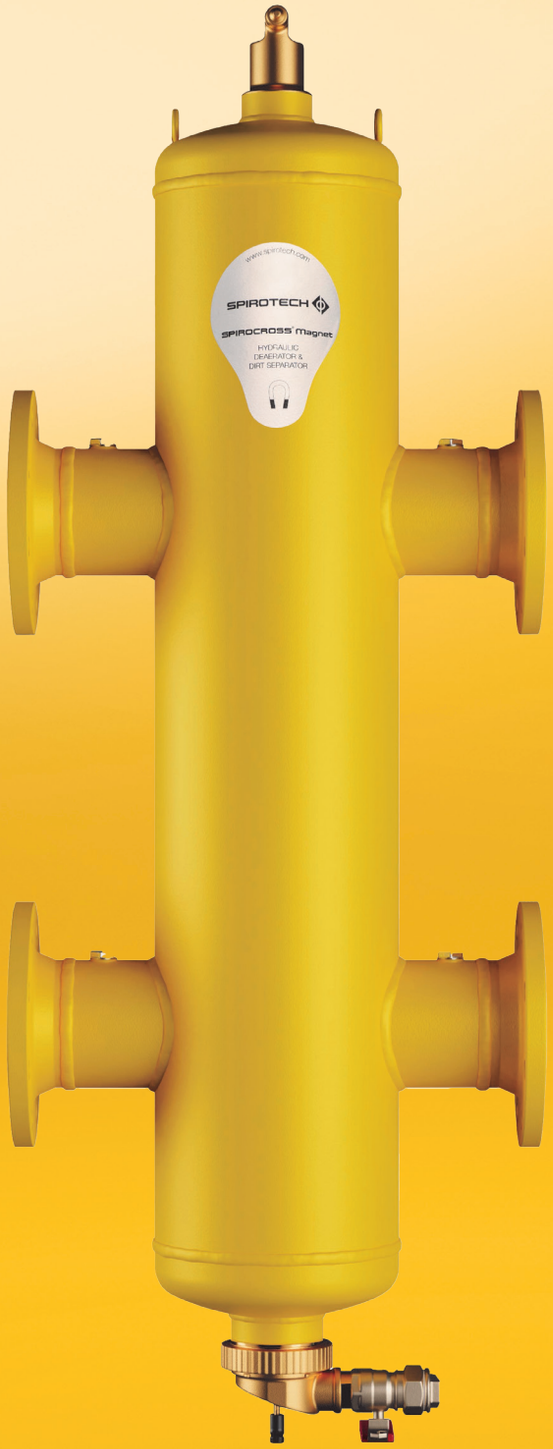
HYDRAULIC DEAERATORS AND DIRT SEPARATORS

SPIROCROSS®



EXCEPTIONAL GUARANTEE SPIRO Life UP TO 20 YEARS

Industry-leading 20-year guarantee

Minimal fluid mixing

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

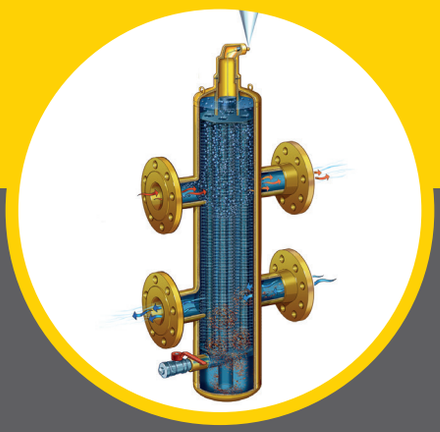
Increased energy efficiency

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.

SPIROCROSS®

SPIROCROSS®



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.

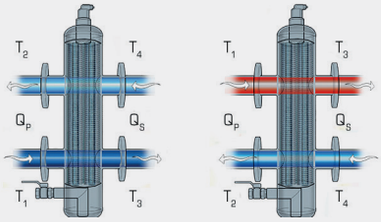
DEAERATION AND DIRT SEPARATION IN PERFECT BALANCE

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?

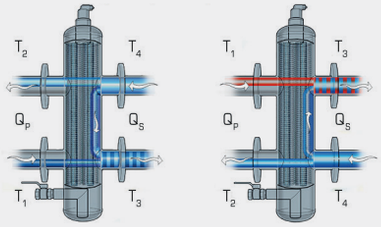
A hydraulic separator balances the differences in volumetric flow between a primary circuit (supply = Qp) and a secondary circuit (demand = Qs). Three operating situations can occur if a hydraulic separator is installed in a system and these are shown below and to the right.

Situation 1: Qp = Qs ΔTp = ΔTs T2 = T4



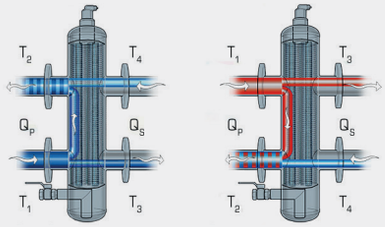
Cooling Heating

Situation 2: Qp < Qs ΔTp > ΔTs T2 = T4



Cooling Heating

Situation 3: Qp > Qs ΔTp < ΔTs T1 = T3



Cooling Heating

NEW

SPIROCROSS® – Brass solution with magnet

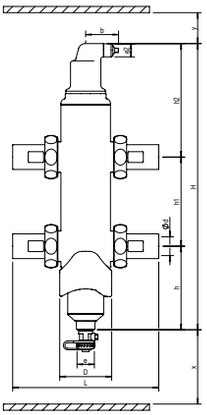
Art.-No.	Connection d	int.	H [mm]	h [mm]	h1 [mm]	h2 [mm]	D [mm]	L [mm]	b [mm]	e	ext.	e2	ext.	x [mm]	y [mm]	Nom. flow rate [m³/h]	Nom. flow rate [l/s]	Volume [ltr]	Weight [kg]
AX100J	Rp1	(F)	462	135	144	183	84	236	53	Rp ¾	(M)	R½	(M)	>100	>50	2,00	0,56	1,3	6,5
AX125J	Rp1¼	(F)	462	135	144	183	84	236	53	Rp ¾	(M)	R½	(M)	>100	>50	3,60	1,00	1,3	6,9
AX150J	Rp1½	(F)	462	135	144	183	84	236	53	Rp ¾	(M)	R½	(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

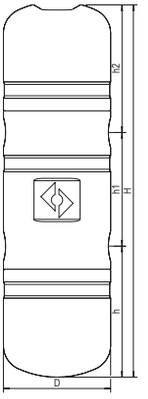


SPIROCROSS
WITG MAGNET

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

STANDARD

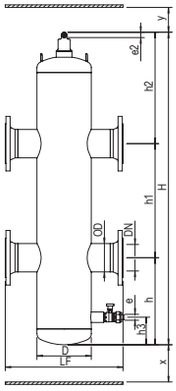
SPIROCROSS® – Steel solution

Art.-No.	DN	OD [mm]	H [mm]	h [mm]	h1 [mm]	h2 [mm]	h3 [mm]	D [mm]	L/LF [mm]	e	int.	e2	ext.	x [mm]	y [mm]	Nom. flow rate [m³/h]	Nom. flow rate [l/s]	Volume [ltr]	Weight [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

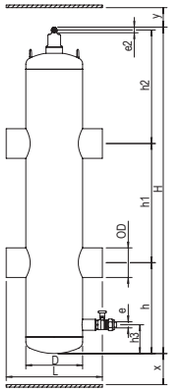
Op. pressure **max. 10 bar** | Temperature **max. 110 °C** | Nom. flow velocity **1.5 m/s** | without magnet

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

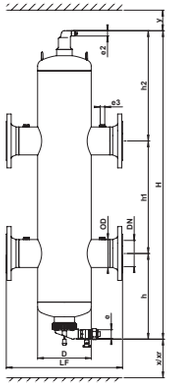
L = Weld ends / F = Flange design (PN 16)



SPIROCROSS
FLANGE DESIGN



SPIROCROSS
WELD ENDS



SPIROCROSS
WITH MAGNET

STANDAARD

SPIROCROSS® – Steel solution with magnet

Art.-No.	DN	OD [mm]	H [mm]	h [mm]	h1 [mm]	h2 [mm]	D [mm]	L/LF [mm]	e	int.	e2	e3	ext.	X [mm]	Xr [mm]	Nom. flow rate [m³/h]	Nom. flow rate [l/s]	Volume [ltr]	Weight [kg]	Weight [kg]
XC050FM	50	60,3	810	234	240	337	159	350	Rp1	(F)	R½	-	(M)	>75	330	12,5	3,47	12	26	26
XC065FM	65	76,1	905	252	305	348	159	350	Rp1	(F)	R½	-	(M)	>75	330	20	5,56	13	31	31
XC080FM	80	88,9	997	268	360	369	219	470	Rp1	(F)	R½	½"	(M)	>100	370	27	7,5	29	46	46
XC100FM	100	114,3	1.261	351	460	450	219	475	Rp1	(F)	R½	½"	(M)	>100	370	47	13,06	38	57	57
XC125FM	125	139,7	1.543	441	560	542	324	635	Rp1	(F)	R½	½"	(M)	>100	540	72	20	105	114	114
XC150FM	150	168,3	1.778	503	660	604	324	635	Rp1	(F)	R½	½"	(M)	>100	540	108	30	123	125	125
XC200FM	200	219,1	2.327	682	870	776	406	775	Rp1	(F)	R½	½"	(M)	>100	700	180	50	252	245	245
XC250FM	250	273,0	2.870	835	1.100	935	508	890	Rp2	(F)	R½	½"	(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)	R½	½"	(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)

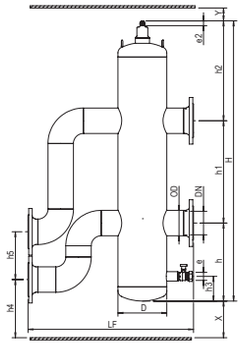
STANDARD

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

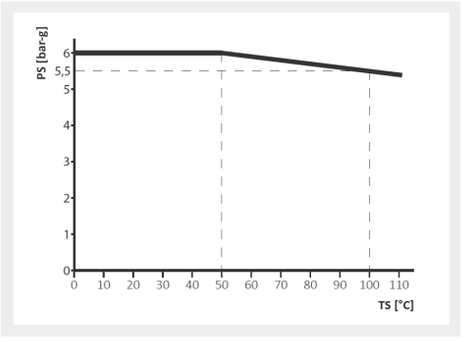
Art.-No.	DN	OD [mm]	H [mm]	h [mm]	h1 [mm]	h2 [mm]	h5 [mm]	D [mm]	LF [mm]	X [mm]	Y [mm]	e	e2	Nom. flow rate [m³/h]	Nom. flow rate [l/s]	Volume [ltr]	Weight [kg]	Matching insulation
XC065FK45A01	65	76,1	905	251	305	348	215	159	462	>75	>50	Rp1	R½	20	5,5	15,0	31,0	TBX065
XC080FK45A01	80	88,9	997	267	360	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)

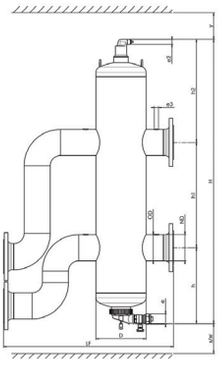
* See graph



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

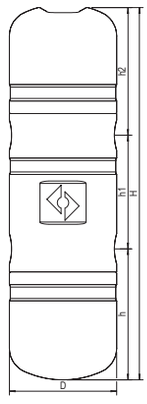
Art.-No.	DN	OD [mm]	H [mm]	h [mm]	h1 [mm]	h2 [mm]	h5 [mm]	D [mm]	LF [mm]	X [mm]	Xr [mm]	Y [mm]	e	e2	e3	Nom. flow rate [m³/h]	Nom. flow rate [l/s]	Volume [ltr]	Weight [kg]
XC065FMK45A01	65	76,1	905	251	305	348	215	159,00	462	>75	330	>50	Rp1	R½	-	20	5,5	16	31
XC080FMK45A01	80	88,9	997	267	360	369	215	219,10	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