# OIL-X IP50 ADVANTAGE

## Intermediate Pressure Filters

The removal of impurities within a compressed air system is vitally important in order to prevent contamination of downstream processes equipment and products.

Parker domnick hunter OIL-X IP50 *ADVANTAGE* intermediate pressure filters combine the new energy efficient OIL-Xplus filter elements with specially designed housings to provide high efficiency filtration for applications up to 50 barg (725 psig).

Available in various filtration grades and connection sizes, they provide a level of protection tailored to your application.

#### **Typical Applications**

- P.E.T. bottling
- Air blast circuit breakers
- Shipborne air distribution systems
- Engine starting
- Pressure testing of pipelines

## **Contact Information:**

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## **Benefits:**

- Meets or exceeds the requirements for delivered air quality shown in all editions of ISO8573-1, the international standard for compressed air quality
- Coalescing filters fully tested in accordance with ISO12500-1
- Performance independently validated by Lloyds Register
- Elimination of oil, water and dirt Available in six filtration grades
- Ideally suited for Food / Beverage / Pharmaceutical / P.E.T. applications
  - FDA Title 21 compliance
  - EC1935 2004 Exempt
- Trouble free, high performance quality OIL-Xplus ADVANTAGE element backed with a 1 year performance guarantee
- 10 years guarantee on filter housing
- Ease of installation Compact housing design
- Port options BSPP / NPT Weld Flange kits also available



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## **Filtration Grades**

Filtration Grade	Filter Type	Particle removal (inc water & oil aerosols)	Max Remaining Oil Content at 21°C (70°F)	Filtration Efficiency	Change Element Every	Precede with Filtration Grade
ws	Bulk Liquid	N/A	N/A	>90%	N/A	N/A
AO	Coalescing	Down to 1 micron	0.6 mg/m <sup>3</sup> 0.5 ppm(w)	99.925%	12 months	WS (for bulk liquid)
AA	Coalescing	Down to 0.01 micron	0.01 mg/m <sup>3</sup> 0.01 ppm(w)	99.9999%	12 months	AO
AR	Dry Particulate	Down to 1 micron	N/A	99.925%	12 months	N/A
AAR	Dry Particulate	Down to 0.01 micron	N/A	99.9999%	12 months	AR
ACS	Oil Vapour Removal	N/A	0.003 mg/m <sup>3</sup> 0.003 ppm(w)	ISO8573-5	when oil vapour or odour is detected	AA

## **Technical Data**

Model/ Grade	Maximum Operating Pressure		Minimum Operating Temperature		Maximum Operating Temperature		Initial 'Dry' Differential Pressure		Initial 'Wet' Differential Pressure	
	bar g	psi g	°C	°F	°C	°F	m bar	psi	m bar	psi
IP50 - WS		705	2.0	35	100	212	N/	A	70	1.0
IP50 - AO							70	1.0	140	2.0
IP50 - AA	50						140	1.5	200	3.0
IP50 - ACS	50 725	2.0	2.0 35	30	86					
IP50 - AR					100	212	70	1.0	N/A	Ά
IP50 - AAR					100		100	1.5		

\*Recommended Filter Element change:- 12 months or 6000 hours\*

\*Not applicable to Grade ACS elements. Grade ACS elements should be changed after 1000 hours operation at 21°C (70°F) or before if odours can be detected.

#### **Filter Selection**

Model	Pipe Size	L/s	m³/min	m³/h	cfm	Replacement Element Code
grade IP50 010A X	1/4"	30	1.8	108	64	K009 (Grade)
grade IP50 020B X	<sup>3</sup> /8"	45	2.7	162	95	K009 (Grade)
grade IP50 030C X	1/2"	95	5.7	342	201	K030 (Grade)
grade IP50 040D X	3/4"	145	8.7	522	307	K030 (Grade)
grade IP50 050E X	1"	285	17.1	1026	604	K145 (Grade)
grade IP50 060G X	1 <sup>1</sup> /2"	465	27.9	1674	985	K145 (Grade)
grade IP50 070H X	2"	965	57.9	3473	2044	K220 (Grade)

### **Correction Factors**

Working	bar g	20	25	30	35	40	45	50
Pressure	psi g	290	362	435	507	580	652	725
Correction Factor		2.43	1.96	1.65	1.42	1.24	1.11	1.00

Use the correction factors above for flow rates at other working pressures.

#### Options:

IP50 Coding examples: A0IP50-010-AGFX ACSIP50-040-DGMX

• Flanged connection kits

Note:

Connections option G = BSPP or N = NPT. Drains options F = Automatic / M = Manual.

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.

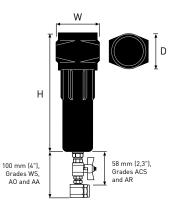
2. Select the correction factor for minimum operating pressure from the CFP table (always round down e.g. for 33 bar, use 30 bar correction factor).

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).

#### Weights and Dimensions

Model	Height (H)			Width (W)		Depth (D)	Weight	
Woder	mm	ins	mm	ins	mm	ins	kg	lbs
grade IP50 010A X	175	6.9	78	3.1	68	2.7	1.3	2.9
grade IP50 020B X	175	6.9	78	3.1	68	2.7	1.3	2.9
grade IP50 030C X	245	9.6	89	3.5	84	3.3	2.0	4.4
grade IP50 040D X	245	9.6	89	3.5	84	3.3	2.0	4.4
grade IP50 050E X	423	16.6	122	4.8	116	4.6	5.0	11.0
grade IP50 060G X	423	16.6	122	4.8	116	4.6	5.0	11.0
grade IP50 070H X	480	18.9	170	6.7	162	6.4	10.0	22.0



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