

PROCESS FILTER HOUSING - PF

DESCRIPTION

PF process filter housings have been specifically developed for applications in process industry, where the risk for corrosion of compressed air ⁽¹⁾ system components is very high. To meet the required compressed air quality ⁽³⁾ appropriate filter element must be installed into filter housing.



APPLICATIONS ⁽²⁾

- Packing industry
- Biotechnology
- Breweries
- Chemical industry
- Diaries
- Fermentation processes
- Food & beverage industry
- Pharmaceutical industry
- Hospitals
- Steam

⁽¹⁾ For any other technical gas please contact us or your local dealer

⁽²⁾ PF process filter housing can be used in variety of applications. For applications not listed please contact us or your local dealer.

⁽³⁾ For oil removal, coalescing filter element must be installed and flow direction inside-out must be provided. General arrangement is filter head on top and filter bowl on bottom.

TECHNICAL SPECIFICATION

Operating temperature ⁽⁴⁾	-20 - 150 °C	-4 - 302 °F
Operating pressure	0 – 14 bar(g)	0 – 203 psi

⁽⁴⁾ Actual operating temperature depends on sealing material and type of filter element.

MATERIALS

Housing material	Stainless steel (quality 1.4404; on request 1.4301)
Sealing	EPDM (Optional FKM or SILICONE)
Housing finishes	Polished down to grade Ra1.6 (externally)
Lubricant	(Optional Shell cassida grease RLS 2)

MAINTENANCE

Replace filter element at least every 12 months or follow the instructions for specific filter element. Once per year make a visual check of filter housing and make sure there is no visual damage.

SIZES

FILTER HOUSING	PIPE SIZE-D	FILTER ELEMENT	OPERATING PRESSURE	FLOW CAPACITY		DIMENSIONS [mm]				VOLUME [l]	WEIGHT [kg]
				[Nm ³ /h]	[scfm]	A	B	C	E		
PF 005	1/4"	0310	14	75	44	206	120	76,1	1/4"	0,70	1,8
PF 007	3/8"	0410	14	105	62	236	120	76,1	1/4"	0,80	2,0
PF 010	1/2"	0420	14	150	88	239	121	76,1	1/4"	0,84	2,1
PF 018	3/4"	0520	14	225	132	263	121	76,1	1/4"	0,95	2,2
PF 030	1"	0525	14	315	185	280	136	88,9	1/4"	1,4	3,0
PF 047	1 1/4"	0725	14	420	247	343	155	88,9	1/4"	1,8	3,4
PF 070	1 1/2"	0730	14	600	353	376	180	114,3	1/4"	3,4	4,6
PF 094	2"	1030	14	900	530	445	180	114,3	1/4"	4,1	5,2
PF 150	2"	1530	14	1260	742	572	180	114,3	1/4"	5,3	6,0
PF 175	2 1/2"	2030	14	1680	989	736	226	139,7	1/4"	10,2	9,6
PF 200	3"	3030	14	2400	1.413	979	226	139,7	1/4"	14	13,7
PF 240	3"	3050	14	3600	2.119	1041	256	168,3	1/4"	21	18,5
PF 450	DN100	3x 2030	10	5040	2.966	981	410	219,1	1"	34	56
PF 600	DN100	3x 3030	10	6720	3.955	1240	410	219,1	1"	43	60
PF 900	DN150	4x 3030	10	9600	5.650	1311	480	273,0	1"	72	90
PF 1200	DN150	6x 3030	10	13440	7.910	1330	540	323,9	1"	102	112
PF 1800	DN200	8x 3030	10	17280	10.171	1496	660	406,4	1"	181	201
PF 2000	DN200	10x 3030	10	21120	12.431	1496	660	406,4	1"	181	202

Flow capacity at 7 bar(g), 20°C

Standard is BSP pipe connection, other pipe connection on request.

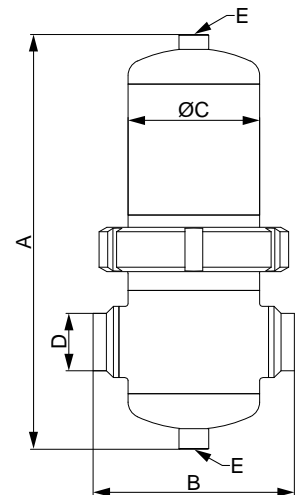
PRESSURE EQUIPMENT DIRECTIVE PED 2014/68/EU (Fluid group 2)

PF 005 - PF 070	Article 4.3
PF 094 - PF 200	Category 1, Module H
PF 240 - PF 900	Category 2, Module H
PF 1200-PF 2000	Category 3, Module H

PRESSURE EQUIPMENT DIRECTIVE PED 2014/68/EU (Fluid group 1) ⁽⁵⁾

PF 005 – PF 047	Article 4.3
PF 070	Category 1, Module H
PF 094 – PF 200	Category 2, Module H
PF 240 – PF 600	Category 3, Module H
PF 1200 – PF 2000	Category 4, Module H1

⁽⁵⁾ Fluid group must be specified in the order, if not standard fluid group 2 is selected.



CORRECTION FACTORS


To calculate the correct capacity of a given filter based on actual operating conditions, multiply the nominal flow capacity by the appropriate correction factor(s).

CORRECTED CAPACITY = NOMINAL FLOW CAPACITY x C_{OP}

OPERATING PRESSURE

[bar]	2	3	4	5	6	7	8	9	10	11	12	13	14
[psi]	29	44	58	72	87	100	115	130	145	160	174	189	203
C _{OP}	0,38	0,5	0,63	0,75	0,88	1	1,13	1,25	1,38	1,50	1,63	1,75	1,88

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	Our quality management system is certified by BUREAU VERITAS in conformity with ISO 9001:2015 Reg. number: 200285
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