

ProAir

HIGH PRESSURE FILTERS

Features

- ▶ Working pressure up to 350 Kg/cm²g (5075 psig) & flow rates up to 1330 Nm³/hr (775 scfm).
- ▶ Available in four filtration grades (10,1.0,0.01 & XCS).
- ▶ **ProAir** Filtration Guarantee.
- ▶ Corrosion resistant SS 304 stainless steel housings. SS316 or other materials available on request.
- ▶ Can be used when mineral, synthetic & degraded lubricants are present.
- ▶ Sizes from 6 mm (1/4" B.S.P.) to 50 mm (2" B.S.P.) available. Non-standard sizes available on request.
- ▶ Location & strength to element position through tie-rod fixing.
- ▶ Hydro static pressure test certificates and material certificates available on request.



Benefits

- \$ High flow combined with pressure failsafe operation.
- \$ Flexibility in selection.
- \$ Reliability.
- \$ Low cost, long life & very durable.
- \$ Rugged & sturdy in aggressive environment.
- \$ Suits every need & applications.
- \$ No bypass of contaminants higher element efficiency.
- \$ Drain valve protected with safety bracket.

Compressed Air and Gas Purification for High Pressure Systems.

The new **ProAir** high efficiency high pressure series HP has been developed with customized housing accommodating the well proven **ProAir** filter elements to deliver complete purification of high pressure compressed air and gases.

Filtration can be done in various grades with choice of selection of housing materials to suit applications. To mention a few :- Air blast circuit breaker, oxygen filtration for breathing gas mixtures, PET bottle blowing, CNG Filtration systems, Breathing air packages, Marine & Defense systems.

TECHNICAL SPECIFICATIONS

GRADE XF - Coarse - Filter	
Particle Removal	1.0 micron
Max Operating Temp.	65° C

GRADE XO - Pre-Filter	
Particle Removal	1.0 micron
Oil Removal	0.5 mg/m ³
Max Operating Temp	65° C

GRADE XA - Oil Removal Filter	
Particle Removal	1.0 micron
Oil Removal	0.01mg/m ³
Max Operating Temp	65° C

GRADE XCS - Oil Vapour Adsorber	
Particle Removal	Down to 0.003mg/m ³ **
Max Operating Temp	30° C

Note: This element will not remove co/co2, or other toxic gases.

* Based at 20°C

** Efficiency Vapour with recommended prefilters

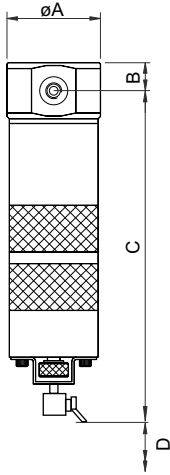
FILTER SELECTION & DIMENSIONS :

350 Kg/Cm² FILTERS

FILTER MODEL NO	PIPE SIZE IN MM (BSPF)	FLOW RATES *		DIMENSIONS IN MM				APPROX WEIGHT IN Kgs	REPLACEMENT ELEMENT CODE/NOS
		Nm ³ /Hr	Scfm	A	B	C	D		
HP-350-067 #	6 mm (G1/4)	114	67	80	28	255	263	7.5	E0019 (*)Vx1
HP-350-150 #	15 mm (G1/2)	255	150	100	35.5	265	328	12.8	E0036 (*)Vx1
HP-350-300 #	20 mm (G3/4)	510	300	100	35.5	303	366	14.1	E0064 (*)Vx1
HP-350-550 #	25 mm (G1)	935	550	100	35.5	496	490	21.0	E2010 (*)Vx1
HP-350-445 #	25 mm (G1)	750	445	155	35.5	445.0	488	15.0	E0127 (*)Vx1
HP-350-775 #	40 mm (G1.1/2)	1330	775	155	35.5	545.0	588	18.0	E0307 (*)Vx1

50 Kg/Cm² PET FILTERS

FILTER MODEL NO	PIPE SIZE IN MM (BSPF)	FLOW RATES * at 40 Kg/cm ² g		DIMENSIONS IN MM				APPROX WEIGHT IN Kgs	REPLACEMENT ELEMENT CODE/NOS
		Nm ³ /Hr	Scfm	A	B	C	D		
HP-50-60 #	6 mm (G1/4)	102	60	80	17.2	167	165	3.8	E0019 (#)x1
HP-50-120 #	15 mm (G1/2)	204	120	90	29.5	238	200	8.0	E0036 (#)x1
HP-50-200 #	20 mm (G3/4)	340	200	90	29.5	276	240	10.0	E0064 (#)x1
HP-50-300 #	20/25 mm (G3/4, G1)	510	300	142	36.5	399	365	12.0	E0127 (#)x1
HP-50-600 #	25/40 mm (G1, 1.1/2)	1020	600	142	36.5	490	465	14.0	E0307 (#)x1
HP-50-1000 #	40 mm (G1.1/2)	1700	1000	175	47	490	450	31.0	E0466 (#)x1
HP-50-1200 #	50mm(G2)	2040	1200	175	47	499	450	31.0	E0466 (#)x1
HP-50-2000 #	50mm(G2)	3400	2000	175	47	790	750	41.0	E0699 (#)x1



TECHNICAL DATA:-

Maximum Operating Pressure :-

350 kg/cm² g (5075 psig) for HP-350
50 kg/cm² g for HP-50

Maximum Operating Temperature :-

GRADE XF, XO, XA 65° C
GRADE XCS 30° C

Minimum Operating Temperature :-

5° C (41° F)

Correction Factor :-

Use the correction factors below for flow rates at other working pressure:

50 Kg/Cm²

Line Press.	Kg/cm ² g	4	6	8	10	15	20	30	40	50
Pressure	PSIG	58	87	116	145	220	290	435	580	725
Correction Factor		0.14	0.22	0.28	0.34	0.47	0.70	0.85	1.00	1.10

350 Kg/Cm²

Working	Kg/cm ² g	50	100	150	200	250	300	350
Pressure	PSIG	725	1450	2175	2900	3625	4350	5075
Correction Factor		0.73	0.78	0.82	0.87	0.91	0.96	1

* Data referred at 20° C (68° F) with sodium test.

Shah Pneumatics has a continuous policy of product development and although the Company reserves the right to change specifications, it attempts to keep customers informed of any alterations. This publication is for general information only and customers are requested to contact our Sales Department for detailed specifications and advice on a product's suitability for specific applications. All products are sold subject to the Company's standard conditions of sale.

ProAir is a trademark of **Shah Pneumatics**.

Compressed Air Treatment Products

Shah Pneumatics

Regd. Office : 28-30, Navketan Industrial Estate,
Mahakali Caves Road, Andheri (East),
Mumbai - 400 093, INDIA.

Phone : +91-22-6695 1090 Fax: +91-22-2687 5317

E-mail : shahpneu@bom3.vsnl.net.in

Website : www.shah-pneumatics.com

FILTER GRADE

* FLOW BASED ON A.N.R. CONDITIONS AT Max. PRESSURE.

Operating Pressure Differential at Rated flow:-

GRADE XF 0.07 kg/cm² (1 psi) approx.
GRADE XO 0.15 kg/cm² (2.25 psi) approx.
GRADE XA 0.30 kg/cm² (4.5 psi) approx.

* Recommended Filter Element Change:-

12 months or 6000 hours (Pressure differential reaches 0.7 Kg/cm²).

Not applicable to Grade XCS elements. Grade XCS elements must be changed periodically to suit application but at least every 1000 hours or earlier.

USE THE CORRECTION FACTORS BELOW FOR FLOW RATES AT OTHER DIFFERENTIAL PRESSURE :

ΔP* Kg/cm ²	0.1	0.2	0.4	0.6	0.8	1.0	2.0	3.0
Correction Factor	1	1.6	2.2	2.7	3.1	3.4	4.9	5.9