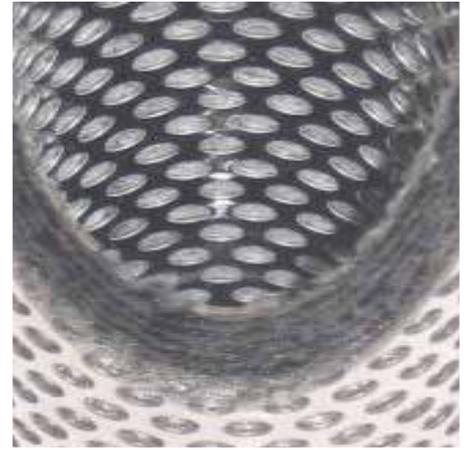


# OIL-X Die-cast Aluminium Compressed Air Filters

Grade AC In-line, Point of Use  
Oil Vapour Reduction Filters (1/4" - 1 1/2")



## In-line, Point of Use Oil Vapour Reduction Filters

Oil vapour is present in all compressed air systems, even those using oil-free compressors. Left untreated, oil vapour can cool, condense and form liquid and aerosols of oil in the compressed air piping or at critical applications.

Whilst many systems are protected with plant scale oil vapour reduction systems in the compressor room such as the Parker OIL-X Grade OVR, years of contamination in the distribution piping from untreated compressed air can still lead to the presence of oil vapour, liquid and aerosol oil at the point of use.

Whilst additional Parker OIL-X Grade OVR can be installed at critical points of use to treat contamination in the distribution piping, these may be oversized for some smaller, point of use applications, therefore the Parker OIL-X Grade AC filters can be used.

Parker Grade AC Filters are a combination filter, incorporating a high efficiency coalescing filter and oil vapour reduction filter in a single housing. Grade AC filter elements use either a deep wrapped bed of carbon cloth or granular activated carbon to adsorb oil vapour (size dependant).

It is important to note, in-line adsorption filter elements have a different life span compared to coalescing and dry particulate filters and require more frequent element changes. Should a 12 month service period be required, Parker OIL-X Grade OVR oil vapour reduction filters are recommended.



## Advantages

- Delivered air quality to ISO8573-1 Class 1 for total oil when used in conjunction with Parker OIL-X Grade AO coalescing filter
- Tested in accordance with ISO8573-2, ISO8573-4 & ISO8573-5
- 3rd party performance validated by Lloyds Register
- Designed for point of use installation - for plant scale protection or long adsorbent life use OIL-X Grade OVR
- Housing Guarantee - 10 year guarantee on filter housings



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## Filtration Performance

Filtration Grade	Filter Type	Particle Reduction (inc water & 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
AC	High Efficiency Coalescing & Oil Vapour Reduction	Down to 0.01 micron	<b>Aerosols</b> 0.01 mg/m <sup>3</sup> 0.01 ppm(w)  <b>Vapour</b> 0.003 mg/m <sup>3</sup> 0.003 ppm(w)	N/A	< 618 mbar (9 psi)	< 773 mbar (11 psi)	<b>Coalescing Element</b> 12 Months  <b>Oil Vapour Reduction Element</b> When oil vapour is detected	AO

## Technical Data

Filtration Grade	Filter Models	Min Operating Pressure		Max Operating Pressure		Min Operating Temperature		Max Operating Temperature	
		bar g	psi g	bar g	psi g	°C	°F	°C	°F
AC	010 - 030 (Float Drain)	1	15	16	232	2	35	30	86
AC	010 - 030 (Manual Drain)	1	15	20	290	2	35	30	86

## Flow Rates

Model	Pipe Size	L/S	m <sup>3</sup> /min	m <sup>3</sup> /hr	cfm	Replacement Elements	
AC010AFX	¼"	6	0.4	22	13	010AA	010AC
AC010BFX	⅜"	6	0.4	22	13	010AA	010AC
AC010CFX	½"	6	0.4	22	13	010AA	010AC
AC015BFX	⅜"	13	0.8	46	27	015AA	015AC
AC015CFX	½"	13	0.8	46	27	015AA	015AC
AC020CFX	½"	25	1.5	90	53	020AA	020AC
AC020DFX	¾"	25	1.5	90	53	020AA	020AC
AC020EFX	1"	25	1.5	90	53	020AA	020AC
AC025DFX	¾"	40	2.4	143	84	025AA	025DAC
AC025EFX	1"	65	3.9	231	136	025AA	025EAC
AC030EFX	1"	85	5.1	305	180	030AA	030AC
AC030FFX	1½"	85	5.1	305	180	030AA	030AC
AC030FFX	1½"	85	5.1	305	180	030AA	030AC

## Filter coding example

Grade	Model	Pipe Size	Thread	Drain Option	Incident Monitor
AC	3 digit code denotes filter housing size	Letter denotes pipe size	G = BSPP	F = Float M = Manual	X = None
<b>Example code</b>					
AC	010	A	G	F	X

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.

## Product Selection & Correction Factors

To correctly select a filter model, the flow rate of the filter must be adjusted for the minimum operating (inlet) pressure at the point of installation.

1. Obtain the minimum operating (inlet) pressure and maximum compressed air flow rate at the inlet of the filter.
2. Select the correction factor for minimum inlet pressure from the CFMIP 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).

## CFMIP - 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
<b>Correction Factor</b>		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

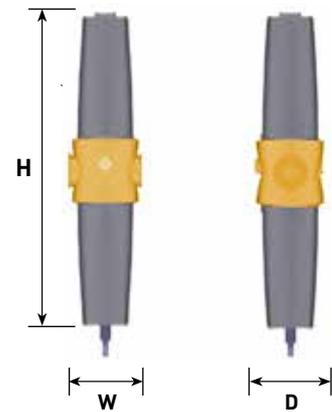
When ordering a filter for pressures above 16 bar g (232 psi g), use a manual drain. Replace F with M in product code. e.g. AC015BGF becomes AC015BGMX.

## Filtration Tested In Accordance With

<b>Filtration Grade</b>	<b>AC</b>
<b>Filter Type</b>	High Efficiency Coalescing & Oil Vapour Reduction (Combination)
<b>Test Methods Used</b>	ISO8573-2 ISO8573-4 ISO8573-5
<b>ISO8573-2 Inlet Challenge Concentration</b>	10 mg of oil aerosol per cubic metre of compressed air
<b>ISO8573-5 Inlet Challenge Concentration</b>	0.018 mg of oil vapour per cubic metre of compressed air

## Weight & Dimensions

Model	Height (H)		Width (W)		Depth (D)		Weight	
	mm	ins	mm	ins	mm	ins	kg	lbs
AC010A	311	12.3	76	3.0	65	2.6	0.8	1.8
AC010B	311	12.3	76	3.0	65	2.6	0.8	1.8
AC010C	311	12.3	76	3.0	65	2.6	0.8	1.8
AC015B	474	18.7	97	3.8	84	3.3	1.6	3.5
AC015C	474	18.7	97	3.8	84	3.3	1.6	3.5
AC020C	474	18.7	97	3.8	84	3.3	1.4	3.2
AC020D	474	18.7	97	3.8	84	3.3	1.4	3.2
AC020E	474	18.7	97	3.8	84	3.3	1.4	3.2
AC025D	554	21.8	129	5.1	115	4.5	3.5	7.8
AC025E	554	21.8	129	5.1	115	4.5	3.4	7.6
AC030E	733	28.9	129	5.1	115	4.5	4.1	9.0
AC030F	733	28.9	129	5.1	115	4.5	4.1	9.0
AC030F	733	28.9	129	5.1	115	4.5	4.1	9.0



## Quality Assurance / IP Rating / Pressure Vessel Approvals

<b>Development / Manufacture</b>	ISO 9001 / ISO 14001
<b>Ingress Protection Rating</b>	Not Applicable
<b>EU</b>	Pressure vessel approved for fluid group 2 in accordance with the Pressure Equipment Directive 2014/68/EU
<b>USA</b>	Approval to ASME VIII Div. 1 not required
<b>AUS</b>	Approval to AS1210 not required
<b>GUS</b>	TR (formerly GOST-R)
<b>For use with Compressed Air Only</b>	



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