Duplex Filter F725 DN 50 – 200







Field of application

The duplex filter type F605 with butterfly valves is a multi-purpose filter for liquid and gaseous media.

Advantages

- continuous filter operation during the cleaning phase
- low filter finenesses

Abstract

The duplex filter consists of two individual filters which can be operated alternatively or in parallel via butterfly valves. The single filters of the standard design consist of welded steel bodies provided with covers which are fixed by means of bolts and nuts. The scope of delivery will comprehend the venting devices within the covers and the drain devices within the bodies.

The filter can be equipped with basket or ring type strainers. The strainer inserts consist of a perforated plate optionally covered with cloths having different mesh widths. The medium to be filtered will flow through the strainer from the inside to the outside.

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 covers located at the top without any additional loads - and mechanically stress free. The medium to be filtered should enter the filter via the upper connection flange. A wrong installation may lead to functional disturbances of the filter.

Commissioning / Instruction manual

- 1. Bring the butterfly valves into the wanted operating position (consider the position indicator)
- 2. Open the venting device until the liquid emerges
- 3. Close the venting device
- 4. The filtering bowl is ready to be used

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

Switching-over procedure

- For opening the butterfly valves of the filter bowl to be operated turn back the lock levers of through 90° and for closing the butterfly valves of the filter bowl to be put out of commission turn back the lock levers through 90°
- 2. Open the venting device of the filter bowl to be operated until the liquid emerges
- 3. Close the venting device, the filter has been switched over

Cleaning

- 1. Depressurize the filter bowl shut down using the venting or drain devices.
- 2. Loosen the filter lock 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 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, the sealing elements should be checked if they are intact. If necessary they should be replaced.

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	Standard design	Special design or supplementary equipment respectively			
Strainer insert	Basket strainer	Ring type strainer, duplex strainer, pleated basket strainer			
Filter fineness	80 - 1000 μm : mesh with support plate from 1mm : perforated sheet	10 - 60 µm			
Filter lock	Through bolts with nuts (Fig. 1)				
Venting devices	Locking screws	Ball valves			
Drain devices	Locking screws	Ball valves			
Connection	Flanges acc. DIN EN 1092-1/11/B1 Position of flanges: superposed	acc. customer's specification (e.g. ANSI)			
Materials:					
Bodies and covers	1.4541/1.4571	1.4571, St35.8/P265GH			
Filterverschluss	acc. the body material	-			
Cover sealings (rubber-steel gasket)	NBR	EPDM, FPM, PTFE			
Perforated plate/mesh (strainer)	1.4301, 14301/1.4401	1.4571, 1.4571/1.4401			
Butterfly valves	GGG-40/1.4408/EPDM	GGG-40/1.4408/FPM, GGG-40/1.4408/PTFE			
Venting screws	Stainless steel	-			
Venting ball valves	-	Stainless steel			
Drain screws	Stainless steel	-			
Drain ball valves	-	Stainless steel			
Surface treatment inside					
Bodies steel	Conservation oil	Primed			
Bodies stainless steel	Glass bead blasted	Pickled and passivated			
Surface treatment outside					
Bodies steel	Synthetic enamel RAL 5018, turquoise	-			
Bodies stainless steel	Glass bead blasted	Pickled and passivated			
Options:					
Differential pressure indicator optical, electrical					
Magnetic insert					

On customer's request further design and material variants will be manufactured and supplied.

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Technical data and dimensions







DN	PN	D1	D2	H1		H2	H3		H4		L1	L2	R1	R2	d1	S	Volume	Flow rate	Filter area Basket	Weight
				min.	max.		min.	max.	min.	max.									strainer	appr.
mm	bar	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	dm³	m³/h	Cm ²	kg
50	16	114	220	260	265	200	562	567	632	637	572	109	106	155	14	995	3,7	18	510	80
65	16	168	285	245	270	210	571	596	644	669	712	121	134	155	14	1095	9,5	30	890	125
80	16	219	340	190	250	280	595	655	670	730	802	136	160	195	14	1200	19	45	1260	160
100	16	219	340	190	240	280	585	635	665	715	856	157	160	195	14	1200	19	70	1260	192
150	16	273	395	255	315	320	729	789	823	883	1006	198	203	276	18	1450	40	160	1960	352
200	10	324	445	582	582	410	1170	1170	1264	1264	1178	240	229	276	18	1990	72	280	3280	465

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

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

Our quality assurance system conforms to ISO 9001:2008

