

Fig. 1:
Design F 118 S (cover with stud bolts and nuts)

Field of Application

The single filter, type F 118 is a multi-purpose filter for gaseous, liquid and pasty media. What makes this filter stand out is its high efficiency, the little space it requires, as well as its quick and easy cleaning. As a special design, the inlet and outlet flange can be positioned wherever you want. 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 double filter, type F 101 or F 301, which can be switch-over or the automatically operating reversible flow filter of the type series F 400/ F 440 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 (F 118 S, Fig. No.1) or bows (F 118, Fig. No. 2). The venting device within the cover and the draining device within the housing are included in the scope of delivery. The filter can alternatively be equipped with a basket strainer, a ring strainer, or a jacket strainer. The filter insert consists of a perforated plate, alternatively covered with cloths having different mesh widths. The medium to be filtered will enter the filter from above and, as a rule, it will flow through the insert from the inside to the outside. Hence, the contaminations will remain within the strainer insert.

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

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

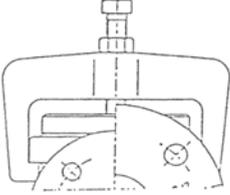
Attention! As we are dealing with a pressure vessel, it should be ensured at any rate that the vessel is absolutely unpressurized prior to starting the maintenance work. The safety rules and the regulations for the prevention of accidents required for the relevant medium should be followed.

Cleaning

1. Depressurize the filter using venting or draining devices.
2. Loosen the lock of the vessel and lift off the cover.
3. Using the draining 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 housing. 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 cloth.
5. During the reassembly, following the disassembly procedure in the reverse, you should make sure to avoid any damage to the sealing elements; if necessary, they should be replaced.

Single Filter DN 20 - 300

F 118 F 118 S (M)

	Standard design	Special design or supplementary equipment respectively
Filter insert	basket strainer	Ring strainer , Multi-mantle strainer, Double strainer
Filter fineness	80 - 1000 um: cloth with support plate (please refer to Page No. 6.1) >1 mm: a perforated plate with a circular perforation	10 – 60µm
Filter lock	DN 20-200 cover with clamp (type F 118, fig.2) DN 20-300 cover with stud bolts and nuts (type F 118 S, fig. 1)	
Venting device	Valve	Cock, Screw
Draining device	Screw	Cock
Connection	Flange acc. DIN 2532/33	Customer-specified
Materials:		
Housing and cover	GGG 50	-
Filter lock	According to the housing material	-
Cover sealing	O-ring Buna N	Viton, EPDM, PMQ, Teflon
Perforated plate/cloth	St, St/1.4401, 1.4301, 1.4301/1.4401	1.4571/1.4401, Ms/Bz, Haste-Alloy C 4, various synthetic materials
Vent valve	MS (Brass)	
Air relief cock	-	St, B, A4
Vent screw	-	B, A4
Drain plug	MS (Brass)	A4
Drain cock	-	St, B, A4
Additional filter	-	Magnet filter insert (see Page No. 4.1)
Heating	-	steam, hot water or electric heating (see Page No. 4.5)
Zinc protection	-	For sea water filters (see Page No. 4.10)
Differential pressure meter	-	Optical, electrical (see Page No. 4.7)
Surface treatment at the inside		
Housing GGG-50	Anti-corrosion protection enamel	Vestosint, E-OTFE
Surface treatment at the outside	Synthetic enamel, RAL 5018 turquoise	Vestosint, E-STFE, EVOH

On the customers' request further design and material variants will be manufactured and supplied.
 Please let us have your relevant inquiry.

Single Filter
 DN 20 - 300

F 118
F 118 S (M)

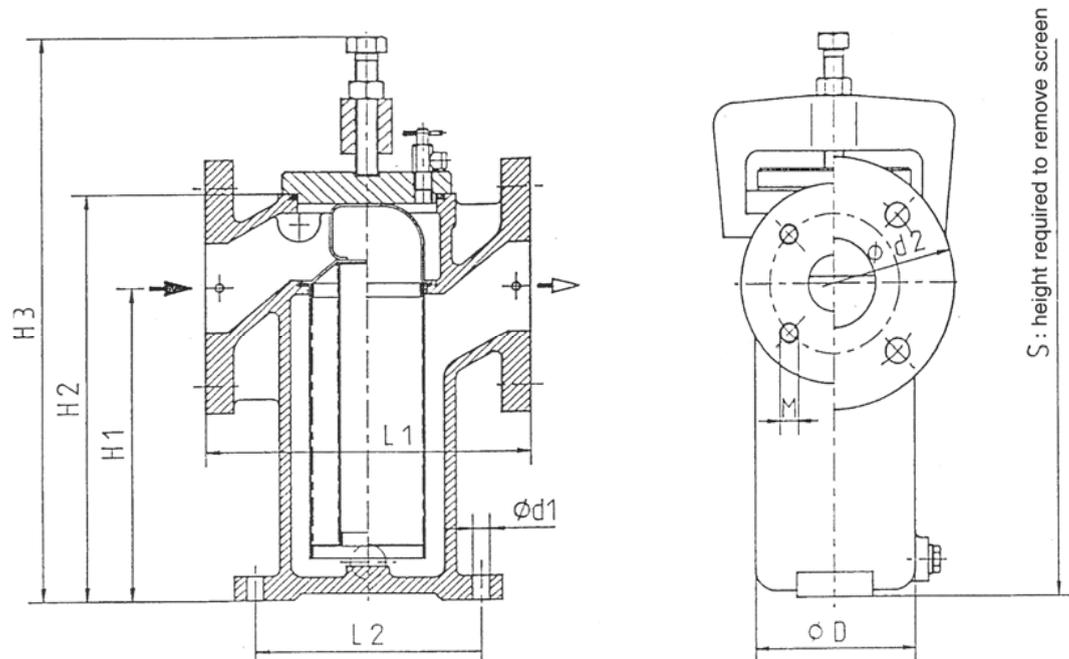


Fig.3: Dimensions of the standard-type design with a strainer-based or a ring-type strainer. Illustrated on an F 118 type.

DN	Body size	PN		ØD	H1	H2	H3		L1	L2	Ød1	Ød1	M	S	Vol.	Flow rate	Filter area app..		Weight app.	
		F 118	F 118 S				F 118	F 118 S									KS	RS	F 118	F 118 S
mm	Nr.	bar	bar	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	dm³	m³/h	cm²	cm²	kg	kg
20	1	16	16	80	155	179	263	219	170	-	-	DIN	-	385	0,5	3	140	-	7	6
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
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	10	220	325	453	596	519	380	260	14	DIN	-	920	12	110	1280	2000	60	53
150	7	6	10	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	-	118
250	9	-	6	400	600	816	-	906	605	-	23	DIN	-	1580	70	440	3720	5950	-	186
300	10	-	6	470	720	975	-	1065	720	-	23	DIN	-	1900	130	635	5450	8920	-	290

Single Filter DN 20 - 300

F 118 F 118 S (M)

Technical data and dimensions

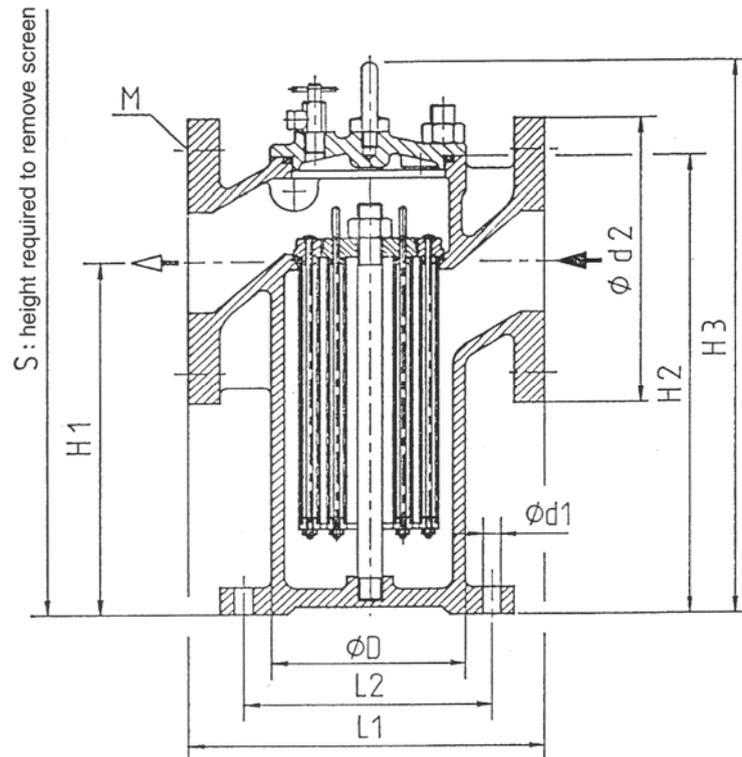


Fig.4: Dimensions of the standard-type design with a shell-type-strainer, illustrated on an F 118 S (M) type.

DN	Body size	PN		ØD	H1	H2	H3	H3	L1	L2	Ød1	Ød1	M	S	Vol.	Flow rate	Filter area app.		Weight app.	
		F 118	F 118 S														KS	RS	F 118	F 118 S
mm	Nr.	bar	bar	mm	dm ³	m ³ /h	cm ²	cm ²	kg	kg										
50	5	10	16	176	325	428	554	489	318	215	14	DIN	M16	860	8	18	2500	45	40	50
65	7	6	10	260	390	540	710	611	462	310	18	200	M16	1090	24	30	6560	87	78	65
80	7	6	10	260	390	540	710	611	462	310	18	DIN	M16	1090	24	45	6560	87	78	80
100	8	6	10	320	490	695	880	765	598	370	23	DIN	M16	1395	48	70	12500	150	136	100
125	9	-	10	400	600	816	-	906	594	-	23	285	M16	1580	70	110	18400	-	202	125

The flow rate refers to an inlet speed of 2,5 m/s in pressure pipes, a viscosity of 1 m Pas (water) and filter units of ≥ 80 Nm. Half the flow rate is recommended for suction pipes.

BS: basket strainer

RS: ring type strainer

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

Our quality assurance system conforms to DIN ISO 9001 : 2000.