022WJ, UE028WJ, UE075WJ, UE100WJ
TUR125	Insulation Set SpiroTrap Rp1¼	UE125WJ
TUR150	Insulation Set SpiroTrap Rp1½	UE150WJ
TUR200	Insulation Set SpiroTrap Rp2	UE200WJ



SPIROTRAP®

Steel solution

STANDARD

SPIROTRAP® – Steel solution with magnet – standard flow

Art.-No.	DN	OD	H	D	L/LF	h	h1	x	xr	y	e	int.	Nom. flow rate	Nom. flow rate	Δp at nom. flow	Volume	Weight
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]			[m³/h]	[l/s]	[kPa]	[ltr]	[kg]
BE050LM	50	60,3	471	159	260	341	121	>75	330	>50	Rp1	(F)	12,50	3,47	3,0	5,0	8,0
BE050FM	50	60,3	471	159	350	341	121	>75	330	>50	Rp1	(F)	12,50	3,47	3,0	5,0	13,0
BE065LM	65	76,1	471	159	260	333	129	>75	330	>50	Rp1	(F)	20,00	5,56	2,9	5,0	8,0
BE065FM	65	76,1	471	159	350	333	129	>75	330	>50	Rp1	(F)	20,00	5,56	2,9	5,0	14,0
BE080LM	80	88,9	576	219	370	424	148	>100	370	>50	Rp1	(F)	27,00	7,50	3,1	17,0	16,0
BE080FM	80	88,9	576	219	470	424	148	>100	370	>50	Rp1	(F)	27,00	7,50	3,1	17,0	24,0
BE100LM	100	114,3	576	219	370	412	160	>100	370	>50	Rp1	(F)	47,00	13,06	3,7	17,0	16,0
BE100FM	100	114,3	576	219	475	412	160	>100	370	>50	Rp1	(F)	47,00	13,06	3,7	17,0	25,0
BE125LM	125	139,7	798	324	525	605	193	>100	540	>50	Rp1	(F)	72,00	20,00	4,2	50,0	47,0
BE125FM	125	139,7	798	324	635	605	193	>100	540	>50	Rp1	(F)	72,00	20,00	4,2	50,0	58,0
BE150LM	150	168,3	798	324	525	591	207	>100	540	>50	Rp1	(F)	108,00	30,00	4,9	50,0	48,0
BE150FM	150	168,3	798	324	635	591	207	>100	540	>50	Rp1	(F)	108,00	30,00	4,9	50,0	61,0
BE200FM	200	219,1	1.063	406	775	773	280	>100	700	>50	Rp1	(F)	180,00	50,00	5,8	105,0	107,0
BE250FM	250	273,0	1.265	508	890	896	364	>100	750	>50	Rp2	(F)	288,00	80,00	7,0	210,0	162,0
BE300FM	300	323,9	1.492	610	1.005	1.058	426	>100	900	>50	Rp2	(F)	405,00	112,50	7,8	350,0	261,0



Op. pressure
max. 10 bar



Temperature
max. 110 °C

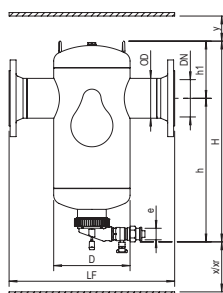


Nom. flow velocity
1.5 m/s

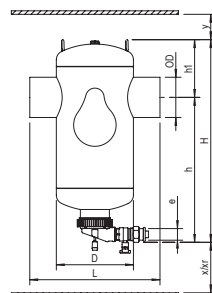


with Magnet

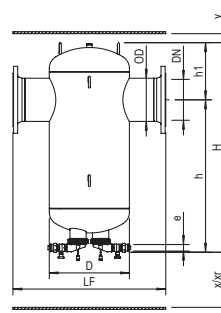
L = Weld ends / F = Flange design (PN 16) / M = Magnet



SPIROTRAP
FLANGE DESIGN



SPIROTRAP
WELD ENDS DESIGN



SPIROTRAP
FLANGE DESIGN
FROM DN 200



Have you also thought of an automatic air vent/microbubble separator? Learn more on page 15.

SPIROTRAP®

Steel solution

SPIROTRAP® – Steel solution – standard flow

STANDARD

Art.-No.	DN	OD	H	D	L/LF	h	h1	x	y	e	int.	Nom. flow rate	Nom. flow rate	Δp at nom. flow	Volume	Weight
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]			[m³/h]	[l/s]	[kPa]	[litr]	[kg]
BE050L	50	60,3	390	159	260	270	121	>200	>50	Rp1	(F)	12,50	3,47	3,0	5,0	9,0
BE050F	50	60,3	390	159	350	270	121	>200	>50	Rp1	(F)	12,50	3,47	3,0	5,0	13,0
BE065L	65	76,1	390	159	260	260	129	>200	>50	Rp1	(F)	20,00	5,56	2,7	5,0	9,0
BE065F	65	76,1	390	159	350	260	129	>200	>50	Rp1	(F)	20,00	5,56	2,7	5,0	15,0
BE080L	80	88,9	500	219	370	355	148	>200	>50	Rp1	(F)	27,00	7,50	2,9	17,0	17,0
BE080F	80	88,9	500	219	470	355	148	>200	>50	Rp1	(F)	27,00	7,50	2,9	17,0	25,0
BE100L	100	114,3	500	219	370	345	160	>200	>50	Rp1	(F)	47,00	13,06	3,7	17,0	17,0
BE100F	100	114,3	500	219	475	345	160	>200	>50	Rp1	(F)	47,00	13,06	3,7	17,0	26,0
BE125L	125	139,7	670	324	525	475	193	>200	>50	Rp1	(F)	72,00	20,00	4,2	50,0	41,0
BE125F	125	139,7	670	324	635	475	193	>200	>50	Rp1	(F)	72,00	20,00	4,2	50,0	54,0
BE150L	150	168,3	670	324	525	460	207	>200	>50	Rp1	(F)	108,00	30,00	4,9	50,0	42,0
BE150F	150	168,3	670	324	635	460	207	>200	>50	Rp1	(F)	108,00	30,00	4,9	50,0	56,0
BE200F	200	219,1	900	406	775	615	280	>200	>50	Rp1	(F)	180,00	50,00	5,8	105,0	105,0
BE250F	250	273,0	1.165	508	890	800	364	>200	>50	Rp2	(F)	288,00	80,00	6,9	210,0	170,0
BE300F	300	323,9	1.380	610	1.005	955	426	>200	>50	Rp2	(F)	405,00	112,50	7,7	350,0	252,0



Op. pressure
max. 10 bar



Temperature
max. 110 °C



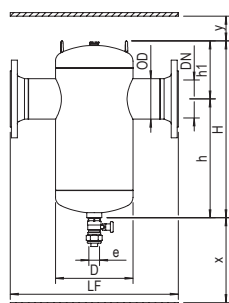
Nom. flow velocity
1.5 m/s



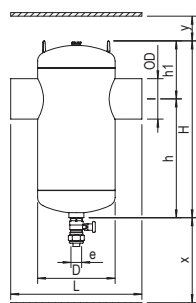
without magnet

Products in the range are available up to DN800 and are made to order – prices on application.

L = Weld ends / F = Flange design (PN 16)



SPIROTRAP
FLANGE DESIGN



SPIROTRAP
WELD ENDS

SPIROTRAP®

SPIROTRAP®

Steel solution

SPIROTRAP® – Demountable steel solution – standard flow

SPECIAL

Art.-No.	DN	OD	H	D	L/LF	DF	h	h1	x	y	e	int.	Nom. flow rate [m³/h]	Nom. flow rate [l/s]	Δp at nom. flow [kPa]	Volume [ltr]	Weight [kg]
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]							
BF050L	50	60,3	390	159	260	285	270	121	>350	>50	Rp1	(F)	12,50	3,47	3,0	5,0	28,0
BF050F	50	60,3	390	159	350	285	270	121	>350	>50	Rp1	(F)	12,50	3,47	3,0	5,0	33,0
BF065L	65	76,1	390	159	260	285	260	129	>350	>50	Rp1	(F)	20,00	5,56	2,7	5,0	28,0
BF065F	65	76,1	390	159	350	285	260	129	>350	>50	Rp1	(F)	20,00	5,56	2,7	5,0	34,0
BF080L	80	88,9	500	219	370	340	355	148	>500	>50	Rp1	(F)	27,00	7,50	2,9	17,0	40,0
BF080F	80	88,9	500	219	470	340	355	148	>500	>50	Rp1	(F)	27,00	7,50	2,9	17,0	48,0
BF100L	100	114,3	500	219	370	340	345	160	>500	>50	Rp1	(F)	47,00	13,06	3,7	17,0	40,0
BF100F	100	114,3	500	219	475	340	345	160	>500	>50	Rp1	(F)	47,00	13,06	3,7	17,0	50,0
BF125L	125	139,7	670	324	525	460	475	193	>600	>50	Rp1	(F)	72,00	20,00	4,2	50,0	90,0
BF125F	125	139,7	670	324	635	460	475	193	>600	>50	Rp1	(F)	72,00	20,00	4,2	50,0	103,0
BF150L	150	168,3	670	324	525	460	460	207	>600	>50	Rp1	(F)	108,00	30,00	4,9	50,0	90,0
BF150F	150	168,3	670	324	635	460	460	207	>600	>50	Rp1	(F)	108,00	30,00	4,9	50,0	106,0
BF200F	200	219,1	900	406	775	580	615	280	>900	>50	Rp1	(F)	180,00	50,00	5,8	105,0	195,0
BF250F	250	273,0	1.165	508	890	715	800	364	>1,100	>50	Rp2	(F)	288,00	80,00	6,9	210,0	319,0
BF300F	300	323,9	1.380	610	1.005	840	955	426	>1,300	>50	Rp2	(F)	405,00	112,50	7,7	350,0	499,0



Op. pressure
max. 10 bar



Temperature
max. 110 °C

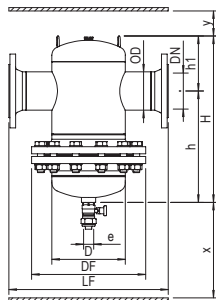


Nom. flow velocity
1.5 m/s

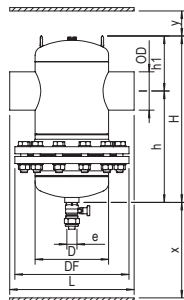


without magnet

L = Weld ends / F = Flange design (PN 16)



SPIROTRAP
DEMOUNTABLE
FLANGE DESIGN



SPIROTRAP
DEMOUNTABLE
WELD ENDS

CUSTOM

Please visit page 30 for further information on our custom products.

SPIROTRAP®

Steel solution

SPIROTRAP® – Steel solution – Hi-flow

SPECIAL

Art.-No.	DN	OD	H	D	L/LF	h	h1	x	y	e	int.	Nom. flow rate [m³/h]	Nom. flow rate [l/s]	Δp at nom. flow [kPa]	Volume [litr]	Weight [kg]
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]							
HE050L	50	60,3	550	159	260	430	121	>200	>50	Rp1	(F)	25,00	6,94	11,7	7,0	12,0
HE050F	50	60,3	550	159	350	430	121	>200	>50	Rp1	(F)	25,00	6,94	11,7	7,0	17,0
HE065L	65	76,1	550	159	260	420	129	>200	>50	Rp1	(F)	40,00	11,11	11,9	7,0	12,0
HE065F	65	76,1	550	159	350	420	129	>200	>50	Rp1	(F)	40,00	11,11	11,9	7,0	18,0
HE080L	80	88,9	700	219	370	550	148	>200	>50	Rp1	(F)	54,00	15,00	12,4	25,0	23,0
HE080F	80	88,9	700	219	470	550	148	>200	>50	Rp1	(F)	54,00	15,00	12,4	25,0	31,0
HE100L	100	114,3	700	219	370	540	160	>200	>50	Rp1	(F)	94,00	26,11	14,7	25,0	24,0
HE100F	100	114,3	700	219	475	540	160	>200	>50	Rp1	(F)	94,00	26,11	14,7	25,0	33,0
HE125L	125	139,7	950	324	525	755	193	>200	>50	Rp1	(F)	144,00	40,00	16,9	75,0	58,0
HE125F	125	139,7	950	324	635	755	193	>200	>50	Rp1	(F)	144,00	40,00	16,9	75,0	71,0
HE150L	150	168,3	950	324	525	740	207	>200	>50	Rp1	(F)	215,00	59,72	19,2	75,0	59,0
HE150F	150	168,3	950	324	635	740	207	>200	>50	Rp1	(F)	215,00	59,72	19,2	75,0	73,0
HE200F	200	219,1	1.240	406	775	955	280	>200	>50	Rp1	(F)	360,00	100,00	23,4	150,0	136,0
HE250F	250	273,0	1.670	508	890	1.300	364	>200	>50	Rp2	(F)	575,00	159,72	27,5	300,0	213,0
HE300F	300	323,9	1.980	610	1.005	1.550	426	>200	>50	Rp2	(F)	810,00	225,00	31,2	500,0	393,0



Op. pressure
max. 10 bar



Temperature
max. 110 °C



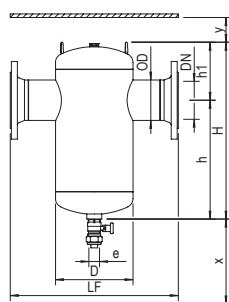
Nom. flow velocity
3 m/s



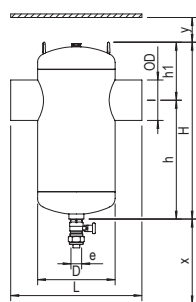
without Magnet

Products in the range are available up to DN800 and are made to order – prices on application.

L = Weld ends / F = Flange design (PN 16)



SPIROTRAP
FLANGE DESIGN



SPIROTRAP
WELD ENDS

CUSTOM

Please visit page 30 for further information on our custom products.

SPIROTRAP®

SPIROTRAP®

Steel solution

SPIROTRAP® – Demountable steel solution – Hi-flow

SPECIAL

Art.-No.	DN	OD	H	D	L/LF	DF	h	h1	x	y	e	int.	Nom. flow rate [m³/h]	Nom. flow rate [l/s]	Δp at nom. flow [kPa]	Volume [litr]	Weight [kg]
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]							
HF050L	50	60,3	550	159	260	285	430	121	>500	>50	Rp1	(F)	25,00	6,94	11,7	7,0	30,0
HF050F	50	60,3	550	159	350	285	430	121	>500	>50	Rp1	(F)	25,00	6,94	11,7	7,0	35,0
HF065L	65	76,1	550	159	260	285	420	129	>500	>50	Rp1	(F)	40,00	11,11	11,9	7,0	30,0
HF065F	65	76,1	550	159	350	285	420	129	>500	>50	Rp1	(F)	40,00	11,11	11,9	7,0	36,0
HF080L	80	88,9	700	219	370	340	550	148	>700	>50	Rp1	(F)	54,00	15,00	12,4	25,0	50,0
HF080F	80	88,9	700	219	470	340	550	148	>700	>50	Rp1	(F)	54,00	15,00	12,4	25,0	58,0
HF100L	100	114,3	700	219	370	340	540	160	>700	>50	Rp1	(F)	94,00	26,11	14,7	25,0	50,0
HF100F	100	114,3	700	219	475	340	540	160	>700	>50	Rp1	(F)	94,00	26,11	14,7	25,0	60,0
HF125L	125	139,7	950	324	525	460	755	193	>900	>50	Rp1	(F)	144,00	40,00	16,9	75,0	110,0
HF125F	125	139,7	950	324	635	460	755	193	>900	>50	Rp1	(F)	144,00	40,00	16,9	75,0	123,0
HF150L	150	168,3	950	324	525	460	740	207	>900	>50	Rp1	(F)	215,00	59,72	19,2	75,0	110,0
HF150F	150	168,3	950	324	635	460	740	207	>900	>50	Rp1	(F)	215,00	59,72	19,2	75,0	126,0
HF200F	200	219,1	1.240	406	775	580	955	280	>1.200	>50	Rp1	(F)	360,00	100,00	23,4	150,0	225,0
HF250F	250	273,0	1.670	508	890	715	1.300	364	>1.600	>50	Rp2	(F)	575,00	159,72	27,5	300,0	380,0
HF300F	300	323,9	1.980	610	1.005	840	1.550	426	>1.900	>50	Rp2	(F)	810,00	225,00	31,2	500,0	599,0



Op. pressure
max. 10 bar



Temperature
max. 110 °C

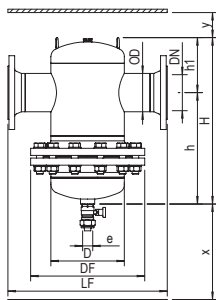


Nom. flow velocity
3 m/s

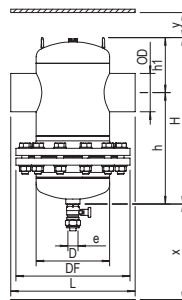


without Magnet

L = Weld ends / F = Flange design (PN 16)



SPIROTRAP
DEMOUNTABLE
FLANGE DESIGN

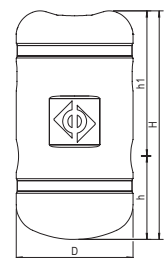


SPIROTRAP
DEMOUNTABLE
WELD ENDS

ACCESSORIES

SPIROTRAP® – Accessories for steel solution

Art.-No.	Description	Suitable for
TB050	Insulation Set for SpiroTrap DN 50 + 65	BE050F/L, BE065F/L, BE050FM/LM, BE065FM/LM
TB080	Insulation Set for SpiroTrap DN 80 + 100	BE080F/L, BE100F/L, BE080FM/LM, BE100FM/LM
TB125	Insulation Set for SpiroTrap DN 125 + 150	BE125F/L, BE150F/L
TB125A01	Insulation Set for SpiroTrap Magnet DN 125 + 150	BE125FM/LM, BE150FM/LM



SPIROTRAP
INSULATION

CUSTOM

Please visit page 30 for further information on our custom products.

DEAERATORS AND DIRT SEPARATORS

SPIROCOMBI®



Industry leading
up to 20-year guarantee



Energy saving



Highly efficient
air and dirt removal



Quick, easy cleaning



Unique, high-powered
magnet



Protects critical
system components

All images used are for illustrative purposes only. Individual features like material used (i.e. brass or steel) may vary, as may guarantee.

SPIROCOMBI®

BENEFITS OF SPIROCOMBI

- Removes circulating air and microbubbles effectively
- Very small particles, from 5 µm (= 0.005 mm), are separated and removed
- Dirt can be discharged while the system is in operation
- No shut-off valves or bypass required
- Constant low pressure drop
- Exceptional guarantee



SPIROCOMBI DEAERATORS AND DIRT SEPARATORS

Today's highly energy-efficient heating and cooling systems offer optimal performance with water that is free of air and dirt. In untreated systems, air may cause problems such as flow interruptions or even a complete system failure. Dirt consists mainly of magnetite, that can accumulate wherever a magnetic field is present. In valves or heat exchangers, pipes, radiators, pumps and calorimeters. Next to costs associated with repairs, parts and downtime, contamination also leads to reduced system performance and, therefore, higher energy costs.

Spirotech offers an extensive range of SpiroCombi deaerators/dirt separators, especially designed for the simultaneous removal of air and dirt. These remove air, microbubbles and dirt particles from system water continuously.

EFFECTIVE, SAFE, COMPACT AND EASY TO USE

System characteristics determine the best option; two individual separators or a single combined unit. For the fastest removal of magnetite, SpiroCombi Magnet has been added to the existing range of combined air and dirt separators.

The Spirotube separation element ensures effective separation of air and dirt with a minimal pressure drop. The reliable venting mechanism is leak-free and guarantees effective deaeration. The dry pocket magnet increases the magnetite removal substantially and features an excellent first pass efficiency. Collected dirt can be removed quickly, easily and without mess using a drag mechanism. The easy-to-clean magnet resides safely inside the unit and always remains correctly mounted. The robust device's compact design means minimal height is required for installation.



SPIROCOMBI® MB3 – Brass solution with magnet and universal connection

STANDARD

Art.-No.	Connection d	H	b	B	L	D	h	h1	e2	x	y	Nom. flow rate	Nom. flow rate	Volume	Weight
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		[mm]	[mm]	[m³/h]	[l/s]	[ltr]	[kg]
UC022WJ	22 mm	272	123	141	120	84	123	149	R½	>100	>75	1,3	0,36	0,53	2,49
UC028WJ	28 mm	272	126	149	120	84	123	149	R½	>100	>75	2,0	0,55	0,53	2,60
UC075WJ	Rp¾	272	125	142	100	84	123	149	R½	>100	>75	1,3	0,36	0,53	2,41
UC100WJ	Rp1	272	129	152	100	84	123	149	R½	>100	>75	2,0	0,55	0,53	2,57
UC125WJ	Rp1¼	406	138	162	128	84	174	232	R½	>100	>75	3,6	1,00	1,47	5,20
UC150WJ	Rp1½	406	141	168	128	84	174	232	R½	>100	>75	5,0	1,38	1,52	5,30
UC200WJ	Rp2	406	148	183	128	84	174	232	R½	>100	>75	7,5	2,08	1,61	5,40


 Op. pressure
max. 10 bar

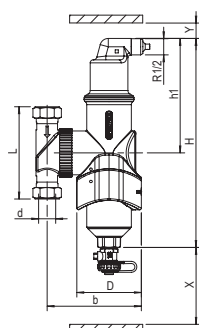
 Temperature
max. 110 °C

 Nom. flow velocity
1 m/s


with magnet



Suitable for cooling systems


 SPIROCOMBI
MB3

SPIROCOMBI® – Steel solution with magnet – standard flow

STANDARD

Art.-No.	DN	OD	H	h1	h	D	L/LF	e1	ext.	e	int.	e2	ext.	x	xr	y	Nom. flow rate	Nom. flow rate	Δp at nom. flow	Volume	Weight
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]							[mm]	[mm]	[mm]	[m³/h]	[l/s]	[kPa]	[ltr]	[kg]
BC050LM	50	60,3	712	361	351	159	260	G¾	(M)	Rp1	(F)	R½	(M)	>75	330	>50	12,50	3,47	3,0	7,0	12,0
BC050FM	50	60,3	712	361	351	159	350	G¾	(M)	Rp1	(F)	R½	(M)	>75	330	>50	12,50	3,47	3,0	7,0	16,0
BC065LM	65	76,1	712	361	351	159	260	G¾	(M)	Rp1	(F)	R½	(M)	>75	330	>50	20,00	5,56	2,9	7,0	12,0
BC065FM	65	76,1	712	361	351	159	350	G¾	(M)	Rp1	(F)	R½	(M)	>75	330	>50	20,00	5,56	2,9	7,0	18,0
BC080LM	80	88,9	858	434	424	219	370	G¾	(M)	Rp1	(F)	R½	(M)	>100	370	>50	27,00	7,50	3,1	25,0	24,0
BC080FM	80	88,9	858	434	424	219	470	G¾	(M)	Rp1	(F)	R½	(M)	>100	370	>50	27,00	7,50	3,1	25,0	31,0
BC100LM	100	114,3	858	434	424	219	370	G¾	(M)	Rp1	(F)	R½	(M)	>100	370	>50	47,00	13,06	3,7	25,0	24,0
BC100FM	100	114,3	858	434	424	219	475	G¾	(M)	Rp1	(F)	R½	(M)	>100	370	>50	47,00	13,06	3,7	25,0	32,0
BC125LM	125	139,7	1.149	559	590	324	525	G¾	(M)	Rp1	(F)	R½	(M)	>100	540	>50	72,00	20,00	4,2	75,0	59,0
BC125FM	125	139,7	1.149	559	590	324	635	G¾	(M)	Rp1	(F)	R½	(M)	>100	540	>50	72,00	20,00	4,2	75,0	71,0
BC150LM	150	168,3	1.149	559	590	324	525	G¾	(M)	Rp1	(F)	R½	(M)	>100	540	>50	108,00	30,00	4,9	75,0	59,0
BC150FM	150	168,3	1.149	559	590	324	635	G¾	(M)	Rp1	(F)	R½	(M)	>100	540	>50	108,00	30,00	4,9	75,0	74,0
BC200FM	200	219,1	1.479	706	773	406	775	G¾	(M)	Rp1	(F)	R½	(M)	>100	700	>50	180,00	50,00	5,8	150,0	133,0
BC250FM	250	273,0	1.801	905	896	508	890	G¾	(M)	Rp1	(F)	R½	(M)	>100	750	>50	288,00	80,00	7,0	300,0	197,0
BC300FM	300	323,9	2.119	1.061	1.058	610	1.005	G¾	(M)	Rp1	(F)	R½	(M)	>100	900	>50	405,00	112,50	7,8	500,0	319,0


 Op. pressure
max. 10 bar

 Temperature
max. 110 °C

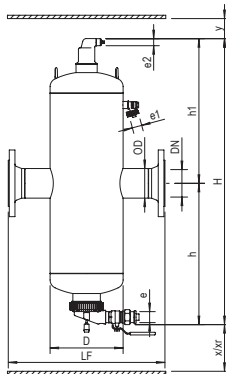
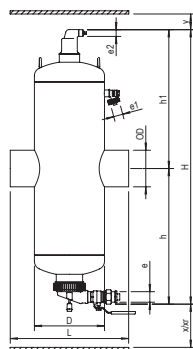
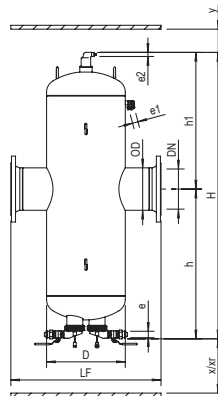
 Nom. flow velocity
1.5 m/s


with magnet



Suitable for cooling systems

L = Weld ends / F = Flange design (PN 16) / M = Magnet


 SPIROCOMBI
FLANGE DESIGN

 SPIROCOMBI WELD
ENDS DESIGN

 SPIROCOMBI FLANGE
DESIGN FROM DN 200

SPIROCOMBI® – Steel solution – standard flow

Art.-No.	DN	OD	H	h1	h	D	L/LF	e1	ext.	e	int.	e2	ext.	x	y	Nom. flow rate	Nom. flow rate	Δp at nom. flow	Volume	Weight
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]							[mm]	[mm]	[m³/h]	[l/s]	[kPa]	[litr]	[kg]
BC050L	50	60,3	630	365	265	159	260	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	12,50	3,47	3,0	7,0	12,0
BC050F	50	60,3	630	365	265	159	350	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	12,50	3,47	3,0	7,0	17,0
BC065L	65	76,1	630	365	265	159	260	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	20,00	5,56	2,7	7,0	12,0
BC065F	65	76,1	630	365	265	159	350	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	20,00	5,56	2,7	7,0	18,0
BC080L	80	88,9	785	440	345	219	370	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	27,00	7,50	2,9	25,0	24,0
BC080F	80	88,9	785	440	345	219	470	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	27,00	7,50	2,9	25,0	31,0
BC100L	100	114,3	785	440	345	219	370	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	47,00	13,06	3,7	25,0	24,0
BC100F	100	114,3	785	440	345	219	475	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	47,00	13,06	3,7	25,0	33,0
BC125L	125	139,7	1.035	560	475	324	525	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	72,00	20,00	4,2	75,0	58,0
BC125F	125	139,7	1.035	560	475	324	635	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	72,00	20,00	4,2	75,0	70,0
BC150L	150	168,3	1.035	560	475	324	525	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	108,00	30,00	4,9	75,0	58,0
BC150F	150	168,3	1.035	560	475	324	635	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	108,00	30,00	4,9	75,0	73,0
BC200F	200	219,1	1.315	700	615	406	775	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	180,00	50,00	5,8	150,0	135,0
BC250F	250	273,0	1.730	900	830	508	890	G¾	(M)	Rp2	(F)	R½	(M)	>200	>50	288,00	80,00	6,9	300,0	252,0
BC300F	300	323,9	2.025	1.055	970	610	1.005	G¾	(M)	Rp2	(F)	R½	(M)	>200	>50	405,00	112,50	7,7	500,0	325,0


 Op. pressure
max. 10 bar

 Temperature
max. 110 °C

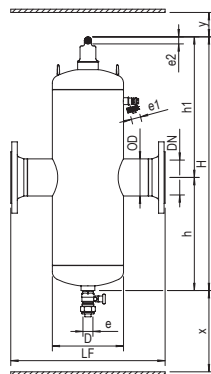
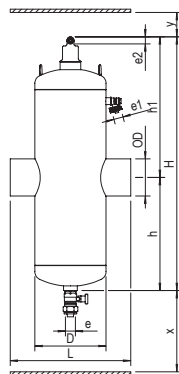
 Nom. flow velocity
1.5 m/s


without magnet



Suitable for cooling systems

L = Weld ends / F = Flange design (PN 16)


 SPIROCOMBI
FLANGE DESIGN

 SPIROCOMBI
WELD ENDS

 Products in the range are
available up to DN800
and are made to order –
prices on application.

SPIROCOMBI® – Demountable steel solution – standard flow

Art.-No.	DN	OD	H	h1	h	D	L/LF	DF	e1	ext.	e	int.	e2	ext.	x	y	Nom. flow rate	Nom. flow rate	Δp at nom. flow	Volume	Weight
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]							[mm]	[mm]	[m³/h]	[l/s]	[kPa]	[ltr]	[kg]
BD050L	50	60,3	630	365	265	159	260	285	G¾	(M)	Rp1	(F)	R½	(M)	>510	>50	12,50	3,47	3,0	7,0	30,0
BD050F	50	60,3	630	365	265	159	350	285	G¾	(M)	Rp1	(F)	R½	(M)	>510	>50	12,50	3,47	3,0	7,0	35,0
BD065L	65	76,1	630	365	265	159	260	285	G¾	(M)	Rp1	(F)	R½	(M)	>510	>50	20,00	5,56	2,7	7,0	30,0
BD065F	65	76,1	630	365	265	159	350	285	G¾	(M)	Rp1	(F)	R½	(M)	>510	>50	20,00	5,56	2,7	7,0	36,0
BD080L	80	88,9	785	440	345	219	370	340	G¾	(M)	Rp1	(F)	R½	(M)	>660	>50	27,00	7,50	2,9	25,0	50,0
BD080F	80	88,9	785	440	345	219	470	340	G¾	(M)	Rp1	(F)	R½	(M)	>660	>50	27,00	7,50	2,9	25,0	58,0
BD100L	100	114,3	785	440	345	219	370	340	G¾	(M)	Rp1	(F)	R½	(M)	>660	>50	47,00	13,06	3,7	25,0	50,0
BD100F	100	114,3	785	440	345	219	475	340	G¾	(M)	Rp1	(F)	R½	(M)	>660	>50	47,00	13,06	3,7	25,0	60,0
BD125L	125	139,7	1.035	560	475	324	525	460	G¾	(M)	Rp1	(F)	R½	(M)	>920	>50	72,00	20,00	4,2	75,0	110,0
BD125F	125	139,7	1.035	560	475	324	635	460	G¾	(M)	Rp1	(F)	R½	(M)	>920	>50	72,00	20,00	4,2	75,0	123,0
BD150L	150	168,3	1.035	560	475	324	525	460	G¾	(M)	Rp1	(F)	R½	(M)	>920	>50	108,00	30,00	4,9	75,0	110,0
BD150F	150	168,3	1.035	560	475	324	635	460	G¾	(M)	Rp1	(F)	R½	(M)	>920	>50	108,00	30,00	4,9	75,0	126,0
BD200F	200	219,1	1.315	700	615	406	775	580	G¾	(M)	Rp1	(F)	R½	(M)	>1.200	>50	180,00	50,00	5,8	150,0	225,0
BD250F	250	273,0	1.730	900	830	508	890	715	G¾	(M)	Rp2	(F)	R½	(M)	>1.600	>50	288,00	80,00	6,9	300,0	364,0
BD300F	300	323,9	2.025	1.055	970	610	1.005	840	G¾	(M)	Rp2	(F)	R½	(M)	>1.900	>50	405,00	112,50	7,7	500,0	563,0


 Op. pressure
max. 10 bar

 Temperature
max. 110 °C

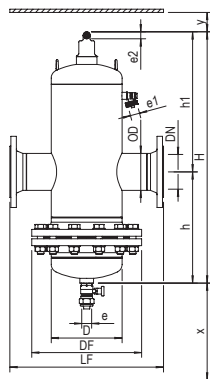
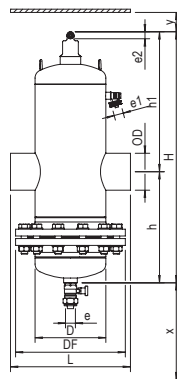
 Nom. flow velocity
1.5 m/s


without magnet



Suitable for cooling systems

L = Weld ends / F = Flange design (PN 16)


 SPIROCOMBI
DEMOUNTABLE
HI-FLOW
FLANGE DESIGN

 SPIROCOMBI
DEMOUNTABLE
HI-FLOW
WELD ENDS

CUSTOM

Please visit page 30 for further information on our custom products.

SPIROCOMBI® – Steel solution – Hi-flow

SPECIAL

Art.-No.	DN	OD	H	h1	h	D	L/LF	e1	ext.	e	int.	e2	ext.	x	y	Nom. flow rate	Nom. flow rate	Δp at nom. flow	Volume	Weight
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]							[mm]	[mm]	[m³/h]	[l/s]	[kPa]	[litr]	[kg]
HC050L	50	60,3	910	505	405	159	260	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	25,00	6,94	11,7	10,0	18,0
HC050F	50	60,3	910	505	405	159	350	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	25,00	6,94	11,7	10,0	23,0
HC065L	65	76,1	910	505	405	159	260	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	40,00	11,11	11,9	10,0	18,0
HC065F	65	76,1	910	505	405	159	350	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	40,00	11,11	11,9	10,0	24,0
HC080L	80	88,9	1.145	620	525	219	370	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	54,00	15,00	12,4	37,0	36,0
HC080F	80	88,9	1.145	620	525	219	470	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	54,00	15,00	12,4	37,0	43,0
HC100L	100	114,3	1.145	620	525	219	370	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	94,00	26,11	14,7	37,0	36,0
HC100F	100	114,3	1.145	620	525	219	475	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	94,00	26,11	14,7	37,0	45,0
HC125L	125	139,7	1.570	825	745	324	525	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	144,00	40,00	16,9	115,0	90,0
HC125F	125	139,7	1.570	825	745	324	635	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	144,00	40,00	16,9	115,0	102,0
HC150L	150	168,3	1.570	825	745	324	525	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	215,00	59,72	19,2	115,0	90,0
HC150F	150	168,3	1.570	825	745	324	635	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	215,00	59,72	19,2	115,0	105,0
HC200F	200	219,1	1.995	1.040	955	406	775	G¾	(M)	Rp1	(F)	R½	(M)	>200	>50	360,00	100,00	23,4	230,0	195,0
HC250F	250	273,0	2.680	1.385	1.295	508	890	G¾	(M)	Rp2	(F)	R½	(M)	>200	>50	575,00	159,72	27,5	500,0	343,0
HC300F	300	323,9	3.190	1.640	1.550	610	1.005	G¾	(M)	Rp2	(F)	R½	(M)	>200	>50	810,00	225,00	31,2	830,0	484,0


 Op. pressure
max. 10 bar

 Temperature
max. 110 °C

 Nom. flow velocity
3 m/s

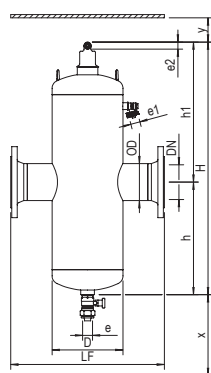
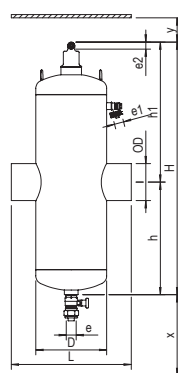

without magnet



Suitable for cooling systems

L = Weld ends / F = Flange design (PN 16)

Products in the range are available up to DN800 and are made to order – prices on application.


 SPIROCOMBI HI-FLOW
FLANGE DESIGN

 SPIROCOMBI HI-FLOW
WELD ENDS

CUSTOM

Please visit page 30 for further information on our custom products.

SPIROCOMBI® – Demountable steel solution – Hi-flow

SPECIAL

Art.-No.	DN	OD	H	h1	h	D	L/LF	DF	e1	ext.	e	int.	e2	ext.	x	y	Nom. flow rate	Nom. flow rate	Δp at nom. flow	Volume	Weight
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]							[mm]	[mm]	[m³/h]	[l/s]	[kPa]	[litr]	[kg]
HD050L	50	60,3	910	505	405	159	260	285	G¾	(M)	Rp1	(F)	R½	(M)	>790	>50	25,00	6,94	11,7	10,0	38
HD050F	50	60,3	910	505	405	159	350	285	G¾	(M)	Rp1	(F)	R½	(M)	>790	>50	25,00	6,94	11,7	10,0	43
HD065L	65	76,1	910	505	405	159	260	285	G¾	(M)	Rp1	(F)	R½	(M)	>790	>50	40,00	11,11	11,9	10,0	38
HD065F	65	76,1	910	505	405	159	350	285	G¾	(M)	Rp1	(F)	R½	(M)	>790	>50	40,00	11,11	11,9	10,0	44
HD080L	80	88,9	1.145	620	525	219	370	340	G¾	(M)	Rp1	(F)	R½	(M)	>1.020	>50	54,00	15,00	12,4	37,0	60
HD080F	80	88,9	1.145	620	525	219	470	340	G¾	(M)	Rp1	(F)	R½	(M)	>1.020	>50	54,00	15,00	12,4	37,0	68
HD100L	100	114,3	1.145	620	525	219	370	340	G¾	(M)	Rp1	(F)	R½	(M)	>1.020	>50	94,00	26,11	14,7	37,0	60
HD100F	100	114,3	1.145	620	525	219	475	340	G¾	(M)	Rp1	(F)	R½	(M)	>1.020	>50	94,00	26,11	14,7	37,0	70
HD125L	125	139,7	1.570	825	745	324	525	460	G¾	(M)	Rp1	(F)	R½	(M)	>1.450	>50	144,00	40,00	16,9	115,0	140
HD125F	125	139,7	1.570	825	745	324	635	460	G¾	(M)	Rp1	(F)	R½	(M)	>1.450	>50	144,00	40,00	16,9	115,0	153
HD150L	150	168,3	1.570	825	745	324	525	460	G¾	(M)	Rp1	(F)	R½	(M)	>1.450	>50	215,00	59,72	19,2	115,0	140
HD150F	150	168,3	1.570	825	745	324	635	460	G¾	(M)	Rp1	(F)	R½	(M)	>1.450	>50	215,00	59,72	19,2	115,0	156
HD200F	200	219,1	1.995	1.040	955	406	775	580	G¾	(M)	Rp1	(F)	R½	(M)	>1.880	>50	360,00	100,00	23,4	230,0	295
HD250F	250	273,0	2.680	1.385	1.295	508	890	715	G¾	(M)	Rp2	(F)	R½	(M)	>2.560	>50	575,00	159,72	27,5	500,0	573
HD300F	300	323,9	3.190	1.640	1.550	610	1.005	840	G¾	(M)	Rp2	(F)	R½	(M)	>3.070	>50	810,00	225,00	31,2	830,0	1.018


 Op. pressure
max. 10 bar

 Temperature
max. 110 °C

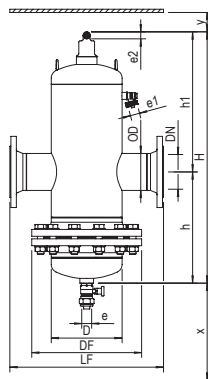
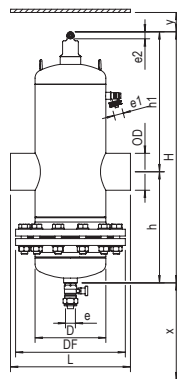
 Nom. flow velocity
3 m/s


without magnet



Suitable for cooling systems

L = Weld ends / F = Flange design (PN 16)


 SPIROCOMBI
DEMOUNTABLE
HI-FLOW
FLANGE DESIGN

 SPIROCOMBI
DEMOUNTABLE
HI-FLOW
WELD ENDS

CUSTOM

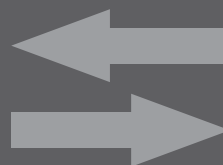
Please visit page 30 for further information on our custom products.

HYDRAULIC DEAERATORS AND DIRT SEPARATORS

SPIROCROSS®



Industry-leading
20-year guarantee



Minimal fluid
mixing



3-in-1 operation:
balancing, deaeration,
dirt separation



Increased energy
efficiency

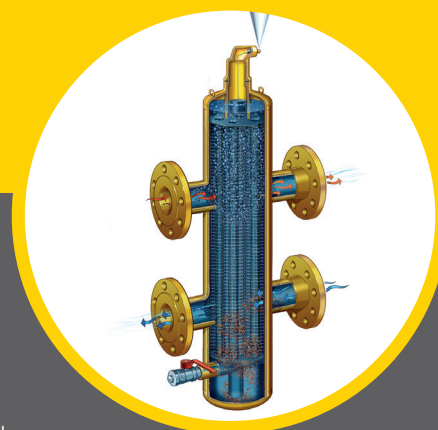


3-in-1 savings:
space, time, costs

All images used are for illustrative purposes only. Individual features like material used (i.e. brass or steel) may vary, as may guarantee.

BENEFITS OF SPIROCROSS

- Three functions in a single component
- Just four connections instead of eight
- Optimal hydraulic balance between primary and secondary pumps
- Spirotube guarantees minimal fluid mixing and thus the best temperature differential
- Real, active deaeration and dirt separation
- Even the tiniest air bubbles and dirt particles are separated and removed
- Constant low pressure drop
- Compact design and limited build height, thanks to the Spirotube
- Exceptional guarantee



SPIROCROSS HYDRAULIC DEAERATORS AND DIRT SEPARATORS

A good hydraulic balance is highly important for HVAC and process systems with separated circuits or several groups and pumps.

The effective removal of air and dirt also contributes towards the achievement of optimum system performance. Hydraulic balancing and air and dirt separation are combined in the SpiroCross.

Thanks to the combination of 3 functions in 1, savings will not only be made in purchasing but also in space, installation and maintenance costs.



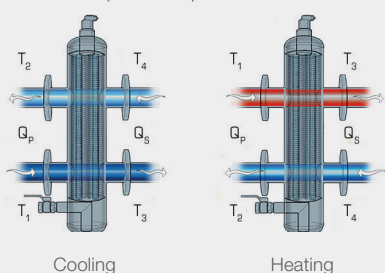
DEAERATION AND DIRT SEPARATION IN PERFECT BALANCE

The unique Spirotube ensures active deaeration and dirt separation in a very compact design and guarantees a perfect balance with minimal fluid mixing. Although the Spirotube can trap the smallest microbubbles and dirt particles, it has a very open structure which means that the SpiroCross does not clog up. Flow and pressure drop are not affected by the accumulated dirt, since it is collected outside the main flow.

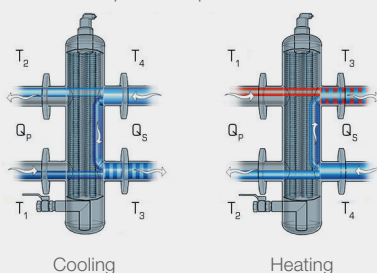
HOW DOES A HYDRAULIC SEPARATOR WORK?

A hydraulic separator balances the differences in volumetric flow between a primary circuit (supply = Q_p) and a secondary circuit (demand = Q_s). Three operating situations can occur if a hydraulic separator is installed in a system and these are shown below and to the right.

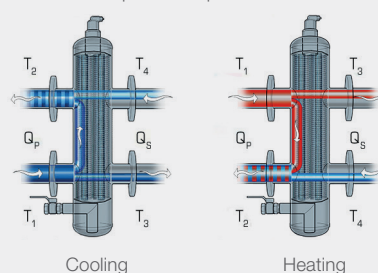
Situation 1: $Q_p = Q_s$ $\Delta T_p = \Delta T_s$ $T_2 = T_4$



Situation 2: $Q_p < Q_s$ $\Delta T_p > \Delta T_s$ $T_2 = T_4$



Situation 3: $Q_p > Q_s$ $\Delta T_p < \Delta T_s$ $T_1 = T_3$



SPIROCROSS®

Brass solution

NEW

SPIROCROSS® – Brass solution with magnet

Art.-No.	Connection d	int.	H	h	h1	h2	D	L	b	e	ext.	e2	ext.	x	y	Nom. flow rate	Nom. flow rate	Volume	Weight
			[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]					[mm]	[mm]	[m³/h]	[l/s]	[ltr]	[kg]
AX100J	Rp1	(F)	462	135	144	183	84	236	53	Rp ¾	(M)	R ½	(M)	>100	>50	2,00	0,56	1,3	6,5
AX125J	Rp1 ¼	(F)	462	135	144	183	84	236	53	Rp ¾	(M)	R ½	(M)	>100	>50	3,60	1,00	1,3	6,9
AX150J	Rp1 ½	(F)	462	135	144	183	84	236	53	Rp ¾	(M)	R ½	(M)	>100	>50	5,00	1,39	1,3	6,7



Op. pressure
max. 10 bar



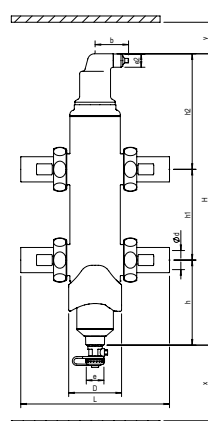
Temperature
max. 110 °C



Nom. flow velocity
1.5 m/s



with magnet

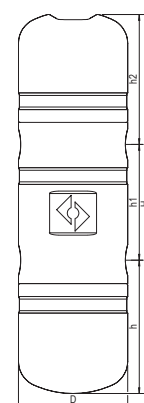


SPIROCROSS
WITG MAGNET

ACCESSORIES

SPIROCROSS® – Accessories for brass solution

Art.-No.	Description	Suitable for
TAX150	Insulation Set SpiroCross Brass	AX100(J), AX125(J), AX150(J)



SPIROCROSS
INSULATION SET

SPIROCROSS® – Steel solution

STANDARD

Art.-No.	DN	OD	H	h	h1	h2	h3	D	L/LF	e	int.	e2	ext.	x	y	Nom. flow rate	Nom. flow rate	Volume	Weight
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]					[mm]	[mm]	[m³/h]	[l/s]	[ltr]	[kg]
XC050L	50	60,3	815	238	240	337	100	159	260	Rp1	(F)	R1/2	(M)	>75	>50	12,50	3,47	12,0	13,0
XC050F	50	60,3	815	238	240	337	100	159	350	Rp1	(F)	R1/2	(M)	>75	>50	12,50	3,47	12,0	26,0
XC065L	65	76,1	905	251	305	349	100	159	260	Rp1	(F)	R1/2	(M)	>75	>50	20,00	5,56	13,0	19,0
XC065F	65	76,1	905	251	305	349	100	159	350	Rp1	(F)	R1/2	(M)	>75	>50	20,00	5,56	13,0	31,0
XC080L	80	88,9	999	270	360	369	110	219	370	Rp1	(F)	R1/2	(M)	>100	>50	27,00	7,50	29,0	33,0
XC080F	80	88,9	999	270	360	369	110	219	470	Rp1	(F)	R1/2	(M)	>100	>50	27,00	7,50	29,0	49,0
XC100L	100	114,3	1.261	351	460	450	110	219	370	Rp1	(F)	R1/2	(M)	>100	>50	47,00	13,06	38,0	43,0
XC100F	100	114,3	1.261	351	460	450	110	219	475	Rp1	(F)	R1/2	(M)	>100	>50	47,00	13,06	38,0	60,0
XC125L	125	139,7	1.546	443	560	543	130	324	525	Rp1	(F)	R1/2	(M)	>100	>50	72,00	20,00	105,0	95,0
XC125F	125	139,7	1.546	443	560	543	130	324	635	Rp1	(F)	R1/2	(M)	>100	>50	72,00	20,00	105,0	119,0
XC150L	150	168,3	1.781	505	670	606	130	324	525	Rp1	(F)	R1/2	(M)	>100	>50	108,00	30,00	123,0	110,0
XC150F	150	168,3	1.781	505	670	606	130	324	635	Rp1	(F)	R1/2	(M)	>100	>50	108,00	30,00	123,0	140,0
XC200F	200	219,1	2.321	675	870	776	170	406	775	Rp1	(F)	R1/2	(M)	>100	>50	180,00	50,00	252,0	274,0
XC250F	250	273,0	2.870	835	1.100	935	215	508	890	Rp2	(F)	R1/2	(M)	>100	>50	288,00	80,00	501,0	413,0
XC300F	300	323,9	3.388	996	1.295	1.097	245	610	1.005	Rp2	(F)	R1/2	(M)	>100	>50	405,00	112,50	859,0	656,0


 Op. pressure
max. 10 bar

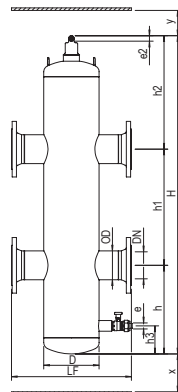
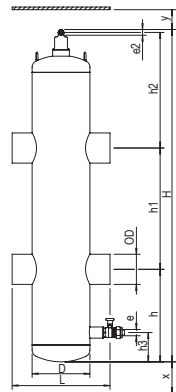
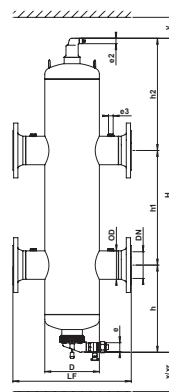
 Temperature
max. 110 °C

 Nom. flow velocity
1.5 m/s


without magnet

Products in the range are available up to DN800 and are made to order – prices on application.

L = Weld ends / F = Flange design (PN 16)


 SPIROCROSS
FLANGE DESIGN

 SPIROCROSS
WELD ENDS

 SPIROCROSS
WITH MAGNET

SPIROCROSS® – Steel solution with magnet

STANDARD

Art.-No.	DN	OD	H	h	h1	h2	D	L/LF	e	int.	e2	e3	ext.	X	Xr	Nom. flow rate	Nom. flow rate	Volume	Weight	Weight
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]						[mm]	[mm]	[m³/h]	[l/s]	[ltr]	[kg]	[kg]
XC050FM	50	60,3	810	234	240	337	159	350	Rp1	(F)	R1/2	-	(M)	>75	330	12,5	3,47	12	26	26
XC065FM	65	76,1	905	252	305	348	159	350	Rp1	(F)	R1/2	-	(M)	>75	330	20	5,56	13	31	31
XC080FM	80	88,9	997	268	360	369	219	470	Rp1	(F)	R1/2	1/2"	(M)	>100	370	27	7,5	29	46	46
XC100FM	100	114,3	1.261	351	460	450	219	475	Rp1	(F)	R1/2	1/2"	(M)	>100	370	47	13,06	38	57	57
XC125FM	125	139,7	1.543	441	560	542	324	635	Rp1	(F)	R1/2	1/2"	(M)	>100	540	72	20	105	114	114
XC150FM	150	168,3	1.778	503	660	604	324	635	Rp1	(F)	R1/2	1/2"	(M)	>100	540	108	30	123	125	125
XC200FM	200	219,1	2.327	682	870	776	406	775	Rp1	(F)	R1/2	1/2"	(M)	>100	700	180	50	252	245	245
XC250FM	250	273,0	2.870	835	1.100	935	508	890	Rp2	(F)	R1/2	1/2"	(M)	>100	750	288	80	501	372	372
XC300FM	300	323,9	3.394	1.002	1.295	1.096	610	1.005	Rp2	(F)	R1/2	1/2"	(M)	>100	900	405	112,5	859	578	578


 Op. pressure
max. 10 bar

 Temperature
max. 110 °C

 Nom. flow velocity
1.5 m/s


with magnet

L = Weld ends / F = Flange design (PN 16)

STANDARD
SPIROCROSS® R – low-loss header for Remeha cascade frames, steel, flanged

Art.-No.	DN	OD	H	h	h1	h2	h5	D	LF	X	Y	e	e2	Nom. flow rate [m³/h]	Nom. flow rate [l/s]	Volume [litr]	Weight [kg]	Matching insulation
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]							
XC065FK45A01	65	76,1	905	251	305	348	215	159	462	>75	>50	Rp1	R½	20	5,5	15,0	31,0	TBX065
XC080FK45A01	80	88,9	997	267	360	369	215	219	708	>100	>50	Rp1	R½	27	7,5	38,0	55,0	TBX085
XC100FK45A01	100	114,3	1.261	351	460	450	215	219	744	>100	>50	Rp1	R½	47	13,0	45,0	68,0	TBX100


 Op. pressure PS*
max. 6 bar

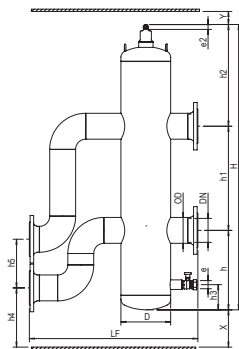
 Temperature TS*
max. 110 °C

 Nom. flow velocity
1,5 m/s

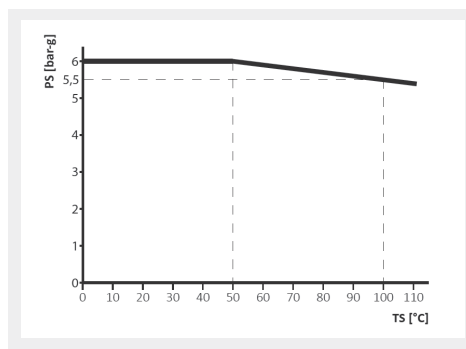

without magnet

Flange design (PN 6)

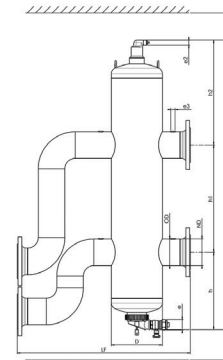
* See graph



SPIROCROSS XC FK



SpiroCross R, pressure and temperature range



SPIROCROSS XC FMK

NEW
SPIROCROSS® R – low-loss header with magnet for Remeha cascade frames, steel, flanged

Art.-No.	DN	OD	H	h	h1	h2	h5	D	LF	X	Xr	Y	e	e2	e3	Nom. flow rate [m³/h]	Nom. flow rate [l/s]	Volume [litr]	Weight [kg]
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]							
XC065FMK45A01	65	76,1	905	251	305	348	215	159,00	462	>75	330	>50	Rp1	R½	-	20	5,5	16	31
XC080FMK45A01	80	88,9	997	267	360	369	215	219,10	708	>100	370	>50	Rp1	R½	G½	27	7,5	34	49
XC100FMK45A01	100	114,3	1.261	332	460	450	215	219,10	744	>100	370	>50	Rp1	R½	G½	47	13	51	65


 Op. pressure *
max. 6 bar

 Temperature
max. 110 °C

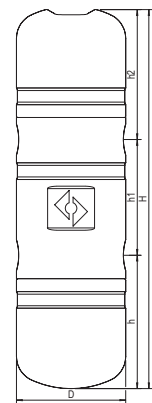
 Nom. flow velocity
1,5 m/s


with magnet

Flange design (PN 6)

ACCESSORIES
SPIROCROSS® – Accessories for steel solution

Art.-No.	Description	Suitable for
TBX050	Insulation Set SpiroCross steel	XC050F/L
TBX065	Insulation Set SpiroCross steel	XC065F/L
TBX080	Insulation Set SpiroCross steel	XC080F/L
TBX100	Insulation Set SpiroCross steel	XC100F/L
TBX125	Insulation Set SpiroCross steel	XC125F/L
TBX150	Insulation Set SpiroCross steel	XC150F/L
TBX050A01	Insulation Set SpiroCross steel with magnet	XC050FM
TBX065A01	Insulation Set SpiroCross steel with magnet	XC065FM
TBX080A01	Insulation Set SpiroCross steel with magnet	XC080FM
TBX100A01	Insulation Set SpiroCross steel with magnet	XC100FM
TBX125A01	Insulation Set SpiroCross steel with magnet	XC125FM
TBX150A01	Insulation Set SpiroCross steel with magnet	XC150FM


 SPIROCROSS
INSULATION SET

PRESSURISATION

SPIROEXPAND®



Correct pressure
throughout the system



Reduced
operating costs



Air levels reduced to
absolute minimum



Maximised efficiency
of all system components



Reduction of malfunction
and downtime

All images used are for illustrative purposes only. Individual features like material used (i.e. brass or steel) may vary, as may guarantee.

SPIROEXPAND®

BENEFITS OF SPIROEXPAND

The Spirotech approach, combining deaeration and dirt separation along with pressurisation will render the following benefits:

- A correctly designed system
- Increase System Efficiency
- Dramatically reduce maintenance costs for Pump Seals, Fouling of Control Valves, Blockages in Heat Exchangers



SPIROEXPAND PRESSURISATION

SpiroExpand enables automatic pressure monitoring and control and provides degassed makeup water. Adding a pressurisation solution to our established degassing products makes it possible to provide a total, integrated system care solution.

Today's highly energy-efficient heating and cooling systems offer optimal performance with air-free water. Most issues within HVAC systems are closely related to air being introduced into the system as a result of pressurisation issues. A poorly designed, installed or maintained pressurisation system can lead to negative pressures around the circuit. The introduction of oxygen through leaks or by refilling with undegassed, mostly hard water also makes corrosion inhibitors significantly less effective.

HYDRONIC STABILITY

The use of fluid as the heat-transfer medium in heating and cooling systems is a dynamic process. Hydronic stability means the fluid can transfer heat or cold at any location in the system, at any given time. Pressurisation is a key factor in hydronic stability.

WIDE RANGE OF SOLUTIONS

SpiroExpand covers a wide range of installations, from the most basic setup to the most extended, complicated system. All units are used to provide both full vacuum degassing of the system water. Makeup water is degassed prior to system entry, offering substantial long-term protection. Not just for the commissioning phase, but for the entire lifetime of the system. SpiroExpand can dramatically increase performance and avoid premature failure of major system components and, together with dirt separation and degassing, provide a system that performs the way it has been designed to delete.



SPIROEXPAND MULTICONTROL

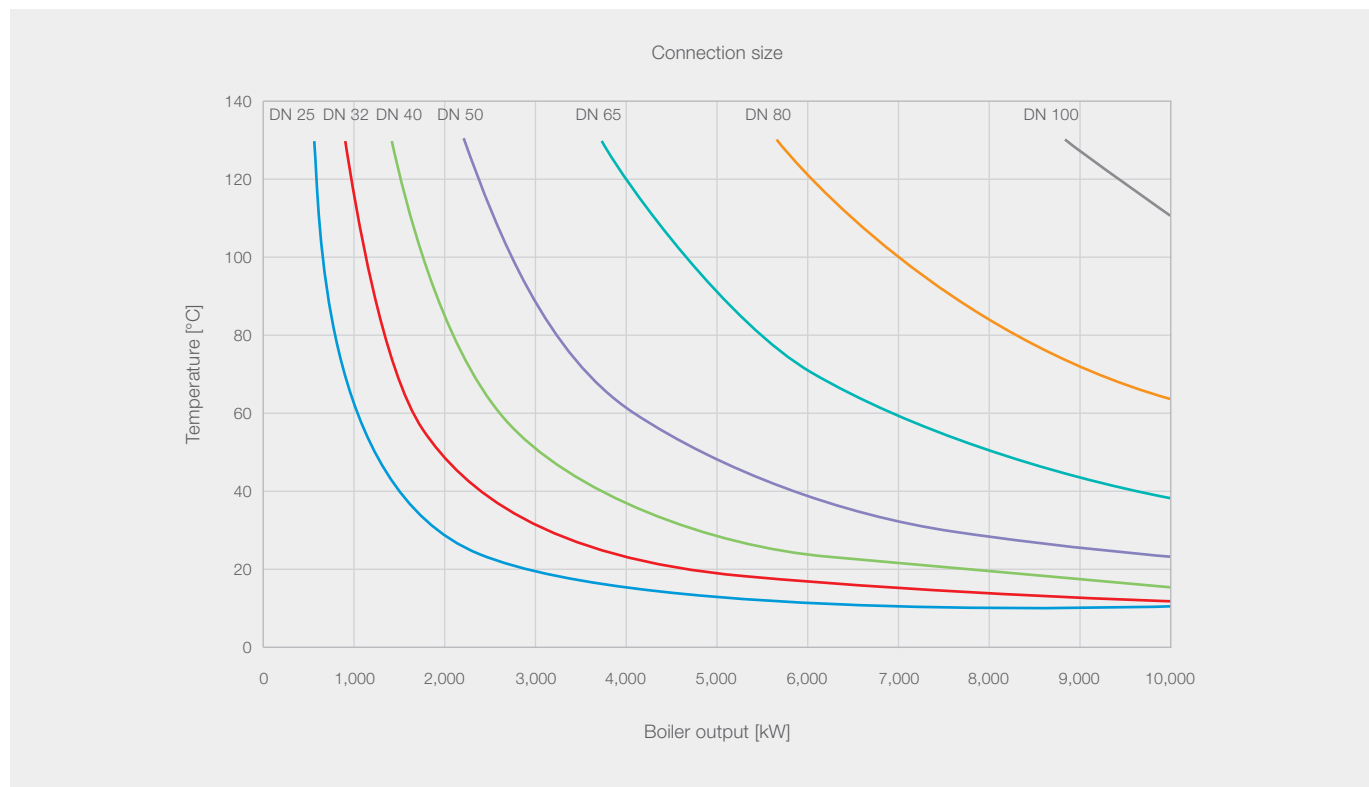
- For use in systems generally with large volumes and high pressures and also if space is limited and traditional fixed gas cushion type vessels are difficult to accommodate.
- The SpiroExpand MultiControl range offers a multitude of units to cover all system volumes and pressures.
- Special units are also available upon request for systems operating at higher pressures.

SPIROEXPAND CONTROL

- For use in systems generally up to (but not limited to) 300 m³. The SpiroExpand Control range offers a choice of 4 units to cover the pressure range from 1 bar to 16 bar.
- All units are used to provide both full vacuum degassing of the system water and make-up water is also degassed prior to entering the system offering substantial long-term protection of the system.

SPIROEXPAND FILL

- Primarily for use in smaller systems with relatively low pressures and volumes.
- The SpiroExpand Fill range offers the choice of a simple mechanical auto-fill unit or a wall-hung pumped fill unit.



SPIROEXPAND® – SpiroExpand PicoControl Kompact, Single pump 1 x 100 %, Single valve 1 x 100 %

Art.-No.	Volume	Upper working pressure range
	[litr]	[bar]
EPCK-S45-4.0	45	1,0–4,0
EPCK-S75-4.0	75	1,0–4,0
EPCK-S125-4.0	125	1,0–4,0
EPCK-S200-4.0	200	1,0–4,0
EPCK-S300-4.0	300	1,0–4,0
EPCK-S500-4.0	500	1,0–4,0

SPIROEXPAND® – MultiControl Kompact – SOLO, Single pump 1 x 100 %, Single valve 1 x 100 %

Art.-No.	Volume	Upper working pressure range
	[litr]	[bar]
EMCK-S45-4.0	45	1,0–4,0
EMCK-S75-4.0	75	1,0–4,0
EMCK-S125-4.0	125	1,0–4,0
EMCK-S200-4.0	200	1,0–4,0
EMCK-S300-4.0	300	1,0–4,0
EMCK-S500-4.0	500	1,0–4,0
EMCK-S45-5.6	45	2,0–5,6
EMCK-S75-5.6	75	2,0–5,6
EMCK-S125-5.6	125	2,0–5,6
EMCK-S200-5.6	200	2,0–5,6
EMCK-S300-5.6	300	2,0–5,6
EMCK-S500-5.6	500	2,0–5,6
EMCK-S45-8.1	45	4,0–8,1
EMCK-S75-8.1	75	4,0–8,1
EMCK-S125-8.1	125	4,0–8,1
EMCK-S200-8.1	200	4,0–8,1
EMCK-S300-8.1	300	4,0–8,1
EMCK-S500-8.1	500	4,0–8,1

SPIROEXPAND® – MultiControl Kompact – DUO, Double pump 2 x 50 %, Single valve 1 x 100 %

EMCK-D45-4.0	45	1,0–4,0
EMCK-D75-4.0	75	1,0–4,0
EMCK-D125-4.0	125	1,0–4,0
EMCK-D200-4.0	200	1,0–4,0
EMCK-D300-4.0	300	1,0–4,0
EMCK-D500-4.0	500	1,0–4,0
EMCK-D45-5.6	45	2,4–5,6
EMCK-D75-5.6	75	2,4–5,6
EMCK-D125-5.6	125	2,4–5,6
EMCK-D200-5.6	200	2,4–5,6
EMCK-D300-5.6	300	2,4–5,6
EMCK-D500-5.6	500	2,4–5,6
EMCK-D200-6.6	200	2,4–6,6
EMCK-D45-6.6	45	2,4–6,6
EMCK-D45-8.1	45	6,0–8,1
EMCK-D75-8.1	75	6,0–8,1
EMCK-D125-8.1	125	6,0–8,1
EMCK-D200-8.1	200	6,0–8,1
EMCK-D300-8.1	300	6,0–8,1
EMCK-D500-8.1	500	6,0–8,1

SPIROEXPAND® – MultiControl Kompact – DUO/TWIN, Double pump 2 x 50 %, Double valve 2 x 100 %

Art.-No.	Volume	Upper working pressure range
	[ltr]	[bar]
EMCK-D45-4.0-twin	45	1,0–4,0
EMCK-D75-4.0-twin	75	1,0–4,0
EMCK-D125-4.0-twin	125	1,0–4,0
EMCK-D200-4.0-twin	200	1,0–4,0
EMCK-D300-4.0-twin	300	1,0–4,0
EMCK-D500-4.0-twin	500	1,0–4,0
EMCK-D45-5.6-twin	45	2,4–5,6
EMCK-D75-5.6-twin	75	2,4–5,6
EMCK-D125-5.6-twin	125	2,4–5,6
EMCK-D200-5.6-twin	200	2,4–5,6
EMCK-D300-5.6-twin	300	2,4–5,6
EMCK-D500-5.6-twin	500	2,4–5,6
EMCK-D45-6.6-twin	45	2,4–6,6
EMCK-D75-6.6-twin	75	2,4–6,6
EMCK-D125-6.6-twin	125	2,4–6,6
EMCK-D200-6.6-twin	200	2,4–6,6
EMCK-D300-6.6-twin	300	2,4–6,6
EMCK-D500-6.6-twin	500	2,4–6,6
EMCK-D45-8.1-twin	45	4,0–8,1
EMCK-D75-8.1-twin	75	4,0–8,1
EMCK-D125-8.1-twin	125	4,0–8,1
EMCK-D200-8.1-twin	200	4,0–8,1
EMCK-D300-8.1-twin	300	4,0–8,1
EMCK-D500-8.1-twin	500	4,0–8,1

SPIROEXPAND® – MultiControl Kompact – MAXI, Double pump 2 x 100 %, Single valve 1 x 100 %

EMCK-M45-4.0	45	1,0–4,0
EMCK-M75-4.0	75	1,0–4,0
EMCK-M125-4.0	125	1,0–4,0
EMCK-M200-4.0	200	1,0–4,0
EMCK-M300-4.0	300	1,0–4,0
EMCK-M500-4.0	500	1,0–4,0
EMCK-M45-5.6	45	2,0–5,6
EMCK-M75-5.6	75	2,0–5,6
EMCK-M125-5.6	125	2,0–5,6
EMCK-M200-5.6	200	2,0–5,6
EMCK-M300-5.6	300	2,0–5,6
EMCK-M500-5.6	500	2,0–5,6
EMCK-M45-8.1	45	4,0–8,1
EMCK-M75-8.1	75	4,0–8,1
EMCK-M125-8.1	125	4,0–8,1
EMCK-M200-8.1	200	4,0–8,1
EMCK-M300-8.1	300	4,0–8,1
EMCK-M500-8.1	500	4,0–8,1

PRESSURISATION

SPIROEXPAND®

SPIROEXPAND® – MultiControl Kompact – MAXI/TWIN, Double pump 2 x 100 %, Double valve 2 x 100 %

PRESSURISATION

Art.-No.	Volume	Upper working pressure range
	[litr]	[bar]
EMCK-M45-4.0-twin	45	1.0–4.0
EMCK-M75-4.0-twin	75	1.0–4.0
EMCK-M125-4.0-twin	125	1.0–4.0
EMCK-M200-4.0-twin	200	1.0–4.0
EMCK-M300-4.0-twin	300	1.0–4.0
EMCK-M500-4.0-twin	500	1.0–4.0
EMCK-M45-5.6-twin	45	2.0–5.6
EMCK-M75-5.6-twin	75	2.0–5.6
EMCK-M125-5.6-twin	125	2.0–5.6
EMCK-M200-5.6-twin	200	2.0–5.6
EMCK-M300-5.6-twin	300	2.0–5.6
EMCK-M500-5.6-twin	500	2.0–5.6
EMCK-M45-8.1-twin	45	4.0–8.1
EMCK-M75-8.1-twin	75	4.0–8.1
EMCK-M125-8.1-twin	125	4.0–8.1
EMCK-M200-8.1-twin	200	4.0–8.1
EMCK-M300-8.1-twin	300	4.0–8.1
EMCK-M500-8.1-twin	500	4.0–8.1

SPIROEXPAND® – MultiControl Modular – SOLO, Single pump 1 x 100 %, Single valve 1 x 100 %

Art.-No.	Upper working pressure range
	[bar]
EMCM-S1-4.0	1,0–4,0
EMCM-S2-7.8	4,0–7,8
EMCM-S3-10.0	4,0–10,0
EMCM-S4-6.2	2,4–6,2
EMCM-S5-6.2	2,4–6,2
EMCM-S6-10.1	6,0–10,1
EMCM-S8-16.0	8,0–16,0
EMCM-S1-5.6	2,0–5,6
EMCM-S2-6.0	2,0–6,0
EMCM-S9-11.0	6,0–11,0
EMCM-S1-8.1	4,0–8,1
EMCM-S0.3-16.0	8,0–16,0
EMCM-S6-6.6	2,4–6,6
EMCM-S7-6.6	2,4–6,6
EMCM-S9-6.6	2,4–6,6

SPIROEXPAND® – MultiControl Modular – DUO, Double pump 2 x 50 %, Single valve 1 x 100 %

EMCM-D1-4.0	1,0–4,0
EMCM-D2-7.8	6,0–7,8
EMCM-D3-10.4	6,0–10,4
EMCM-D4-6.2	2,4–6,2
EMCM-D5-6.2	2,4–6,2
EMCM-D6-10.1	6,0–10,1
EMCM-D8-16.0	8,0–16,0
EMCM-D1-5.6	2,4–5,6
EMCM-D9-11.0	6,0–11,0
EMCM-D1-8.1	6,0–8,1
EMCM-D1-6.6	2,4–6,6
EMCM-D2-6.6	2,4–6,6
EMCM-D6-6.6	2,4–6,6
EMCM-D7-6.6	2,4–6,6
EMCM-D9-6.6	2,4–6,6

SPIROEXPAND® – MultiControl Modular – DUO/TWIN, Double pump 2 x 50 %, Double valve 2 x 100 %

EMCM-D1-4.0-twin	1,0–4,0
EMCM-D1-5.6-twin	2,4–5,6
EMCM-D1-6.6-twin	2,4–8,1
EMCM-D1-8.1-twin	6,0–8,1
EMCM-D2-6.6-twin	2,4–6,6
EMCM-D6-6.6-twin	2,4–6,6
EMCM-D9-6.6-twin	2,4–6,6
EMCM-D2-7.8-twin	6,0–7,8
EMCM-D3-10.4-twin	6,0–10,4
EMCM-D4-6.2-twin	2,4–6,2
EMCM-D5-6.2-twin	2,4–6,2
EMCM-D6-10.1-twin	6,0–10,1
EMCM-D9-11.0-twin	6,0–11,0

SPIROEXPAND® – MultiControl Modular – MAXI, Double pump 2 x 100 %, Single valve 1 x 100 %

Art.-No.	Upper working pressure range
	[bar]
EMCM-M1-4.0	1,0–4,0
EMCM-M2-7.8	4,0–7,8
EMCM-M3-10.0	4,0–10,0
EMCM-M4-6.2	2,4–6,2
EMCM-M5-6.2	2,4–6,2
EMCM-M6-10.1	6,0–10,1
EMCM-M8-16.0	8,0–16,0
EMCM-M1-5.6	2,0–5,6
EMCM-M2-6.0	2,0–6,0
EMCM-M9-6.6	2,4–6,6
EMCM-M9-11.0	6,0–11,0
EMCM-M1-8.1	4,0–8,1
EMCM-M0.3-16.0	8,0–16,0

SPIROEXPAND® – MultiControl Modular – MAXI/TWIN. Double pump 2 x 100 %. Double valve 2 x 100 %

EMCM-M1-4.0-twin	1,0–4,0
EMCM-M1-5.6-twin	2,0–5,6
EMCM-M1-8.1-twin	4,0–8,1
EMCM-M2-7.8-twin	4,0–7,8
EMCM-M3-10.0-twin	4,0–10,0
EMCM-M4-6.2-twin	2,4–6,2
EMCM-M5-6.2-twin	2,4–6,2
EMCM-M6-10.1-twin	6,0–10,1
EMCM-M8-16.0-twin	8,0–16,0
EMCM-M2-6.0-twin	2,0–6,0
EMCM-M9-11.0-twin	6,0–11,0
EMCM-M0.3-16.0-twin	8,0–16,0
EMCM-M0-6-6.6-twin	2,4–6,6
EMCM-M7-6.6-twin	2,4–6,6
EMCM-M9-6.6-twin	2,4–6,6

SPIROEXPAND® – TopControl Modular – SOLO, Single pump 1 x 100 %, Single valve 1 x 100 %

ETCM-S1-8.4	1,0–8,4
ETCM-S5.4-15.7	2,0–15,7
ETCM-S4.7-23.5	2,6–23,5
ETCM-S9.1-14.9	2,0–14,9
ETCM-S10.0-23.5	2,6–23,5

SPIROEXPAND® – TopControl Modular – DUO, Double pump 2 x 50 %, Single valve 1 x 100 %

ETCM-D1-8.4	1,0–8,4
ETCM-D10.8-15.7	2,0–15,7
ETCM-D9.4-23.5	2,6–23,5
ETCM-D18.2-14.9	2,0–14,9
ETCM-D20.0-23.5	2,6–23,5

SPIROEXPAND® – TopControl Modular – DUO/TWIN, Double pump 2 x 50 %, Double valve 2 x 100 %

ETCM-D1-8.4-twin	1,0–8,4
ETCM-D10.8-15.7-twin	2,0–15,7
ETCM-D9.4-23.5-twin	2,6–23,5
ETCM-D18.2-14.9-twin	2,0–14,9
ETCM-D20.0-23.5-twin	2,6–23,5

SPIROEXPAND® – TopControl Modular – MAXI, Double pump 2 x 100 %, Single valve 1 x 100 %

Art.-No.	Description	max. op. pressure
ETCM-M1-8.4		max. op. pressure 1,0–8,4 bar
ETCM-M5.4-15.7		max. op. pressure 2,0–15,7 bar
ETCM-M4.7-23.5		max. op. pressure 2,6–23,5 bar
ETCM-M9.1-14.9		max. op. pressure 2,0–14,9 bar
ETCM-M10.0-23.5		max. op. pressure 2,6–23,5 bar

SPIROEXPAND® – TopControl Modular – MAXI/TWIN, Double pump 2 x 100 %, Double valve 2 x 100 %

ETCM-M1-8.4-twin		max. op. pressure 1,0–8,4 bar
ETCM-M5.4-15.7-twin		max. op. pressure 2,0–15,7 bar
ETCM-M4.7-23.5-twin		max. op. pressure 2,6–23,5 bar
ETCM-M9.1-14.9-twin		max. op. pressure 2,0–14,9 bar
ETCM-M10.0-23.5-twin		max. op. pressure 2,6–23,5 bar

SPIROEXPAND® – MultiControl COOL

EMCC-S1-4.0	MultiControl COOL SOLO	max. op. pressure 1,0–4,0 bar
EMCC-S1-5.6	MultiControl COOL SOLO	max. op. pressure 2,0–5,6 bar
EMCC-D1-4.0	MultiControl COOL DUO	max. op. pressure 1,0–4,0 bar
EMCC-D1-5.6	MultiControl COOL DUO	max. op. pressure 2,0–5,6 bar
EMCC-M1-4.0	MultiControl COOL MAXI	max. op. pressure 1,0–4,0 bar
EMCC-M1-5.6	MultiControl COOL MAXI	max. op. pressure 2,0–5,6 bar

SPIROEXPAND® – MultiControl COOL

Art.-No.	Description	Additional description
EMCC-G125	MultiControl COOL expansion vessel	with level measurement
EMCC-G200	MultiControl COOL expansion vessel	with level measurement
EMCC-G300	MultiControl COOL expansion vessel	with level measurement
EMCC-G500	MultiControl COOL expansion vessel	with level measurement
EMCC-Z125	MultiControl COOL supplementary vessel	only overflow line, without level measurement
EMCC-Z200	MultiControl COOL supplementary vessel	only overflow line, without level measurement
EMCC-Z300	MultiControl COOL supplementary vessel	only overflow line, without level measurement
EMCC-Z500	MultiControl COOL supplementary vessel	only overflow line, without level measurement
EMCC-N1	MultiControl COOL post-feed module	quantity controlled feed, ½"
EMCC-Z	MultiControl COOL Connection Set	EMCC-Z to EMCC-G and EMCC-Z to EMCC-Z
EMCC-G	MultiControl COOL Connection Set	EMCC-G to EMCC-_1, suction and overflow line

SPIROEXPAND® – MultiControl AUTOFILL

EMCA-S1-2.7	MultiControl AUTOFILL SOLO	filling pressure up to max. 2,7 bar
EMCA-S1-5.2	MultiControl AUTOFILL SOLO	filling pressure up to max. 5,2 bar
EMCA-G640	MultiControl AUTOFILL expansion vessel MCA-G640	
EMCA-G1000	MultiControl AUTOFILL expansion vessel MCA-G1000	
E55390	MultiControl AUTOFILL Connection Set	MCA-G to MCA-_1, suction and circulation line

SPIROEXPAND® – SpiroExpand Fill

MR0650	SpiroExpand Fill 230 V/50	
--------	---------------------------	--



SpiroExpand EMCC suitable for cooling systems

SPIROEXPAND® – Expansion vessel for MultiControl Kompact

Art.-No.	Volume [ltr]	Description
EMCB-Z75	75	only overflow line, without level measurement
EMCB-Z125	125	only overflow line, without level measurement
EMCB-Z200	200	only overflow line, without level measurement
EMCB-Z300	300	only overflow line, without level measurement
EMCB-Z500	500	only overflow line, without level measurement

SPIROEXPAND® – Expansion vessel for MultiControl Modular and TopControl Modular

EP0200R	200	elko-mat EG 200M
EP0300R	300	elko-mat EG 300M
EP0500R	500	elko-mat EG 500M
EP0800R	800	elko-mat EG 800M
EP1000R	1,000	elko-mat EG 1000M
EP1500R	1,500	elko-mat EG 1500M
EP2000R	2,000	elko-mat EG 2000M
EP2500R	2,500	elko-mat EG 2500M
EP3000R	3,000	elko-mat EG 3000M
EP4000R	4,000	elko-mat EG 4000M
EP5000R	5,000	elko-mat EG 5000M
EPX100R	10,000	elko-mat EG 10000M

SPIROEXPAND® – Supplementary vessels for MultiControl Modular and TopControl Modular

EP0300RS	300	elko-mat EGZ 300M
EP0500RS	500	elko-mat EGZ 500M
EP0800RS	800	elko-mat EGZ 800M
EP1000RS	1.000	elko-mat EGZ 1000M
EP1500RS	1.500	elko-mat EGZ 1500M
EP2000RS	2.000	elko-mat EGZ 2000M
EP2500RS	2.500	elko-mat EGZ 2500M
EP3000RS	3.000	elko-mat EGZ 3000M
EP4000RS	4.000	elko-mat EGZ 4000M
EP5000RS	5.000	elko-mat EGZ 5000M
EPX100RS	10.000	elko-mat EGZ 10000M

SPIROEXPAND® – Intermediate cooling vessel for EV models

Art.-No.	Volume [ltr]	Description
ET0100T1	100	P max. 10 bar / T max. 110°C
ET0150T1	250	P max. 10 bar / T max. 110°C
ET0200T1	200	P max. 10 bar / T max. 110°C
ET0350T1	350	P max. 10 bar / T max. 110°C
ET0500T1	500	P max. 10 bar / T max. 110°C
ET0750T1	750	P max. 10 bar / T max. 110°C
ET1000T1	1.000	P max. 10 bar / T max. 110°C
ET1500T1	1.500	P max. 10 bar / T max. 110°C
ET2000T1	2.000	P max. 10 bar / T max. 110°C
ET3000T1	3.000	P max. 10 bar / T max. 110°C

SPIROEXPAND® – Expansion modules and accessories for MultiControl and TopControl

ACCESSORIES

Art.-No.	Description
EMCPB	MultiControl Busmodul Profibus Profibus-Standard DP-V0
EMCPN	MultiControl Busmodul Profinet Profinet IO-Device
EMCMO	MultiControl Busmodul Modbus RTU RS485
EMCWE	MultiControl Webmodul ethernet 100 Mbps, WLAN GH2.4 z 802.11n
EMCSM	MultiControl SMS-Modul
EMCAM	MultiControl Expansion module. "analogue remote signaling"
EMCBM	MultiControl Expansion module. "binary remote message"
EMCBMR	MultiControl Expansion module. "binary remote messages & remote acknowledgment"
EMCF-1	MultiControl post-feed module EMCF-1. Quantity controlled feed ½"
EMCF-3	MultiControl post-feed module EMCF-3. Quantity controlled feed ¾"
TMA05	Backflow preventer with controllable low pressure zone (½" IG)
TMA06	Backflow preventer with controllable low pressure zone (¾" IG)
EMCB-ZB	Bypass Kit for MultiControl Kompact and Modular 1/PN10
EMAE-1	MultiControl degassing module EMAE-1, Low pressure degassing, ½", suitable for EMCM
EMCB-ZC	MultiControl Kompact connection set EMCB-Z. Connection of EMCB-Z to EMCK (extension)
EPCF-1	PicoControl post-feed module ½" post-feed drinking water systems

SPIROEXPAND® – MWE-module demineralisatie voor suppletiewater

EMVE2	elko-mat EMVE 2 Module demineralisation supplementary water
EMWE4	Module demineralisation supplement water type EMVE
EMWE6	elko-mat EMWE 6 Module water softening make-up water
EMWE12	elko-mat EMWE 12 Module water softener
ER-MWE28	elko-mat ER-EMWE 28 Module water softening, regenerating

SPIROEXPAND® – Diaphragm safety valve
ACCESSORIES

Art.-No.	Description
E50111	Diaphragm safety valve 1/2"– 3 bar, max. heating capacity: 50 kW
E50112	Diaphragm safety valve 1/2"– 3 bar, max. heating capacity: 50 kW
E50113	Diaphragm safety valve 3/4"– 3 bar, max. heating capacity: 100 kW
E50512	Diaphragm safety valve 1/2"– 6 bar, max. heating capacity: 75 kW
E50513	Diaphragm safety valve 3/4"– 6 bar, max. heating capacity: 150 kW
E52001	Diaphragm safety valve 1"–3 bar, max. heating capacity: 354 kW
E52002	Diaphragm safety valve 1"–4 bar, max. heating capacity: 436 kW
E52003	Diaphragm safety valve 1"–5 bar, max. heating capacity: 515 kW
E52004	Diaphragm safety valve 1"–6 bar, max. heating capacity: 591 kW
E52005	Diaphragm safety valve 5/4"–3 bar, max. heating capacity: 729 kW
E52006	Diaphragm safety valve 5/4"–4 bar, max. heating capacity: 898 kW
E52007	Diaphragm safety valve 5/4"–5 bar, max. heating capacity: 1,060 kW
E52008	Diaphragm safety valve 5/4"–6 bar, max. heating capacity: 1,216 kW
E52009	Diaphragm safety valve 5/4"–3 bar, max. heating capacity: 949 kW
E52010	Diaphragm safety valve 5/4"–4 bar, max. heating capacity: 1,168 kW
E52011	Diaphragm safety valve 5/4"–5 bar, max. heating capacity: 1,378 kW
E52012	Diaphragm safety valve 5/4"–6 bar, max. heating capacity: 1,582 kW
E52013	Diaphragm safety valve 2"–3 bar, max. heating capacity: 1,322 kW
E52014	Diaphragm safety valve 2"–4 bar, max. heating capacity: 1,626 kW
E52015	Diaphragm safety valve 2"–5 bar, max. heating capacity: 1,920 kW
E52016	Diaphragm safety valve 2"–6 bar, max. heating capacity: 2,203 kW
E52017	Diaphragm safety valve 1"–8 bar, max. heating capacity: 743 kW
E52018	Diaphragm safety valve 5/4"–8 bar, max. heating capacity: 1,529 kW
E52019	Diaphragm safety valve 5/4"–8 bar, max. heating capacity: 1,989 kW
E52020	Diaphragm safety valve 2"–8 bar, max. heating capacity: 2,770 kW
E52021	Diaphragm safety valve 1"–10 bar, max. heating capacity: 889 kW
E52022	Diaphragm safety valve 5/4"–10 bar, max. heating capacity: 1,830 kW
E52023	Diaphragm safety valve 5/4"–10 bar, max. heating capacity: 2,380 kW
E52024	Diaphragm safety valve 2"–10 bar, max. heating capacity: 3,315 kW

SPIROEXPAND® – Expansion vessel with fixed pressure and butyl membrane

Art.-No.	Description	
EV0002FP06	Expansion vessel with fixed pressure and butyl membrane	2 Liter, 6 bar
EV0008FP06	Expansion vessel with fixed pressure and butyl membrane	8 Liter, 6 bar
EV0012FP06	Expansion vessel with fixed pressure and butyl membrane	12 Liter, 6 bar
EV0018FP06	Expansion vessel with fixed pressure and butyl membrane	18 Liter, 6 bar
EV0024FP06	Expansion vessel with fixed pressure and butyl membrane	24 Liter, 6 bar
EV0035FP06	Expansion vessel with fixed pressure and butyl membrane	35 Liter, 6 bar
EV0060FP06	Expansion vessel with fixed pressure and butyl membrane	60 Liter, 6 bar
EV0080FP06	Expansion vessel with fixed pressure and butyl membrane	80 Liter, 6 bar
EV0100FP06	Expansion vessel with fixed pressure and butyl membrane	100 Liter, 6 bar
EV0150FP06	Expansion vessel with fixed pressure and butyl membrane	150 Liter, 6 bar
EV0200F	Expansion vessel with fixed pressure and butyl membrane	200 Liter, 10 bar
EV0250F	Expansion vessel with fixed pressure and butyl membrane	250 Liter, 10 bar
EV0300F	Expansion vessel with fixed pressure and butyl membrane	300 Liter, 10 bar
EV0450F	Expansion vessel with fixed pressure and butyl membrane	450 Liter, 10 bar

SPIROEXPAND® – Expansion vessel with replaceable EPDM bladder

Art.-No.	Description	
EV0750RE	Expansion vessel with replaceable EPDM bladder	750 Liter, 10 bar
EV1000RE	Expansion vessel with replaceable EPDM bladder	1000 Liter, 10 bar
EV1500RE	Expansion vessel with replaceable EPDM bladder	1500 Liter, 10 bar
EV2000RE	Expansion vessel with replaceable EPDM bladder	2000 Liter, 10 bar
EV3000RE	Expansion vessel with replaceable EPDM bladder	3000 Liter, 10 bar
EV0100REP16	Expansion vessel with replaceable EPDM bladder	100 Liter, 16 bar
EV0150REP16	Expansion vessel with replaceable EPDM bladder	150 Liter, 16 bar
EV0200REP16	Expansion vessel with replaceable EPDM bladder	200 Liter, 16 bar
EV0300REP16	Expansion vessel with replaceable EPDM bladder	300 Liter, 16 bar
EV0500REP16	Expansion vessel with replaceable EPDM bladder	500 Liter, 16 bar
EV0750REP16	Expansion vessel with replaceable EPDM bladder	750 Liter, 16 bar
EV0850REP16	Expansion vessel with replaceable EPDM bladder	850 Liter, 16 bar
EV1500REP16	Expansion vessel with replaceable EPDM bladder	1500 Liter, 16 bar
EV2000REP16	Expansion vessel with replaceable EPDM bladder	2000 Liter, 16 bar
EV3000REP16	Expansion vessel with replaceable EPDM bladder	3000 Liter, 16 bar
EV0050REP25	Expansion vessel with replaceable EPDM bladder	50 Liter, 25 bar
EV0100REP25	Expansion vessel with replaceable EPDM bladder	100 Liter, 25 bar
EV0150REP25	Expansion vessel with replaceable EPDM bladder	150 Liter, 25 bar
EV0200REP25	Expansion vessel with replaceable EPDM bladder	200 Liter, 25 bar
EV0300REP25	Expansion vessel with replaceable EPDM bladder	300 Liter, 25 bar
EV0500REP25	Expansion vessel with replaceable EPDM bladder	500 Liter, 25 bar
EV0850REP25	Expansion vessel with replaceable EPDM bladder	850 Liter, 25 bar
EV1000REP25	Expansion vessel with replaceable EPDM bladder	1000 Liter, 25 bar
EV1500REP25	Expansion vessel with replaceable EPDM bladder	1500 Liter, 25 bar
EV2000REP25	Expansion vessel with replaceable EPDM bladder	2000 Liter, 25 bar
EV3000REP25	Expansion vessel with replaceable EPDM bladder	3000 Liter, 25 bar

SPIROEXPAND® – Expansion vessel – series N

Art.-No.	Volume [ltr]	Description
EVN4	4	P max. 3 bar / T max. 70°C / Hanging vessel
EVN8	8	P max. 3 bar / T max. 70°C / Hanging vessel
EVN12	12	P max. 3 bar / T max. 70°C / Hanging vessel
EVN18	18	P max. 3 bar / T max. 70°C / Hanging vessel
EVN25	25	P max. 3 bar / T max. 70°C / Hanging vessel
EVN35	35	P max. 3 bar / T max. 70°C / Hanging vessel
EVN50	50	P max. 3 bar / T max. 70°C / Hanging vessel
EVN80	80	P max. 3 bar / T max. 70°C / Hanging vessel
EVN100	100	P max. 3 bar / T max. 70°C / Hanging vessel
EVNP115	115	P max. 3 bar / T max. 70°C / Hanging vessel
EVN140	140	P max. 3 bar / T max. 70°C / Hanging vessel
EVNP230	230	P max. 3 bar / T max. 70°C / Standing vessel

SPIROEXPAND® – Standing expansion vessel – series SG

EVSG120	120	P max. 3 bar / T max. 70°C
EVSG180	180	P max. 3 bar / T max. 70°C
EVSG250	250	P max. 3 bar / T max. 70°C
EVSG330	330	P max. 3 bar / T max. 70°C
EVSG500	500	P max. 3 bar / T max. 70°C

SPIROEXPAND® – Safety expansion vessel – series COOL

EVCool18	18	P max. 6 bar / T range -10°C - 70°C
EVCool25	25	P max. 6 bar / T range -10°C - 70°C
EVCool35	35	P max. 6 bar / T range -10°C - 70°C
EVCool50	50	P max. 6 bar / T range -10°C - 70°C

SPIROEXPAND® – Universal expansion vessel with replaceable membrane – series U

EVU18-6	18	P max. 6 bar / T max. 70°C / Hanging vessel
EVU25-6	25	P max. 6 bar / T max. 70°C / Hanging vessel
EVU35-6	35	P max. 6 bar / T max. 70°C / Hanging vessel
EVU50-6	50	P max. 6 bar / T max. 70°C / Hanging vessel
EVU90-6	90	P max. 6 bar / T max. 70°C / Hanging vessel
EVU120-6	120	P max. 6 bar / T max. 70°C / Standing vessel
EVU200-6	200	P max. 6 bar / T max. 70°C / Standing vessel
EVU300-6	300	P max. 6 bar / T max. 70°C / Standing vessel

SPIROEXPAND® – Universal expansion vessel with replaceable membrane – series U

EVU15-10	15	P max. 10 bar / T max. 70°C / Hanging vessel
EVU20-10	20	P max. 10 bar / T max. 70°C / Hanging vessel
EVU30-10	30	P max. 10 bar / T max. 70°C / Hanging vessel
EVU60-10	60	P max. 10 bar / T max. 70°C / Hanging vessel
EVU120-10	120	P max. 10 bar / T max. 70°C / Standing vessel
EVU180-10	180	P max. 10 bar / T max. 70°C / Standing vessel
EVU240-10	240	P max. 10 bar / T max. 70°C / Standing vessel
EVU300-10	300	P max. 10 bar / T max. 70°C / Standing vessel



SpiroExpand EVCool suitable for cooling systems

SPIROEXPAND® – Expansion vessel for solar installations with changable membrane – series Solar

Art.-No.	Volume [ltr]	Description
EVSolar18	18	P max. 6 bar / T max. 70°C / Hanging vessel
EVSolar25	25	P max. 6 bar / T max. 70°C / Hanging vessel
EVSolar35	35	P max. 6 bar / T max. 70°C / Hanging vessel
EVSolar50	50	P max. 6 bar / T max. 70°C / Hanging vessel
EVSolar90	90	P max. 6 bar / T max. 70°C / Standing vessel
EVSolar120	120	P max. 6 bar / T max. 70°C / Standing vessel
EVSolar200	200	P max. 6 bar / T max. 70°C / Standing vessel
EVSolar300	300	P max. 6 bar / T max. 70°C / Standing vessel

SPIROEXPAND® – Expansion vessel for drinking water in non-flowed design – series EVSan

EVSan2	2	P max. 10 bar / T max. 70°C / Hanging vessel
EVSan15	15	P max. 10 bar / T max. 70°C / Hanging vessel
EVSan20	20	P max. 10 bar / T max. 70°C / Hanging vessel
EVSan30	30	P max. 10 bar / T max. 70°C / Hanging vessel
EVSan60	60	P max. 10 bar / T max. 70°C / Hanging vessel
EVSan120	120	P max. 10 bar / T max. 70°C / Standing vessel
EVSan180	180	P max. 10 bar / T max. 70°C / Standing vessel
EVSan240	240	P max. 10 bar / T max. 70°C / Standing vessel
EVSan300	300	P max. 10 bar / T max. 70°C / Standing vessel

SPIROEXPAND® – Expansion vessel for drinking water in flow-through design – series EVSanD

EVSan20D	20	P max. 10 bar / T max. 70°C / hanging vessel
EVSan30D	30	P max. 10 bar / T max. 70°C / hanging vessel
EVSan60D	60	P max. 10 bar / T max. 70°C / hanging vessel
EVSan90D	90	P max. 10 bar / T max. 70°C / hanging vessel
EVSan120D	120	P max. 10 bar / T max. 70°C / Standing vessel
EVSan180D	180	P max. 10 bar / T max. 70°C / Standing vessel
EVSan240D	240	P max. 10 bar / T max. 70°C / Standing vessel
EVSan300D	300	P max. 10 bar / T max. 70°C / Standing vessel

SPIROEXPAND® – Safety expansion vessel Compact with replaceable membrane and maintenance unit – series C

EVC600	600	P max. 3 bar / T max. 70°C
EVC800	800	P max. 3 bar / T max. 70°C
EVC1000	1.000	P max. 3 bar / T max. 70°C

SPIROEXPAND® – Safety expansion vessel Compact with replaceable membrane and maintenance unit– series CV

EVCV120	120	P max. 5 bar / T max. 70°C
EVCV180	180	P max. 5 bar / T max. 70°C
EVCV250	250	P max. 5 bar / T max. 70°C
EVCV330	330	P max. 5 bar / T max. 70°C
EVCV600	600	P max. 5 bar / T max. 70°C

SPIROEXPAND® – Accessories for expansion vessels

E50110	Maintenance unit ¾" a/a, elko-flex WE ¾" a/a
E50100	Set of 2 maintenance units ¾" a/a, elko-flex WE ¾" a/a
E50207	Maintenance unit 1" a/i, elko-flex WE 1" a/i
E50200	Set of 2 maintenance units 1" a/i, elko-flex WE 1" a/i
E50307	Maintenance unit ¾" a/i, elko-flex WE ¾" a/i
E50120	Digital test gauge with display – test range: 0-9 bar

DEMINERALIZATION

SPIROPURE®



Maintains and improves
system water quality



Optimises efficiency of the
total installation or process



Supports functioning of
other Spirotech solutions



Quick and easy
installation

All images used are for illustrative purposes only. Individual features like material used (i.e. brass or steel) may vary, as may guarantee.

SPIROPURE® – Filling stations for demineralization

Art.-No.	Description	Resin content [ltr]
G61.556	SpiroPure HomeFill Basic	0,75
G61.557	SpiroPure HomeFill XL	1,50
G61.558	SpiroPure HomeFill Duplex	2 x 1,5
G61.679	SpiroPure HomeFill Basic OFK	0,75
G61.680	SpiroPure HomeFill XL OFK	1,50



SPIROPURE
HOMEFILL BASIC



SPIROPURE
PROFILL 23.0

SPIROPURE® – Mobile filling stations (bypass)

G61.561	SpiroPure ProFill 9.5	9,50
G61.562	SpiroPure ProFill 23.0	23,0
G61.563	SpiroPure ProFill Advanced 23.0	23,0
G61.681	SpiroPure ProFill 9.5 Small	9,50
G61.682	SpiroPure ProFill 23.0 Small	23,0

SPIROPURE® – Supplementation

G61.683	SpiroPure EcoFill LED Mini	6,00
G61.684	SpiroPure EcoFill LED Small	9,50
G61.685	SpiroPure EcoFill LED Big	23,0
G61.686	SpiroPure EcoFill LED Tall	46,0

SPIROPURE® – Refill cartridges

G61.564	Refill for: G61.562, G61.563	23,0
G61.565	Refill for: G61.561	9,50
G61.559	Refill for: G61.556	0,75
G61.560	Refill for: G61.557, G61.558	1,50
G61.688	SpiroPure Fill Set light	1,50
G61.689	SpiroPure Fill Set	3,00

SPIROPURE® – Supplementation

G61.943	SpiroPure EcoFill GLT Mini	6,00
G61.944	SpiroPure EcoFill GLT Small	9,50
G61.945	SpiroPure EcoFill GLT Big	23,0
G61.946	SpiroPure EcoFill GLT Tall	46,0

SPIROPURE® – Refill cartridges

G61.564	Refill for: G61.562, G61.563	23,0
G61.565	Refill for: G61.561	9,50
G61.559	Refill for: G61.556	0,75
G61.560	Refill for: G61.557, G61.558	1,50
G61.688	SpiroPure Fill Set light	1,50
G61.689	SpiroPure Fill Set	3,00
G61.947	SpiroPure Refill Pack ProFill pH Control 6 l.	6,00
G61.948	SpiroPure Rinsing head for ProFill 23 l.	-

FLUSHING AGENTS AND ADDITIVES

SPIROPLUS®



All images used are for illustrative purposes only. Individual features like material used (i.e. brass or steel) may vary, as may guarantee.



Maintains and improves system water quality



Optimises efficiency of the total installation or process



pH-neutral cleaners



For cleaning, sealing and protecting the system



Supports functioning of other Spirotech solutions



Prevents damage and malfunction

SPIROPLUS®

SPIROPLUS – PROTECTION FROM THE INSIDE

SpiroPlus products are developed specifically for use in heating, cooling and process installations. Combined with our first class hardware, SpiroPlus products improve and maintain the quality of the installation fluid and the efficiency of the entire installation or process.

**SPIROPLUS FLUSHING AGENTS AND ADDITIVES**

Today's equipment is more sensitive to the make-up and quality of system water. Many manufacturers are even specifying water quality requirements as a precondition for their guarantees.

SpiroPlus flushing agents and additives are designed to bring and keep system fluid and the system itself in top condition. Pressurisation is optimised and potential deaeration and dirt separation problems are solved and prevented in both existing and newly constructed systems. Rules, regulations and preferences concerning additives for installation fluids are changing. An important goal is to improve the total system efficiency and by doing that, to reduce energy consumption. Another reason is that modern equipment is much more sensitive to the composition and the quality of the system fluid and the effects of it. A number of boiler manufacturers even set requirements regarding the fluid quality connected to their guarantee conditions.

DEMINERALISATION OF HEATING WATER

Demineralisation of heating water not only effectively prevents hardness deposits in the heating system, it also helps prevent corrosion. However, unfavourable pH changes that can occur after system commissioning are often underestimated. This particularly applies if the pH value needs to remain within a narrow range, as with aluminium materials (8.2–8.5). All Spirotech filling equipment and refilling stations use a special mixed-bed resin. The resin not only removes residual hardness and dissolved salts from the heating water, it also stabilises the pH. This avoids the need to check the heating water after 8 to 12 weeks.

GUARANTEED SYSTEM FLUID QUALITY

The SpiroPlus range offers flushing agents for specific actions as well as additives that remain active inside an installation. Whether you're cleaning a system prior to installation, protecting it from frost, or removing dirt, contaminants, calcium, air or corrosion, Spirotech has a solution. The full line of SpiroPlus fluids includes a mild cleaner, power cleaner (both pH-neutral), lime cleaner, sealant, protector and a wide range of anti freeze and glycol mixtures. All these products facilitate quality improvement and preservation of fluid quality. SpiroPlus Protector and SpiroPlus AntiFreeze HC even exceed the EU REACH requirements which have been adopted to protect human health and the environment.

We also develop custom additives and fluids, depending on the requirements for a specific system or process. Experts working at our specialised lab can offer you the best possible advice in every situation. Spirotech offers an extensive range of solutions for system fluid analysis and conditioning in HVAC and process systems. This includes accessories, additives and advice targeted at reducing faults, wear and maintenance as well as maximising system performance and lower energy consumption.

SPIROPLUS® – Flushing agents and additives
STANDARD

Art.-No.	Description	Volume [ltr]
CD001	SpiroPlus Mild Cleaner, Dirt Dissolver	1
CD010	SpiroPlus Mild Cleaner, Dirt Dissolver	10
CD020	SpiroPlus Mild Cleaner, Dirt Dissolver	20
CC001	SpiroPlus Power Cleaner, Power Dirt Dissolver	1
CC010	SpiroPlus Power Cleaner, Power Dirt Dissolver	10
CL001	SpiroPlus Lime Cleaner, Descaler	1
CL010	SpiroPlus Lime Cleaner, Descaler	10
CS001	SpiroPlus Sealer, Leak Sealer	1
CH001	SpiroPlus Protector, Corrosion Protector	1
CH010	SpiroPlus Protector, Corrosion Protector	10
CH020	SpiroPlus Protector, Corrosion Protector	20
CA020/A10	SpiroPlus AntiFreeze HC, Frost Protector	20
CA200/A10	SpiroPlus AntiFreeze HC, Frost Protector	200
CA1000/A10	SpiroPlus AntiFreeze HC, Frost Protector	1.000,00



SpiroPlus AntiFreeze suitable for cooling systems


 SPIROPLUS
MILD CLEANER

 SPIROPLUS
PROTECTOR

ACCESSORIES
SPIROPLUS® – Accessories

Art.-No.	Description	Weight [kg]
G18.660	Cleaner Test Strips EDTA	0,19
G18.678	SpiroPlus test strips water hardness	0,10
G19.262	SpiroPlus Protector test strips	0,17
CTA0109	SpiroCare Prolab Analysis (water analysis)	0,50
CTA1111	SpiroCare System Analysis	0,40
CTF075	Flush adaptor (for connecting SpiroTrap MB3, SpiroVent RV2)	0,42
G18.789	SpiroPlus Refractometer	0,42



SpiroPlus G18.789 suitable for cooling systems



Have you also thought of a dirt separator, automatic air vent (AAV) and microbubble deaeration? Learn more on page 12 and 14.

SPIRO CARE® – Analysis and advice



As the leading expert in system water quality, Spirotech offers an easy to use analysis service that provides installers, homeowners, local authorities and housing associations with professional lab verifications.

MAKING ANALYSIS EASY AND VALUABLE

SpiroCare ProLab Analysis is an easy-to-use kit for collecting water samples and system fluid information. Sample shipment costs, analysis and report creation are all included in the purchasing price. Select your language, fill in the printed or online form and send your samples to Spirotech's specialised laboratory in the prepaid envelope provided. After receipt of the samples, results of the analysis sent by email within a few working days, allowing rapid and efficient continuation of work on projects. Spirotech is dedicated to ensuring reliable and enduring performance, so the report does not only include the water analysis, but also proposes possible actions or adaptations. If required, specialised analysis and custom advice are available. SpiroCare ProLab Analysis can be used to check water quality during boiler or radiator replacement, as a pre- or post-flush check or as a status checkup.



REPORT

Furthermore, SpiroCare ProLab Analysis makes guarantee application procedures easier, as an increasing number of manufacturers require water quality analysis to be carried out before issuing a guarantee.

OTHERS



Insulation sets



Flushing kit for domestic heating systems



System analysis products



Additional accessories

All images used are for illustrative purposes only. Individual features like material used (i.e. brass or steel) may vary, as may guarantee.

SPIROTECH® – Insulation sets for brass units

INSULATION SETS

Art.-No.	Description	Suitable for	Weight [kg]
TAB050	Insulation Set SpiroTop	AB050 / AB050/030	0,18
TAR200	Insulation Set for 2" horizontal connection	AA200 / AE200	0,58
TUR100	Insulation Set for universal connection	UE022WH, UE022WHA01, UE028WH, UE075WH, UE100WH, UE022WJ, UE028WJ, UE075WJ, UE100WJ, UA022W, UA028W, UA075W	0,22
TUR125	Insulation set for 1 ¼" universal connection	UE125WJ, UA125W	0,30
TUR150	Insulation set for 1 ¼" universal connection	UE150WJ, UA150W	0,30
TUR200	Insulation set for 2" universal connection	UE200WJ, UA200W	0,30
TAA150	Insulation Set Air Brass	AA022, AA075, AA100, AA125, AA150	0,17
TAE150	Insulation Set Dirt Brass	AE022, AE075, AE100, AE125, AE150	0,15
TAX150	Insulation Set Cross Brass	AX100(J), AX125(J), AX150(J)	0,20

SPIROTECH® – Insulation sets for steel units

ACCESSORIES

TBX050	Insulation Set SpiroCross Steel	XC050F/L	3,60
TBX065	Insulation Set SpiroCross Steel	XC065F/L	3,70
TBX080	Insulation Set SpiroCross Steel	XC080F/L	7,10
TBX100	Insulation Set SpiroCross Steel	XC100F/L	7,60
TBX125	Insulation Set SpiroCross Steel	XC125F/L	10,0
TBX150	Insulation Set SpiroCross Steel	XC150F/L	10,8
TBX050A01	Insulation Set SpiroCross Steel with magnet	XC050FM	3,50
TBX065A01	Insulation Set SpiroCross Steel with magnet	XC065FM	4,00
TBX080A01	Insulation Set SpiroCross Steel with magnet	XC080FM	7,00
TBX100A01	Insulation Set SpiroCross Steel with magnet	XC100FM	7,50
TBX125A01	Insulation Set SpiroCross Steel with magnet	XC125FM	10,0
TBX150A01	Insulation Set SpiroCross Steel with magnet	XC150FM	10,5
TB050	Insulation Set Steel	BA050F/L, BA065F/L, BE050F/L, BE065F/L, BE050FM/LM, BE065FM/LM	1,54
TB080	Insulation Set Steel	BA080F/L, BA100F/L, BE080F/L, BE100F/L, BE080FM/LM, BE100FM/LM	2,45
TB125	Insulation Set Steel	BA125F/L, BA150F/L, BE125F/L, BE150F/L	5,42
TB125A01	Insulation set Magnet DN 125 +150	BE125FM/LM, BE150FM/LM	5,42

SPIROTECH® – Flush connector and other accessories

ACCESSORIES	Art.-No.	Description	Additional information	Weight [kg]
	TMA05	Quantity controlled feed Preventer for (1/2" int. con. size)	SpiroVent Superior – Products with automatic refill (without S4A-R)	1,17
	TMA06	Backflow Preventer for (3/4" int. con. size)	SpiroVent Superior – Products with automatic refill (without S4A-R)	1,17
	G14.452	pH Indicator Paper	-	0,20
	G18.660	Cleaner Test Strips EDTA	-	0,20
	G18.678	Test Strips Water Hardness	-	0,10
	G19.262	Protector Test Strips	-	0,20
	G18.789	Refractometer	-	0,40
	CTA0109	SpiroCare Prolab Analysis	Water analysis designed for domestic installations (2x 75ml bottles)	0,50
	CTA1111	SpiroCare ProLab Analysis	Water analysis designed for commercial installations (2 x 250 ml bottles)	0,20
	CTF075	Flush Connector	details under SpiroPlus	0,40

SPIROTECH
Accessories



TAB050



TAR200



TUR100



TAA150



TBX065



TBX100



TAX150



TUE100



TB080



SPIROPLUS
POCKET COMBINER



FLUSH CONNECTOR



SPIROPLUS
pH INDICATOR PAPER



SPIROCARE SYSTEM ANALYSIS



SPIROCARE PROLAB
ANALYSIS

[illegible]

[illegible]

MAXIMISING PERFORMANCE FOR YOU

Spirotech is a leading expert in improving the efficiency of heating and cooling systems. Our family business has over 60 years of experience in developing solutions for removing and preventing the accumulation of air and sludge deposits in energy systems. Our products save energy, increase comfort, avoid wear and tear and maximise operating periods. Reliable and customer-oriented products that help you get top performance and protect investment in capital assets. We develop high-value solutions with our partners, suppliers and investors that improve the operation of residential and commercial properties, as well as industrial processes. Our comprehensive network of selected importers in over 70 countries means there is always a Spirotech expert near to you.

Heating and cooling systems are highly complex, particularly when they are run in conjunction with other systems and installations. So locating and analysing faults when they occur is never easy, especially with the clock ticking in the event of a system failure. Spirotech is here to support you with practical advice and solutions, helping you to pinpoint causes and rectify them. Please feel free to contact us.

**IF YOU WOULD LIKE TO KNOW
MORE ABOUT OUR SOLUTIONS,
PLEASE VISIT OUR WEBSITE
SPIROTECH.COM.**

