K SERIES SCREEN FILTER

F03-K-FT-001

Product data sheet · Metal and automatic filters

Metal screen filter with circulation plate, from 2" to 8", for water with a high load of mineral particles. Working pressure up to 8 or 10 bar depending on size. Standard version, rotating brush version or "push & pull" brush version.



Technical data

Body	S235JR steel (AISI 304 or 316 stainless steel on request)
Cartridge	PVC-U frame (DIN 8061-8062), AISI 304 stainless steel screen; stainless steel perforated sheet from 6" upwards
Seals	EPDM
Surface treatment	Pickling, phosphating and polyester powder coating (epoxy coating suitable for drinking water on request)
Maximum working pressure	8 bar from 2" to 4", 10 bar from 5" to 8"
Connections	Female threaded BSP (2" to 4"), DIN 2576 PN10 flanges, grooved on request
Screen	80 mesh (220 µm), 120 mesh (140 µm), 140 mesh (115 µm) or 160 mesh (90 µm)

Description

K series filters are suitable for water with a high load of suspended mineral particles. They protect pumps, control valves and filtration systems, and can be used in addition to a hydrocyclone.

Water enters the filter, passes through the circulation plate and then the cartridge, and leaves filtered. The plate makes the water rotate over the surface of the screen: particles are carried to the collection chamber, in the lid, before they can settle on the screen. This principle extends the filtration time between two cleanings.

Three versions are available:

- standard version;
- rotating brush version;
- "push & pull" brush version, from 2" to 4".

When operated regularly, the brush extends the operating time between two cleanings of the cartridge.

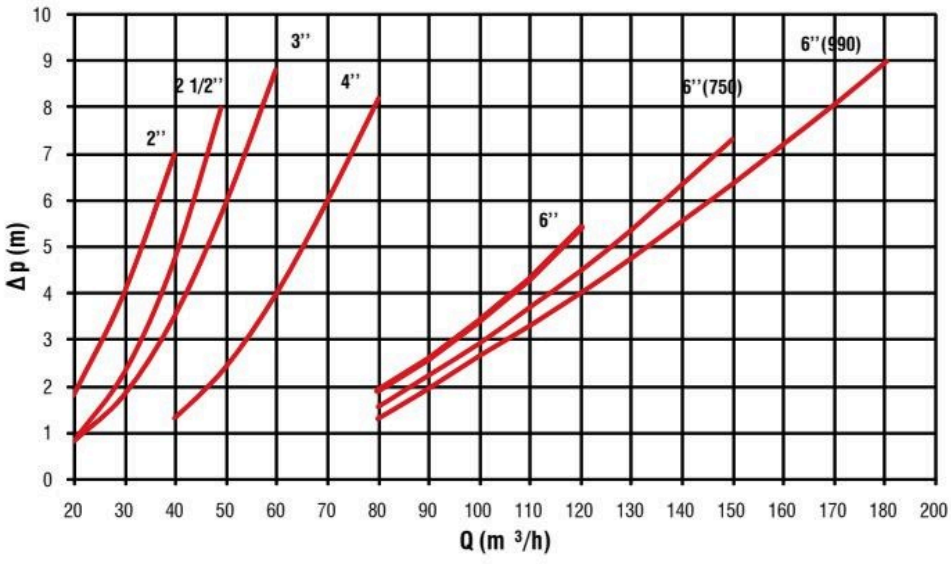
Specifications by model

Code	Inlet / outlet	Connection	Filtration area (cm^2)	Min. flow rate (m^3/h)	Max. flow rate (m^3/h)	PN (bar)
Standard version						
05-01-200	2"	TF, F, G	814	11	31	8
05-01-250	2" 1/2	TF, F, G	1184	12	35	8
05-01-300	3"	TF, F, G	1184	12	40	8

Code	Inlet / outlet	Connection	Filtration area (cm²)	Min. flow rate (m³/h)	Max. flow rate (m³/h)	PN (bar)
05-01-400	4"	TF, F, G	1554	20	70	8
05-01-500	5"	F, G	2930	80	120	10
05-01-311	6"	F, G	2930	80	120	10
05-01-600	6" super (750)	F, G	4100	80	150	10
05-01-601	6" (990)	F, G	5350	80	180	10
05-01-801	8" (990)	F, G	5350	80	180	10
Rotating brush version						
05-05-201	2"	TF, F, G	814	11	31	8
05-05-251	2" 1/2	TF, F, G	1184	12	35	8
05-05-301	3"	TF, F, G	1184	12	40	8
05-05-401	4"	TF, F, G	1554	20	70	8
05-05-501	5"	F, G	2930	80	120	10
05-05-601	6" (570)	F, G	2930	80	120	10
05-05-602	6" super (750)	F, G	4100	80	150	10
05-05-603	6" (990)	F, G	5350	80	180	10
05-05-803	8" (990)	F, G	5350	80	180	10
"Push & pull" brush version						
05-05-202	2"	TF, F, G	814	11	31	8
05-05-252	2" 1/2	TF, G	1184	12	35	8
05-05-302	3"	TF, F, G	1184	12	40	8
05-01-402	4"	TF, F, G	1554	20	70	8

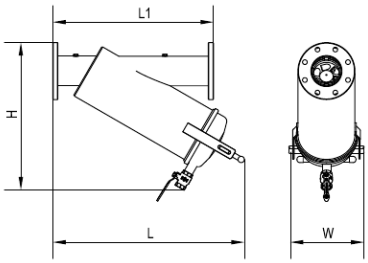
Connection: TF = female threaded BSP, F = DIN 2576 PN10 flanges, G = grooved (on request).

Performance

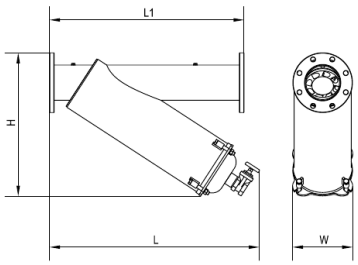


Pressure loss according to flow rate, 120 mesh screen, blanking plugs open

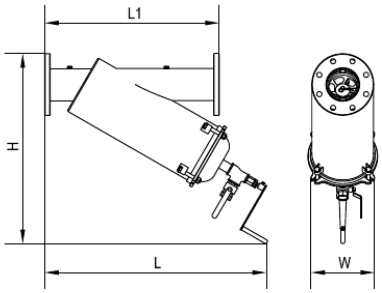
Dimensions



2" to 4" filters



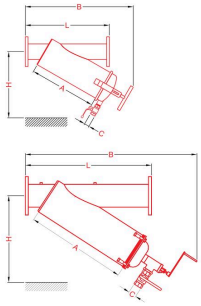
5" to 8" filters



Rotating brush filters

Dimensions and weight

Code	Inlet / outlet	L1 (mm)	L (mm)	H (mm)	W (mm)	Weight (kg)
Standard version						
05-01-200	2"	470	529	402	240	19.1
05-01-250	2" 1/2	500	626	464	240	22.6
05-01-300	3"	500	616	482	240	23.0
05-01-400	4"	620	569	739	290	33.0
05-01-500	5"	750	862	568	287	52.2
05-01-311	6"	750	856	586	287	56.6
05-01-600	6" super (750)	930	1007	684	287	67.0
05-01-601	6" (990)	930	1205	815	287	77.0
05-01-801	8" (990)	930	1241	772	340	82.9
Rotating brush version						
05-05-201	2"	470	573	541	201	17.0
05-05-251	2" 1/2	500	662	598	201	20.6
05-05-301	3"	500	645	624	201	21.0
05-05-401	4"	620	678	791	247	33.0
05-05-501	5"	750	902	837	287	56.9
05-05-601	6" (570)	750	912	864	287	60.5
05-05-602	6" super (750)	930	1073	968	287	71.3
05-05-603	6" (990)	930	1249	1085	287	80.0
05-05-803	8" (990)	930	1323	1016	340	86.5



"Push & pull" brush version: dimensions L, A, H, B and C

Dimensions and weight – "push & pull" brush version

Code	Inlet / outlet	L (mm)	A (mm)	H (mm)	B (mm)	C (inch)	Weight (kg)
"Push & pull" brush version							
05-05-202	2"	470	300	470	850	1" M	16.6
05-05-252	2" 1/2	500	400	500	950	1" M	21.3
05-05-302	3"	500	400	500	950	1" M	22.3
05-01-402	4"	620	500	610	1350	1" M	33.6

For the "push & pull" version, H is the recommended minimum installation height and C is the drain valve connection.

Installation

Install the filter in the direction of the arrow shown on the body.

The rotation effect depends on the water velocity in the circulation plate. Depending on the operating flow rate, fit the number of blanking plugs shown below on the plate.

Number of blanking plugs according to flow rate

Blanking plugs fitted	Min. flow rate (m^3/h)	Max. flow rate (m^3/h)
2"		
4	11	14
3	14	18
2	18	22
1	22	27
0	27	31
2" 1/2		
4	12	16
3	16	21
2	21	27
1	27	33
0	33	40

Blanking plugs fitted	Min. flow rate (m^3/h)	Max. flow rate (m^3/h)
3"		
4	12	16
3	16	21
2	21	27
1	27	33
0	33	40
4"		
4	20	28
3	28	38
2	38	44
1	44	53
0	53	80
5", 6", 6" super, 6" (990), 8" (990)		
5	80	85
4	85	90
3	90	95
2	95	100
1	100	105
0	105	

Above 105 m^3/h, for 5" to 8" filters, no blanking plug is fitted, up to the maximum flow rate of the model.

Maintenance

The particles collected in the lid are removed by opening the drain valve. This flushing can be automated: it is triggered when the pressure loss of the filter exceeds a set threshold.

Clean the cartridge when the pressure loss is 0.5 bar higher than that measured with a clean cartridge. To do this, remove the lid and take out the cartridge.

On brush versions, operate the brush regularly to reduce the frequency of cartridge cleaning.

Related documents : F03-K-VE-001

Product codes : 05-01-200, 05-01-250, 05-01-300, 05-01-400, 05-01-500, 05-01-311, 05-01-600, 05-01-601, 05-01-801, 05-05-201, 05-05-251, 05-05-301, 05-05-401, 05-05-501, 05-05-601, 05-05-602, 05-05-603, 05-05-803, 05-05-202, 05-05-252, 05-05-302, 05-01-402