

VACUUM PUMP PROTECTION FILTERS

P-VAC

DESCRIPTION

P-VAC filters have been specifically developed for protection of vacuum pumps. These filters are optimised for high-efficient removal of solid particles and other contamination from the suction side of vacuum pumps preventing damage to the pump. For P-VAC filter series we offer two filtration stages. Rough pre-filter “VACP” removes bulk liquid and large solid particles while high efficiency microfilter VACM removes very fine impurities which may damage the pump.



APPLICATIONS ⁽¹⁾

- Vacuum pumps

⁽¹⁾ P-VAC filter housing can be used in variety of applications. For applications not listed please contact us or your local dealer.

TECHNICAL SPECIFICATION

Operating temperature	1,5 - 65 °C	35 - 149 °F
Operating pressure	20 - 2000mbar(abs)	0,29 – 29 psi
Initial pressure drop VACM	30mbar	0,45 psi
Initial pressure drop VACP	10mbar	0,15 psi

MATERIALS

Housing material	Aluminium
Fittings, Screws	Brass, Brass-zinc plated, Steel
Cover	ABS
Sealing	NBR
Corrosion protection	Electrophoretic Coating (KTL)
Outside protection	Powder paint coated (Epoxy-polyester base)
Lubricant	Shell cassida grease RLS 2
Filter media	Borosilicate micro fibres,
Drainage media	Polyester
Support (inner-outer)	Stainless Steel 1.4301
Bonding	Polyurethane
Endcaps	PA6 with 30% glass fibres
Sealing	NBR

SIZES

FILTER HOUSING	PIPE SIZE [inch]	FILTER ELEMENT	Capacity ⁽²⁾		DIMENSIONS [mm]				VOLUME [l]	WEIGHT [kg]
			[Nm ³ /h]	[scfm]	A	B	C	D		
P-VAC 0006	1/8	03528 VACP, VACM	1,2	0,7	105	55	14	40	0,08	0,3
P-VAC 0016	1/4	05528 VACP, VACM	2,2	1,3	125	55	14	60	0,10	0,3
P-VAC 0026	1/4	03844 VACP, VACM	3,1	1,8	145	73	18	40	0,23	0,5
P-VAC 0036	3/8	03844 VACP, VACM	3,7	2,2	145	73	18	40	0,23	0,5
P-VAC 0046	1/4	06050 VACP, VACM	4,4	2,6	189	88	21	60	0,45	0,8
P-VAC 0056	3/8"	06050 VACP, VACM	7,5	4,4	189	88	32	60	0,45	0,7
P-VAC 0076	1/2"	07050 VACP, VACM	10	5,7	189	88	32	60	0,45	0,7
P-VAC 0106	3/4"	14050 VACP, VACM	15	9	257	88	32	150	0,64	0,8
P-VAC 0186	1"	12075 VACP, VACM	24	14	261	125	37	160	1,4	1,9
P-VAC 0306	1"	22075 VACP, VACM	42	25	361	125	37	250	2,0	2,4
P-VAC 0476	1 1/2"	32075 VACP, VACM	64	38	461	125	37	350	2,6	2,6
P-VAC 0706	1 1/2"	50075 VACP, VACM	97	57	641	125	37	530	3,6	3,5
P-VAC 0946	2	51090 VACP, VACM	125	74	698	164	49	530	6,0	6,1
P-VAC 1506	2	76090 VACP, VACM	187	110	944	164	49	520	8,3	8,0
P-VAC 1756	2 1/2"	76090 VACP, VACM	210	124	944	164	49	770	8,4	7,6
P-VAC 2006	3"	51140 VACP, VACM	270	159	802	242	60	770	16,7	14,1
P-VAC 2406	3"	75140 VACP, VACM	345	203	999	242	60	630	21,3	16,7

⁽²⁾Free air capacity at atmospheric pressure.

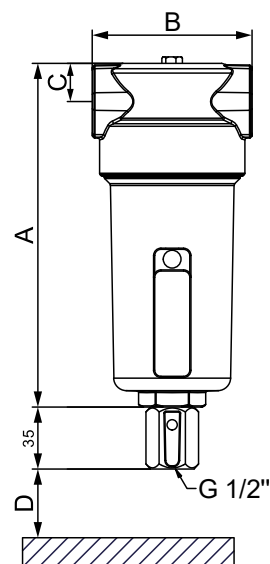
Standard is BSP pipe connection, other pipe connection on request.

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 C₁.
- To select a filter to match system flow conditions, multiply the system flow by the correction factor C₂ that corresponds to vacuum in the pipe.

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.



OPERATING PRESSURE

[bar] absolute	1	0,9	0,8	0,7	0,6	0,5	0,4	0,3	0,2	0,1	0,05	0,02
[psi] absolute	14,7	13	11,6	10,2	8,7	7,3	5,8	3,3	2,9	1,45	0,73	0,29
C ₁	1	0,9	0,8	0,7	0,6	0,5	0,4	0,3	0,2	0,1	0,05	0,02
C ₂	1	1,1	1,25	1,43	1,67	2	2,5	3,33	5	10	20	50