

Single Filter F118/F118S

DN 25-300

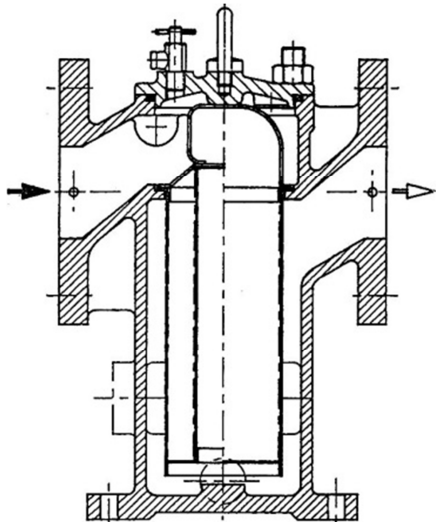


Fig. 1: Design F118S (cover with stud bolts)

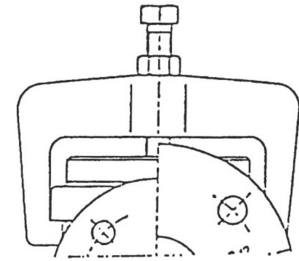


Fig. 2: Clamp lock

Field of Application

The single filter, type F118(S) is a multi-purpose filter for gaseous and liquid media. What makes this filter stand out is its high efficiency, the little space it requires, as well as its quick and easy cleaning. The field of application of the standard design can be extended by additional equipments. If a continuous filter operation is required during the cleaning phase, the analogue switchable duplex filter, type F101D or F311, which can be switch-over or the automatically operating backflush filter of the type series F400/F440/F450 can be used.

Abstract

The filter consists of a cast-iron housing with opposite connecting flanges arranged at the same level. The filter cover will alternatively be fixed with stud bolts and nuts (F118 S, Fig. 1) or clamp (F118, Fig. 2). The venting device in the cover and the drain device in the body are included in the scope of delivery. The filter can alternatively be equipped with a basket or a ring type strainer. The strainer insert consists of a perforated plate, alternatively covered with cloths having different mesh widths. The medium to be filtered flows through the insert from the inside to the outside.

Security information

The filter with clamp is not applicable for the filtration of dangerous media (e.g. toxic, flammable or caustic) and gases, respectively steams! In these cases stud bolts and nuts have to be chosen as filter lock.

Installation

The installation into pipings will be effected by means of flanges. Please ensure that the filter of the standard design is vertically installed - with the cover located at the top, without any additional loads, and mechanically stress-free. The medium should flow in the direction indicated on the housing. A wrong installation may lead to functional disturbances of the filters.

Commissioning / Instruction manual

1. Open the venting device until the liquid emerges
2. Close the venting device
3. The filter is ready for use

Attention! As we are dealing with a pressure vessel, it should be necessarily ensured at any rate that the vessel is absolutely unpressurized before starting the maintenance work. The safety rules and the regulations for the prevention of accidents required for the relevant medium have to be followed.

Cleaning

1. Depressurize the filter using venting or drain devices
2. Loosen the lock of the vessel and lift off the cover
3. Using the drain device, empty the filter at least down to the level of the strainer support
4. Pull the strainer insert upwards and lift it out of the filter body. Now the strainer can be cleaned by blowing out or blasting using compressed air, steam, or water. If necessary, the strainer should be soaked and cleaned using a suitable agent. Possibly, an optimal cleaning will be obtained using ultrasonics. In case of all these modes of cleaning you should always take care not to damage the filter mesh.
5. During the reassembly, following the disassembly procedure in reverse, you should make sure to avoid any damage to the sealing elements; if necessary, they should be replaced

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	Standard design	Special designs resp. supplementary equipment
Strainer insert	Basket strainer	Ring type strainer, duplex strainer
Filter fineness	80 - 1000 µm : mesh with support plate from 1 mm : perforated sheet	10 - 60 µm
Filter lock	Size 1 - 8: Cover with clamp Type F118 (Fig. 2) Size 1 - 10: Cover with stud bolts and nuts Type F118S (Fig. 1)	
Venting device	Valve	Locking screw, ball valve
Drain device	Locking screw	Ball valve
Connection	Flanges acc. DIN 2532/33 form B	acc. customers specification
Materials:		
Body and cover	GGG-50	-
Filter lock	GGG-50/Steel	-
Cover sealing (O-Ring)	Buna N	FPM, EPDM, PMQ, PTFE
Perforated plate/cloth (strainer)	Steel, Steel/1.4401, 1.4301, 1.4301/1.4401	1.4571, 1.4571/1.4401 Brass/Bronze, Hastelloy C4
Venting valve	Brass	-
Venting screw	-	Steel, brass, stainless steel
Venting ball valve	-	Steel, brass, stainless steel
Drain plug	Brass	-
Drain ball valve	-	Steel, brass, stainless steel
Surface treatment		
Inside	Powder coating RAL 5018 turquoise	Anti-corrosion oil, Epoxy resin, Vestosint
Outside	Powder coating RAL 5018 turquoise	Vestosint
Options:		
Differential pressure indicator optical, electrical		
Zinc anode		
Magnetic insert		

Special design and materials are available upon request.

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Technical data and dimensions

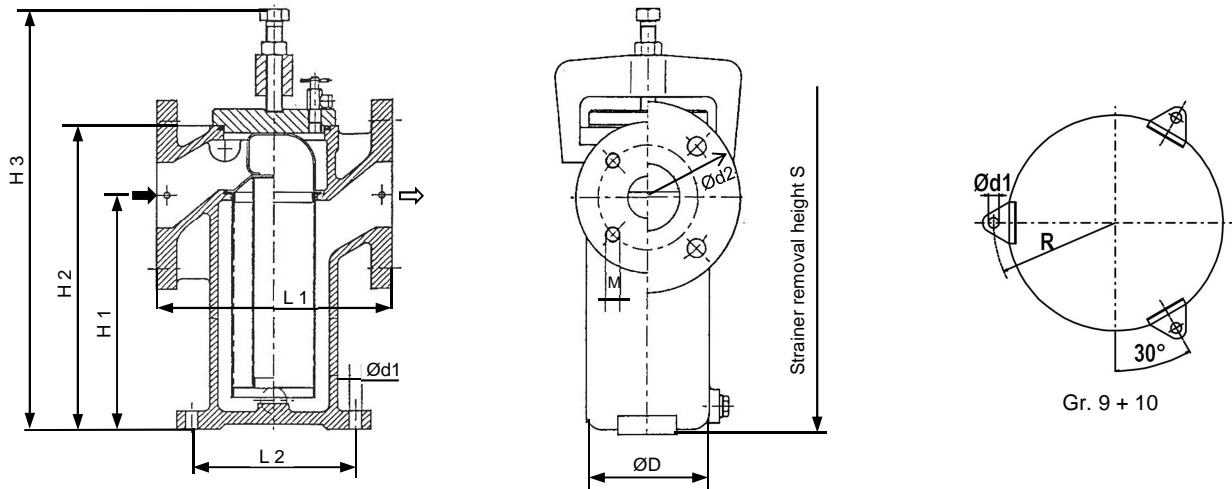


Fig.3: Dimensions of the standard design F118

DN	Body size	PN		ØD	H1	H2	H3		L1	L2	R	Ø d1	Ø d2	M	S	Vol.	Flow rate	Filter area appr.		Weight appr.	
		F118	F118S				F118	F118S										BS	RS	F118	F118S
mm	Nr.	bar	bar	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	dm ³	m ³ /h	cm ²	cm ²	kg	kg
25	1	16	16	80	155	179	263	219	170	-	-	-	DIN	-	385	0,5	4,5	140	-	7	6
32	2	10	16	100	165	215	317	262	190	-	-	-	DIN	M16	465	1	7	250	440	13	12
32	3	10	16	125	215	283	387	344	230	160	-	12	140	M16	580	2,5	7	400	640	22	19
40	2	10	16	100	165	215	317	262	190	-	-	-	DIN	M16	465	1	12	250	440	13	12
50	2	10	16	100	165	215	317	262	190	-	-	-	DIN	-	465	1	18	250	440	13	12
65	3	10	16	125	215	283	387	344	230	160	-	12	DIN	-	580	2,5	30	400	640	22	19
80	4	10	16	166	230	314	439	375	280	200	-	12	DIN	-	660	5,5	45	680	1140	28	25
100	5	10	16	176	325	428	554	489	318	215	-	14	DIN	-	860	8	70	910	1530	42	37
125	6	6	16	220	325	453	596	519	380	260	-	14	DIN	-	920	12	110	1280	2000	60	53
150	7	6	16	260	390	540	710	611	462	310	-	18	DIN	M20	1090	24	160	1860	2720	78	69
200	8	6	10*	320	490	695	880	765	598	370	-	23	DIN	-	1395	48	280	2880	4170	142	118
250	9	-	10	400	600	816	-	906	605	-	230	23	DIN	-	1580	70	440	3720	5950	-	186
300	10	-	6	470	720	975	-	1065	720	-	265	23	DIN	-	1900	130	635	5450	8920	-	290

BS = basket strainer

RS = ring type strainer

* = also available in PN16 with connection flanges acc. DIN 2532

The flow rates refer to an inlet speed of 2,5 m/s in pressure pipes, a viscosity of 1 mPas (water) and filter fineness of $\geq 80 \mu\text{m}$. For suction pipes half of the flow is recommended.

The measurements for ancillary and special equipment are available on request.

Our quality assurance system
conforms to ISO 9001:2008

