Compressed Air Filters

COMPRESSED AIR FILTERS

Parker sets the standard in compressed air quality – our complete range of filters provide ultimate protection against system contamination.

Our compressed air filters guarantee a continuous supply of high quality compressed air, with up to 99.9999% particle removal efficiency, low operational costs and minimal maintenance.

Parker

OIL-X Coalescing / Dry Particulate / Oil Vapour Removal Compressed Air Filters

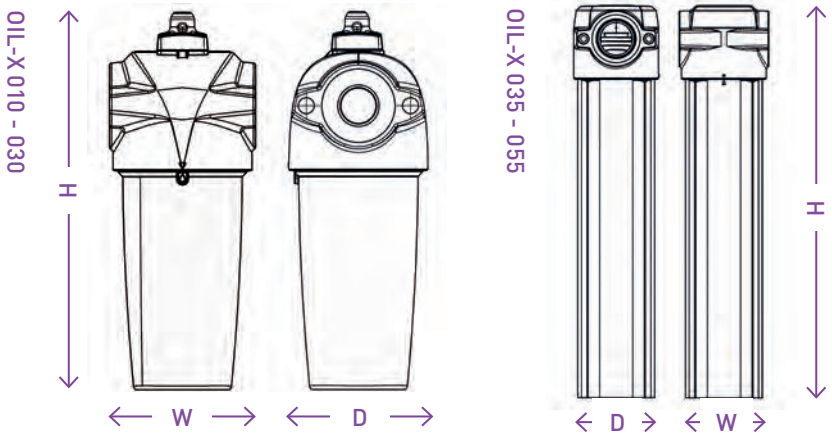
High efficiency coalescing and dry particulate filters with very low pressure drop providing excellent energy savings.

The Parker domnick hunter OIL-X range of die-cast compressed air filters has been designed from the outset to meet the air quality requirements of all editions of ISO8573-1, when validated in accordance with the stringent requirements of ISO12500-1.

An efficient and cost-effective manufacturing process is a major factor in maintaining the profitability and growth of your business. All Parker domnick hunter products are designed to not only minimise the use of compressed air and electrical energy in their operation, but also to significantly reduce the operational costs of the compressor by minimising pressure losses.

OIL-X filters incorporate a number of unique and patented design features to minimise differential pressure and provide a filter and element combination where the differential pressure starts low and stays low to maximise energy savings and provide the lowest lifetime costs without compromising air quality.

Diagrams:



Filtration Performance

Filtration Grade	Filter Type	Particle Removal (inc water and oil aerosols)	Max Remaining Oil Content at 21°C (70°F)	Filtration Efficiency	Initial Dry Differential Pressure	Initial Saturated Differential Pressure	Change Element Every	Precede with Filtration Grade
AO	Coalescing and Dry Particulate	Down to 1 micron	0.5 mg/m³ 0.5 ppm(w)	99.925%	<70 mbar (1psi)	<125 mbar (1.8psi)	12 months	WS (for bulk liquid)
AA	Coalescing and Dry Particulate	Down to 0.01 micron	0.01 mg/m³ 0.01 ppm(w)	99.9999%	<70 mbar (1psi)	<125 mbar (1.8psi)	12 months	AO
ACS	Oil Vapour Removal	N/A	0.003 mg/m³ 0.003 ppm(w)	N/A	<140 mbar (2psi)	N/A	When oil vapour is detected	AO+AA

Technical Data

Filter Grade	Filter Models	Min Operating Pressure		Max Operating Pressure		Min Operating Temp		Max Operating Temp	
		bar g	psi g	bar g	psi g	°C	°F	°C	°F
AO/AA	P010 – P055 (Float Drain)	1	15	16	232	2	35	80	176
AO/AA	P010 – P055 (Manual Drain)	1	15	20	290	2	35	80	176
AO/AA	P060 (Float Drain)	1	15	16	232	2	35	66	150
AO/AA	P060 (Manual Drain)	1	15	20	290	2	35	100	212
ACS	P010 – P055 (Manual Drain)	1	15	20	290	2	35	50	122
ACS	P060 (Manual Drain)	1	15	20	290	2	35	50	122

Flow Rates

Model	Port Connection	L/S	m^3/min	m^3/hr	cfm	Replacement Element kit	No.
GRADE P010A ☐☐I	¼"	10	0.6	36	21	P010 GRADE	1
GRADE P010B ☐☐I	3/8"	10	0.6	36	21	P010 GRADE	1
GRADE P010C ☐☐I	½"	10	0.6	36	21	P010 GRADE	1
GRADE P015C ☐☐I	½"	20	1.2	72	42	P015 GRADE	1
GRADE P020C ☐☐I	½"	30	1.8	108	64	P020 GRADE	1
GRADE P020D ☐☐I	¾"	30	1.8	108	64	P020 GRADE	1
GRADE P025D ☐☐I	¾"	60	3.6	216	127	P025 GRADE	1
GRADE P025E ☐☐I	1"	60	3.6	216	127	P025 GRADE	1
GRADE P030G ☐☐I	1½"	110	6.6	396	233	P030 GRADE	1
GRADE P035G ☐☐I	1½"	160	9.6	576	339	P035 GRADE	1
GRADE P040H ☐☐X	2"	220	13.2	792	466	P040 GRADE	1
GRADE P045I ☐☐X	2½"	330	19.8	1188	699	P045 GRADE	1
GRADE P050I ☐☐X	2½"	430	25.9	1548	911	P050 GRADE	1
GRADE P055I ☐☐X	2½"	620	37.3	2232	1314	P055 GRADE	1
GRADE P055J ☐☐X	3"	620	37.3	2232	1314	P055 GRADE	1
GRADE P060K ☐☐X	4"	1000	60	3600	2119	P060 GRADE	3

Stated flows are for operation at 7 bar (g) (102 psi g) with reference to 20°C, 1 bar (a), 0% relative water vapour pressure.
For flows at other pressures, apply the correction factors shown below.

Filter Coding Examples P010 – P055

Grade	Model	Port Connection	Connection Type	Drain Option	Incident Monitor Option
AO	P and 3 digit code denotes filter housing size	Letter denotes port connection	G = BSPP N = NPT D = Flanged	F = Float M = Manual	I = Indicator X = None
			Example code		
AO	P010	A	G	F	I

Note:
Connection options
Models P010 – P060
G = BSPP / N = NPT.

Models 065 – 095
D = flanged.

Product Selection and Correction Factors

To correctly select a filter model, the flow rate of the filter must be adjusted for the minimum operating pressure of the system.

1. Obtain the minimum operating pressure and maximum compressed air flow rate at the inlet of the filter.
2. Select the correction factor for minimum operating pressure from the CFP table (always round down e.g. for 5.3 bar, use 5 bar correction factor)
3. Calculate the minimum filtration capacity. Minimum Filtration Capacity = Compressed Air Flow Rate x CFP
4. Using the minimum filtration capacity, select a filter model from the flow rate tables above (filter selected must have a flow rate equal to or greater than the minimum filtration capacity).

CFP – Correction Factor Minimum Inlet Pressure

Minimum Inlet Pressure																					
bar g	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
psi g	15	29	44	58	73	87	100	116	131	145	160	174	189	203	218	232	248	263	277	290
Correction Factor	2.65	1.87	1.53	1.32	1.18	1.08	1.00	0.94	0.88	0.84	0.80	0.76	0.73	0.71	0.68	0.66	0.64	0.62	0.61	0.59

When ordering a filter for pressures above 16 bar g (232 psi g), use a manual drain. Replace F with M in product code. e.g. AOP015BGFX becomes AOP015BGMX. Models 150 – 500 are not suitable for pressures above 16 bar g (232 psi g)

Weights and Dimensions

Model	Height (H)		Width (W)		Depth (D)		Weight	
	mm	in	mm	in	mm	in	kg	lbs
010A	180	7.09	76	2.99	66	2.60	0.61	1.34
010B	180	7.09	76	2.99	66	2.60	0.61	1.34
010C	180	7.09	76	2.99	66	2.60	0.61	1.34
015C	238.5	9.39	89	3.5	83.5	3.29	1.16	2.58
020C	238.5	9.39	89	3.5	83.5	3.29	1.12	2.47
020D	238.5	9.39	89	3.5	83.5	3.29	1.12	2.47
025D	277	10.9	120	4.72	114.5	4.50	2.21	4.86
025E	277	10.9	120	4.72	114.5	4.50	2.21	4.86
030G	367	14.45	120	4.72	114.5	4.50	2.68	5.91
035G	531	20.9	164	6.46	156	6.10	6.90	15.20
040H	623	24.5	164	6.46	156	6.10	7.30	16.10
045I	623	24.5	164	6.46	156	6.10	7.10	15.65
050I	745	29.3	192	7.56	183	7.20	10.30	22.71
055I	935	36.8	192	7.56	183	7.20	15.30	33.73
055J	935	36.8	192	7.56	183	7.20	15.30	33.73
060K	847	33.3	420	16.54	282	11.10	44.50	98.11