WELDED STAINLESS STEEL FILTER HOUSING – WFIF (EN/ANSI)

(flanged connection)



DESCRIPTION

WFIF welded stainless steel filter housings with flange connections have been specifically developed for filtration of compressed air as well as many other gasses [(1)] where the risk for corrosion is very high or where stainless steel housing is required. To meet the required gas quality appropriate filter element must be installed into filter housing.

APPLICATIONS [(2)]

- Biotechnology
- Breweries
- Chemical industry
- Petrochemical industry
- Diaries
- Fermentation processes
- Pharmaceutical industry
- Hospitals

[(1)] For list of suitable gasses please contact us or your local dealer.
[(2)] WFIF process filter housing can be used in variety of applications. For applications not listed please contact us or your local dealer.

TECHNICAL SPECIFICATION

Operating temperature [(3)]	-20 / + 150 °C	-4 / + 302 °F
Operating pressure	0 – 14 bar(g)	0 – 203 psi

[(3)] 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	FKM (Optional EPDM or SILICONE) / Aramid fibre with a nitrile rubber binder[(4)]
Lubricant	(Optional Shell Cassida Grease RLS 2)

[(4)] Flange connection sealing.

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.

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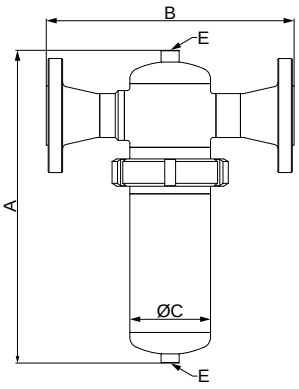
SIZES

FILTER HOUSING	PIPE CONNECTION	FILTER ELEMENT	OPERATING PRESSURE	FLOW CAPACITY		DIMENSIONS [mm]					VOLUME	WEIGHT
				[Nm^3/h]	[scfm]	A	B	$B^{(5)}$	C	E	[l]	[kg]
WFIF 010	DN15	0420	14	150	88	230	195	217	76,1	1/2"	0,84	3.5
WFIF 018	DN20	0520	14	225	132	263	201	219	76,1	1/2"	0,93	4,3
WFIF 030	DN25	0525	14	315	185	279	216	244	88,9	1/2"	1,4	5,7
WFIF 047	DN32	0725	14	420	247	348	239	267	88,9	1/2"	1,74	6,6
WFIF 070	DN40	0730	14	600	353	391	260	290	114,3	1/2"	3,4	8,0
WFIF 094	DN50	1030	14	900	530	444	270	304	114,3	1/2"	4,1	9,8
WFIF 150	DN50	1530	14	1260	742	571	270	304	114,3	1/2"	5,3	11,0
WFIF 175	DN65	2030	14	1680	989	752	295	340	139,7	1/2"	10,2	14,2
WFIF 200	DN80	3030	14	2400	1.413	978	306	340	139,7	1/2"	14	21,2
WFIF 240	DN80	3050	14	3600	2.119	1041	332	368	168,3	1/2"	21	22,9
WFIF 450	DN100	3x 2030	10	5040	2.966	981	410	/	219,1	1"	36	55
WFIF 600	DN100	3x 3030	10	6720	3.955	1288	410	456	219,1	1"	43	64
WFIF 900	DN150	4x 3030	10	9600	5.650	1310	480	/	273,0	1"	77	87
WFIF 1200	DN150	6x 3030	10	13440	7.910	1351	540	598	323,9	1"	104	110
WFIF 1800	DN200	8x 3030	10	17280	10.171	1496	660	/	406,4	1"	180	200
WFIF 2000	DN200	10x 303C	10	21120	12.431	1496	660	/	406,4	1"	180	200

Flow capacity at 7 bar(g), 20°C
Standard is BSP pipe connection, other pipe connection on request.
B = flange connection EN 1092-1/11 PN16
$B^{(5)}$ = flange connection ANSI B16.5 WN Cl 150

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

WFIF 010 - 070	Article 4.3
WFIF 094 - 200	Category 1, Module H
WFIF 240 - 600	Category 2, Module H
WFIF 900- 2000	Category 3, Module H



PRESSURE EQUIPMENT DIRECTIVE PED 2014/68/EU (Fluid group 1) (6)

WFIf 010 - 047	Article 4.3
WFIf 070	Category 1, Module H
WFIf 094 - 200	Category 2, Module H
WFIf 240- 900	Category 3, Module H
WFIf 1200- 2000	Category 4, Module H1

(6) 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

INFORMATION IN THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE

BUREAU VERITAS 1828

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