

Vacuum Pump Protection Filter

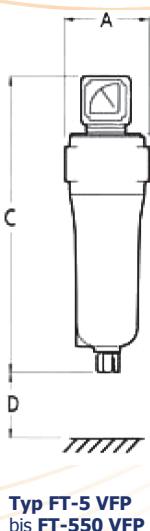
Series FT-VFP



FT offers a full range of Vacuum pump protection filters from 3/8" to 3" connection sizes. The range covers the most popular size of vacuum pump with flow rates up to 350 Nm³/h however larger fabricated models are available upon request.

The 3 micron grade (VLR) is designed for bulk liquid and high dirt removal to prevent liquid contamination and damage to rotating parts. The high efficiency 0,1 micron grade (VLX) is designed to remove very fine particulate matter which may damage the pump or process application.

The filter elements use a high dirt loading glass microfibre filter medium backed up with stainless steel metalwork and nylon endcaps to offer low pressure loss performance. These models incorporate the unique FuT designed 'push on' filter element, which reduces maintenance time and allows the filter to be located in the most confined places. The filter housings are manufactured from diecast aluminium with a tough polyester powder coating and are supplied complete with differential pressure gauge and drain valve.



Filter Model	Pipe size	Flow rate		Element Model	Dimensions (mm)				Weight (kg)
		m3/h	m3/min		A	B	C	D	
FT-8 VFP	3/8	8	0,13	E5 VFP	88	20	187	60	1,0
FT-10 VFP	1/2	10	0,17	E10 VFP	88	20	187	60	1,0
FT-16 VFP	3/4	16	0,27	E16 VFP	88	20	257	80	1,0
FT-26VFP	1	26	0,43	E26 VFP	125	32	263	100	2,0
FT-40 VFP	1	40	0,67	E40 VFP	125	32	363	120	2,7
FT-60 VFP	1 1/2	60	1,00	E60 VFP	125	32	461	140	2,7
FT-100 VFP	1 1/2	100	1,67	E100 VFP	125	32	720	160	3,3
FT-120 VFP	2	120	2,00	E120 VFP	163	43	764	520	5,3
FT-190 VFP	2	190	3,17	E190 VFP	163	43	1015	770	7,3
FT-205 VFP	2 1/2	205	3,42	E205 VFP	163	43	1015	770	7,0
FT-260 VFP	3	260	4,33	E260 VFP	240	59	875	630	13,0
FT-350 VFP	3	350	5,83	E350 VFP	240	59	1080	780	14,0

SPECIFICATION	Grade VLR			Grade VX1	
	Particle removal	3 µm		0,1µm	
Maximum temperaturer	65°C		149°F		65°C
Pressure loss – clean and dry	10 mbar		0,15 psi		30 mbar
Pressure loss- change elements	100 mbar		1,5 psi		100 mbar
Maximum working pressure	2000 mbar abs.		29 psi abs.		2000 mbar abs.
					29 psi abs.

1. Vacuum pump protection filters are manufactured from aluminium and carry the CE mark
2. Differential pressure gauges are fitted to models FT-100 VFP bis FT-550 VFP (Option for FT8VFP – FT 60VFP)
3. Manual drain valves are fitted to all models II

Correction factor

For maximum flow rate, multiply model flow rate shown in the above table by the correction factor corresponding to the working vacuum.

Operating Vacuum	m bar abs	Atmosphärisch	900	800	700	600	500	400	300	200	100	50
	torr	760	675	600	525	450	375	300	225	150	75	37,50
	psia	14,7	13	11,6	10,2	8,7	7,3	5,8	3,3	2,9	1,45	0,73
Correction factor	F1	1	0,9	0,8	0,7	0,6	0,5	0,4	0,3	0,2	0,1	0,05
	F2	1	1,1	1,25	1,43	1,67	2	2,5	3,33	5	10	50

F1: To calculate the correct capacity of a given filter based on actual operating conditions, multiply the nominal flow capacity by the appropriate correction factor
F2: To select a filter to match system flow conditions, multiply the system flow by the correction factor F2 that corresponds to vacuum in the pipe.

Material

Housing: Aluminium
Filter element: Borosilicate micro fibers, support: stainless steel
Endcaps: PA6 with 30% glass fibres