FOCUSED ON
COMPRESSED AIR TREATMENT

Parker Compressed Air Filters | Oil-X Series

Parker

ENGINEERING YOUR SUCCESS.

FOCUSED ON **EFFICIENCY**

Parker domnick hunter OIL-X a new series of compressed air filters, taking efficiency to a different level.

Built on Parker's worldwide expertise in filtration, the OIL-X range has been developed to ensure consistent outstanding air quality, guaranteed for 12 months, and third-party validated to meet ISO 8573-1.

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 minimize the use of compressed air and electrical energy in their operation, but also to significantly reduce the operational costs of the compressor by minimizing pressure losses.

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

The Parker domnick hunter OIL-X has been developed with a design philosophy of simplicity, compatibility and usability, but above all validated air quality. OIL-X is available in four different variants: water separation, coalescing, dry particulate and oil vapor removal.

Features

- For the removal of water and oil aerosols, atmospheric dirt and solid particles, rust, pipescale and micro-organisms
- Coalescing filter performance tested to the stringent requirements of ISO12500-1 and ISO8573-2
- Dry particulate filter performance tested in accordance with the requirements of ISO8573-4
- **Unique filter element**
  With a specialist construction and unique design for reduced air flow velocity, reduced pressure loss, increased dirt holding capacity, and improved efficiency including a 12-month air quality guarantee. Energy efficient media - 1.8 psig saturated pressure drop.
- **Flow management system**
  Specially engineered 'bell mouth', with 90-degree elbow, flow distributor and conical flow diffuser, to promote a consistent, optimum air flow, contributing towards maximum efficiency, reduced differential pressure and lower energy consumption.
- **Differential pressure indicator**
  Indication of required change out of element.
- **Filter housing**
  Designed to allow easy maintenance and element replacement, and covered by a 2-year guarantee, for reduced downtime, service cost and peace of mind.
- **Flexible connections**
  A wide range of port sizes and filter connections, for added flexibility and time saving.
- **Epoxy coating**
  Finished with alocrom corrosion protection and a tough, dry powder epoxy coating for a high quality feel with the reassurance of durability.

FOCUSED ON **FILTRATION & SEPARATION**

Combining the unique filter element with a specially designed advanced air flow management system, the Parker domnick hunter OIL-X range is engineered to not only deliver air quality in accordance with ISO 8573-1 classifications, but it does so with the lowest differential pressure on the market-ensuring maximum efficiency and productivity.

Benefits

- Highest air quality
- Lowest power consumption
- 1.8 psig operational differential pressure
- Lowest CO_2 emissions
- Lowest total cost of ownership

- Validated performance you can rely on

  Built on Parker's worldwide expertise in filtration, the Parker domnick hunter OIL-X range has been developed to ensure consistent outstanding air quality, guaranteed for 12 months - and third-party validated to meet ISO 8573-1 (the international standard of compressed air quality).

- Lowest differential pressure

  Combining the unique filter element with a specially designed advanced air flow management system, the Parker domnick hunter OIL-X range is engineered to not only deliver air quality in accordance with ISO 8573-1 classifications, but it does so with an extremely low differential pressure – ensuring maximum efficiency and productivity.

- Cost savings

  Extended equipment lifespan, reduced maintenance, enhanced energy efficiency, proven reliability and minimal downtime all contribute towards lowest total cost of ownership – and a significant positive impact on compressed air running costs.

One Year Air Quality Guarantee

Your air quality has been guaranteed for 1 year and will be renewed at every annual filter element change.

Annual filter element changes ensure:

- Optimal performance is maintained
- Air quality continues to meet international standards
- Protection of downstream equipment. personnel and processes
- Low operational costs
- Increased productivity and profitability
- Peace of mind

Product Selection

Grade	Element Type	Model Size / Port Connection	Thread Connection	Drain Type	Differential Pressure Indicator*
AA	P	030G	N	F	I
WS AO AA ACS	P	010 A (1/4") 010 B (3/8") 010 C (1/2") 015 C (3/4") 020 D (3/4") 025 D (3/4") 025 E (1") 030 G (1 1/2") 035 G (1 1/2") 040 H (2") 045 I (2 1/2") 050 I (2 1/2") 055 I (2 1/2") 050 J (3") 060 K (4")	N (NPT) G (BSPP)	F (Float) M (Manual)	X (None) I (DPI)

*AO/AA only available with differential pressure indicator (I). WS/ACS only available without differential pressure indicator (X).

OIL-X Water Separators

Technical Data

Filtration Grade	Filter Type	Drain Type	Min Operating Pressure		Max Operating Pressure		Min Operating Temperature		Max Operating Temperature	
			psi g	bar g	psi g	bar g	°F	°C	°F	°C
WSP010-WSP050	Water Separator	Float	15	1	232	16	35	2	176	80
WSP060	Water Separator	Float	15	1	232	16	35	2	150	66

Product Selection

Stated flows are for operation at 102 psi g (7 bar g) with reference to 68°F (20°C), 14.5 psi (1 bar), 0% relative water vapor pressure.

Model	Port Connection Connection	Flow Rates			
		scfm	L/s	m³/min	m³/hr
WSP010ANFX-US	1/4"	21	10	0.6	36
WSP010BNFX-US	3/8"	21	10	0.6	36
WSP010CNFX-US	1/2"	21	10	0.6	36
WSP015CNFX-US	1/2"	85	40	2.4	144
WSP020DNFX-US	3/4"	85	40	2.4	144
WSP025DNFX-US	3/4"	233	110	6.6	396
WSP025ENFX-US	1"	233	110	6.6	396
WSP030GNFX-US	1-1/2"	233	110	6.6	396
WSP035GNFX-US	1-1/2"	742	350	21.0	1260
WSP040HNFX-US	2"	742	350	21.0	1260
WSP045INFX-US	2-1/2"	742	350	21.0	1260
WSP050INFX-US	2-1/2"	1695	800	48.0	2880
WSP055JNFX-US	3"	1695	800	48.0	2880
WSP060KNFX-US	4"	2119	1000	60.0	3600

Correction Factors

Please apply these correction factors to flows other than 102 psi g (7 bar g).

Line Pressure		Correction Factor Pressure (CFP)
psi g	bar g	
15	1	4
29	2	2.63
44	3	2.00
58	4	1.59
73	5	1.33
87	6	1.14
100	7	1.00
116	8	0.94
131	9	0.89
145	10	0.85
160	11	0.82
174	12	0.79
189	13	0.76
203	14	0.73
218	15	0.71
232	16	0.68

Applying 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.

- To correctly select a filter model, the flow rate of the filter must be adjusted for the minimum operating pressure of the system.
- Obtain the minimum operating pressure and maximum compressed air flow rate at the inlet of the filter.
- Select the correction factor for minimum operating pressure from the CFP table (always round down e.g. for 73.2 psi, use 73 psi correction factor).
- Calculate the minimum filtration capacity : Minimum Filtration Capacity = Compressed Air Flow Rate x CFP.
- 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.

OIL-X Filters
Technical Data

Filtration Grade	Filter Type	Drain Type	Min Operating Pressure		Max Operating Pressure		Min Operating Temperature		Max Operating Temperature	
			psi g	bar g	psi g	bar g	°F	°C	°F	°C
AO/AA	Coalescing	Float	15	1	232	16	35	2	176	80
AO/AA	Dry Particulate	Manual	15	1	290	20	35	2	212	100
ACS	Oil Vapor Removal	Manual	15	1	290	20	35	2	122	50

Product Selection

Stated flows are for operation at 102 psi g (7 bar g) with reference to 68°F (20°C), 14.5 psi (1 bar), 0% relative water vapor pressure.

Model	Port Conn.	Flow Rates				Replacement Elements
		scfm	L/s	m^3/min	m^3/hr	
GRADE P010AN(*)	1/4"	21	10	0.6	36	P010 GRADE
GRADE P010BN(*)	3/8"	21	10	0.6	36	P010 GRADE
GRADE P010CN(*)	1/2"	21	10	0.6	36	P010 GRADE
GRADE P015CN(*)	1/2"	42	20	1.2	72	P015 GRADE
GRADE P020CN(*)	1/2"	64	30	1.8	108	P020 GRADE
GRADE P020DN(*)	3/4"	64	30	1.8	108	P020 GRADE
GRADE P025DN(*)	3/4"	127	60	3.6	216	P025 GRADE
GRADE P025EN(*)	1"	127	60	3.6	216	P025 GRADE
GRADE P030GN(*)	1-1/2"	233	110	6.6	396	P030 GRADE
GRADE P035GN(*)	1-1/2"	339	160	9.6	576	P035 GRADE
GRADE P040HN(*)	2"	466	220	13.2	792	P040 GRADE
GRADE P045IN(*)	2-1/2"	699	330	19.1	1188	P045 GRADE
GRADE P050IN(*)	2-1/2"	911	430	25.9	1548	P050 GRADE
GRADE P055IN(*)	2-1/2"	1314	620	37.3	2232	P055 GRADE
GRADE P055JN(*)	3"	1314	620	37.3	2232	P055 GRADE
GRADE P060KN(*)	4"	2119	1000	60.0	3600	060 GRADE

(*) = Replace with (F) when ordering AO/AA coalescing filters, (M) when ordering AO/AA dry particulate filters or (M) when ordering ACS oil vapor removal filters.

☐= Replace with (I) for differential Pressure Indicator. Replace with (X) for no differential pressure indicator.

*AO/AA only available with differential pressure indicator (I). WS/ACS only available without differential pressure indicator (X).

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

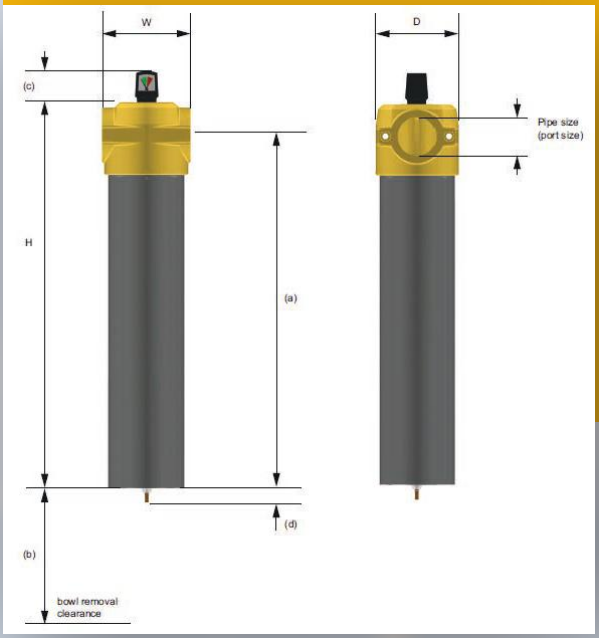
Applying Corrective Factors

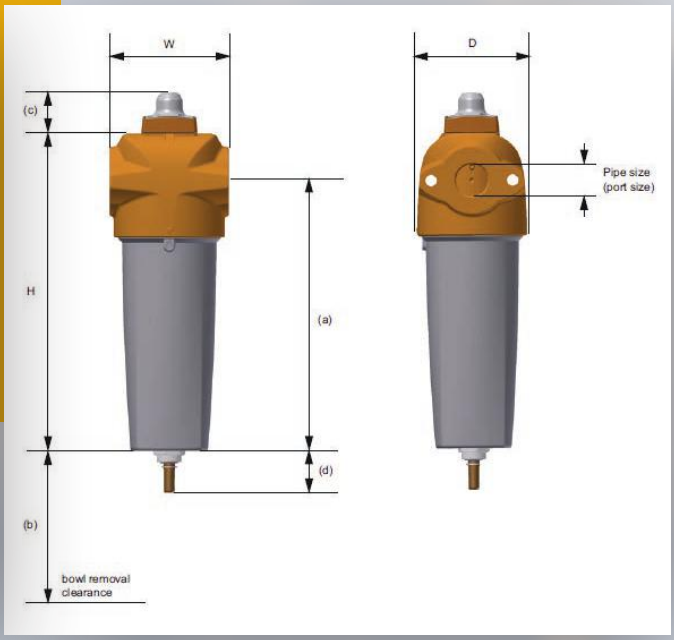
- To correctly select a filter model, the flow rate of the filter must be adjusted for the minimum operating pressure of the system.
- Obtain the minimum operating pressure and maximum compressed air flow rate at the inlet of the filter.
- Select the correction factor for minimum operating pressure from the CFP table (always round down e.g. for 73.2 psi, use 73 psi correction factor).
- Calculate the minimum filtration capacity : Minimum Filtration Capacity = Compressed Air Flow Rate x CFP.
- 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.

Filtration Performance

Filtration Grade	WS	AO	AA	ACS
Filter Type	Bulk Liquid Removal	Coalescing &Dry Particulate	Coalescing & Dry Particulate	Oil Vapor Removal
Particle Removal (inc water & oil aerosols)	N/A	Down to 1 micron	Down to 0.01 micron	N/A
Max Remaining Oil Content at 21°C (70°F)	N/A	0.5mg/m^3 0.5 ppm(w)	0.01mg/m^3 0.01 ppm(w)	0.003 mg/m^3 0.003 ppm(w)
Filtration Efficiency	>92%	99.925%	99.9999%	N/A
Test Methods Used	ISO8573.9	ISO8573.2 ISO8573.4 ISO12500-1	ISO8573.2 ISO8573.4 ISO12500-1	ISO8573.5
ISO12500-1 Inlet Challenge Concentration	N/A	40mg/m^3	10mg/m^3	N/A
Initial Dry Differential Pressure	N/A	<1.0psi (70 mbar)	<1.0psi (70 mbar)	<2.0psi (140 mbar)
Initial Saturated Differential Pressure	N/A	<1.8psi (125 mbar)	<1.8psi (125 mbar)	N/A
Change Element Every	N/A	12 months	12 months	When Oil Vapor is Detected
Precede with Filtration Grade	N/A	WS (for bulk liquid)	AO	AA

Diagram of filter dimensions





Model	Pipe Size	Height (H)		Width (W)		Depth (D)		(a)		(b)		(c)		(d)		Weight	
		mm	ins	mm	ins	mm	ins	mm	ins	mm	ins	mm	ins	mm	ins	kg	lbs
WS / P010A	1/4"	180	7.09	76	2.99	66	2.60	154	6.1	50	1.97	32	1.3	38	1.5	0.61	1.34
WS / P010B	3/8"	180	7.09	76	2.99	66	2.60	154	6.1	50	1.97	32	1.3	38	1.5	0.61	1.34
WS / P010C	1/2"	180	7.09	76	2.99	66	2.60	154	6.1	50	1.97	32	1.3	38	1.5	0.61	1.34
WS / P015C	1/2"	238.5	9.36	89	3.5	83.5	3.29	202	8.0	50	1.97	32	1.3	38	1.5	1.16	2.55
P020C	1/2"	238.5	9.36	89	3.5	83.5	3.29	202	8.0	50	1.97	32	1.3	38	1.5	1.12	2.58
WS / P020D	3/4"	238.5	9.36	89	3.5	83.5	3.29	202	8.0	50	1.97	32	1.3	38	1.5	1.12	2.58
WS / P020D	3/4"	227	10.9	120	4.72	114.5	4.5	232	9.1	70	2.76	32	1.3	38	1.5	2.21	4.86
WS / P025E	1"	227	10.9	120	4.72	114.5	4.5	232	9.1	70	2.76	32	1.3	38	1.5	2.21	4.86
WS / P030G	1-1/2"	367	14.45	120	4.72	114.5	4.5	323	12.7	70	2.76	32	1.3	38	1.5	2.68	5.91
WS / P035G	1-1/2"	531	20.9	164	6.46	156	6.10	384	15.1	100	3.94	68	2.68	38	1.5	6.90	15.20
WS / P040G	2"	623	24.5	164	6.46	156	6.10	476	18.7	100	3.94	68	2.68	38	1.5	7.30	16.10
WS / P045H	2-1/2"	623	24.5	164	6.46	156	6.10	476	18.7	100	3.94	68	2.68	38	1.5	7.10	15.65
WS / P050I	2-1/2"	745	29.3	192	7.56	183	7.20	587	23.1	120	4.72	68	2.68	38	1.5	10.30	22.71
P055I	2-1/2"	935	36.8	192	7.56	183	7.20	772	30.4	120	4.72	68	2.68	38	1.5	15.30	33.73
WS / P055J	3"	935	36.8	192	7.56	183	7.20	772	30.4	120	4.72	68	2.68	38	1.5	15.30	33.73

State of California ONLY
WARNING: Proposition 65
The products described herein can expose you to chemicals known to the State of California to cause cancer or reproductive harm.
For more information: www.P65Warnings.ca.gov

Worldwide Filtration Manufacturing Locations

North America

Compressed Air Treatment

Industrial Gas Filtration and Generation Division
Lancaster, NY
716 686 6400
www.parker.com/igfg

Haverhill, MA
978 858 0505
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Engine Filtration

Racor
Modesto, CA
209 521 7860
www.parker.com/racor

Holly Springs, MS
662 252 2656
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Hydraulic Filtration

Hydraulic & Fuel Filtration
Metamora, OH
419 644 4311
www.parker.com/hydraulicfilter

Laval, QC Canada
450 629 9594
www.parkerfarr.com

Velcon
Colorado Springs, CO
719 531 5855
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Process Filtration

domnick hunter Process Filtration SciLog
Oxnard, CA
805 604 3400
www.parker.com/processfiltration

Water Purification

Village Marine, Sea Recovery, Horizon Reverse Osmosis
Carson, CA
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Europe

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State of California ONLY
WARNING: Proposition 65
The products described herein can expose you to chemicals known to the State of California to cause cancer or reproductive harm.
For more information: www.P65Warnings.ca.gov