



domnick hunter

OIL-X

EVOLUTION

**The most energy efficient
compressed air filters
in the world**

www.domnickhunter.com

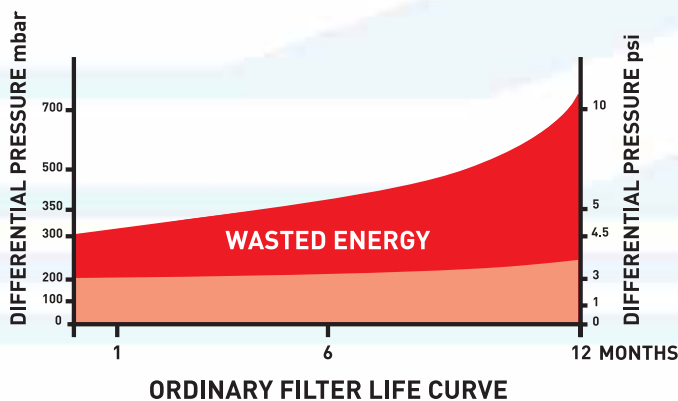
OIL-X EVOLUTION

The most energy efficient compressed air filter

Don't drive your compressor

Old filtration technology

Ordinary compressed air filters have always consumed too much energy, as they are by design, a restriction to air flow. During their working life, this restriction increases dramatically, and typically over one year, can consume more energy than they are worth. Technically, service life is dependent upon differential pressure. Most manufacturers recommend a replacement filter element at between 500 mbar (7 psi) and 700 mbar (10 psi) differential. This will cost you a massive 5% extra in compressor energy. In fact you are driving your compressor with the brakes on!



NEW filtration technology

OIL-X EVOLUTION compressed air filters use very little energy as they have a low resistance to air flow. Advancements such as deep bed pleating, graded density media and an oleophobic coating have led to a high performance filter element with low initial energy costs. Differential pressure starts low and stays low throughout its life. Service life is no longer dependent upon differential pressure, but on annual filter element change backed up with a one year air quality guarantee.



energy efficient filters in the world

compressor with the brakes on!

Guarantee a quality future

All domnick hunter
OIL-X EVOLUTION filters
have two guarantees.

The first is a one year
compressed air quality
guarantee. This ensures that
the solid particle, oil aerosol,
and vapour content selected conforms
to the ISO 8573.1 international standard.
This guarantee is automatically extended
when service recommendations are followed.

The second guarantees the filter housing for ten years
under recommended operating conditions.

Further details of these quality guarantees are available
to download free of charge from www.domnickhunter.com

Independently tested

The performance of OIL-X EVOLUTION filters
exceeds the latest International ISO 8573.1 air
quality standard. This new range of compressed
air filters is not only tried and tested by
domnick hunter, but is independently verified by:



Copies of independent test certificates are
available to download free of charge from
www.domnickhunter.com



domnick hunter

ISO 9001:2000



ISO 14001



INTERNATIONAL
APPROVALS



CRN



AS1210

ASME VIII National Board



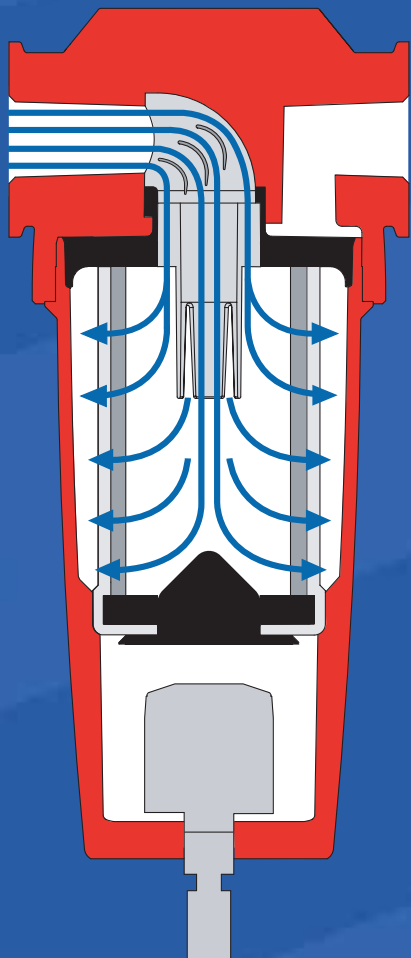
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OIL-X EVOLUTION

The new domnick hunter OIL-X EVOLUTION range of compressed air filters has been designed from the outset to meet current and forthcoming requirements for compressed air quality. Using aerospace technology, domnick hunter has optimised the flow path through the housing and element, significantly reducing air turbulence and pressure losses. Providing an optimal flow path is key to reducing system operating costs.



The most energy efficient filter element in the world

Full Flow Inlet

Inlet conduit matches inlet diameter, reducing pressure drop and running costs.



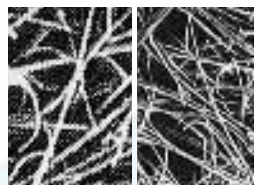
Even Flow Distribution

Air flow is distributed evenly throughout the filter element using a flow distributor.



Deep Bed Pleating

For particle and aerosol removal, deep bed pleating provides 4.5 x more filter media than an ordinary element, giving a larger filtration area, lower flow velocities, increased dirt holding capacity, lower running costs and a more compact filter element.



Graded density nanofibre filter media

Graded density further improves filter life and overall performance by trapping larger particles in the pre-filtration layer of the filter media.

Oil Vapour Removal

Whilst mechanical filtration is capable of removing extremely fine liquids and solid particles, it cannot remove gaseous contaminants such as oil vapour or odours. To efficiently remove these vapours, OIL-X EVOLUTION ACS/OVR filters employ adsorption techniques using a deep bed of activated carbon.



Activated carbon



Conical Air Diffuser

Air flow distribution is further improved by elimination of turbulence.



Aerospace Turning Vanes

Turning vanes effectively direct air flow into the filter element.



Air Stabilisers

Smooth outlet air flow.

High Efficiency Drainage Layer

Ensures coalesced liquids are removed quickly and efficiently.

Drainage Ribs

Filter housing and element integrate to provide capillary action which greatly improves liquid drainage. Interaction between housing and element also ensures maximum coalescing performance is achieved at all times.



No Wet Band Formation

Allows 40% more air flow through a smaller filter element.

Special Filter Media

Oleophobic nanofibre filter media actively repels oil and water to reduce pressure drop and keep running costs to a minimum.



Filter media actively repels oil and water

OIL-X EVOLUTION

Advanced filter housings



Filter Connections

More port sizes are available to match both pipe size and system flow rate giving additional customer choice.



'Clean Change' Filter Element

Element changes are now easy and do not require the user to touch the contaminated element during annual element change.

Minimal Service Clearance

Space saving design minimises service clearance and allows installation in confined spaces.



No corrosion with Alocrom treatment.



Rapid corrosion of untreated aluminium.

Fully Corrosion Protected

Alocrom & dry powder epoxy coated for full corrosion protection



Compact & Lightweight

Advanced housing and element design has also provided a smaller, more compact and lightweight filter which is quick, easy and clean to maintain.



Incident monitor (optional)

Used to indicate premature high differential pressure. Indicator can be retrofitted to existing housings without depressurising the system.



Fixing Clamp

Joins two filters and is a wall mounting bracket in one!



Float drain



Electronic drain

Choice of Drains

Manual, float and electronic drain options available. Easy connection with standard fittings via 1/2" threaded drain port.

Product selection & technical data

Stated flows are at 7 bar g (100 psi g) ANR conditions. For flows at other pressures apply the correction factors shown.

Model	Pipe Size	L/s	Nm ³ /min	Nm ³ /hr	scfm	Replacement Element Kit	No.
grade 010A [] [] X	¼"	10	0.6	36	21	010 grade	1
grade 010B [] [] X	¾"	10	0.6	36	21	010 grade	1
grade 010C [] [] X	½"	10	0.6	36	21	010 grade	1
grade 015B [] [] []	¾"	20	1.2	72	42	015 grade	1
grade 015C [] [] []	½"	20	1.2	72	42	015 grade	1
grade 020C [] [] []	½"	30	1.8	108	64	020 grade	1
grade 020D [] [] []	¾"	30	1.8	108	64	020 grade	1
grade 020E [] [] []	1"	30	1.8	108	64	020 grade	1
grade 025D [] [] []	¾"	60	3.6	216	127	025 grade	1
grade 025E [] [] []	1"	60	3.6	216	127	025 grade	1
grade 030E [] [] []	1"	110	6.6	396	233	030 grade	1
grade 030F [] [] []	1¼"	110	6.6	396	233	030 grade	1
grade 030G [] [] []	1½"	110	6.6	396	233	030 grade	1
grade 035F [] [] []	1¼"	160	9.6	576	339	035 grade	1
grade 035G [] [] []	1½"	160	9.6	576	339	035 grade	1
grade 040G [] [] []	1½"	220	13.2	792	466	040 grade	1
grade 040H [] [] []	2"	220	13.2	792	466	040 grade	1
grade 045H [] [] []	2"	330	19.8	1188	699	045 grade	1
grade 050I [] [] []	2½"	430	25.8	1548	911	050 grade	1
grade 050J [] [] []	3"	430	25.8	1548	911	050 grade	1
grade 055I [] [] []	2½"	620	37.2	2232	1314	055 grade	1
grade 055J [] [] []	3"	620	37.2	2232	1314	055 grade	1

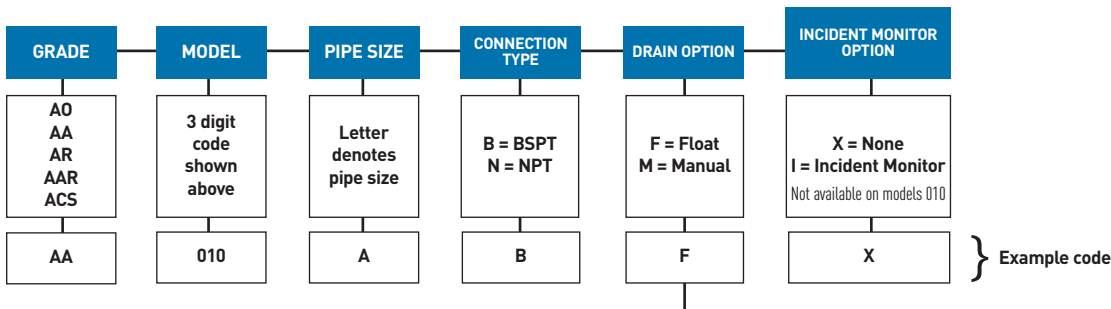
Line Pressure		Correction Factor
bar g	psi g	
1	15	0.38
2	29	0.53
3	44	0.65
4	58	0.76
5	73	0.85
6	87	0.93
7	100	1.00
8	116	1.07
9	131	1.13
10	145	1.19
11	160	1.25
12	174	1.31
13	189	1.36
14	203	1.41
15	218	1.46
16	232	1.51
When ordering an AO/AA filter for pressures above 16 bar g (232 psi g), use manual drain. Replace F with M in product code. e.g. 015BFX now 015BFXM		
17	247	1.56
18	261	1.60
19	275	1.65
20	290	1.70

To find the Correction factor for 8.5 bar g (122psi g) =

$$\sqrt{\frac{\text{System Operating Pressure}}{\text{Nominal pressure}}}$$

$$= \sqrt{\frac{8.5 \text{ bar g}}{7 \text{ bar g}}} = 1.10$$

Filter coding



Note: AO / AA grade filters for use up to 16 bar g (232 psi g) are supplied with a float drain [F] as standard. For pressures of 16 to 20 bar g (232 to 290 psi g) a manual drain [M] must be used. ACS / AR / AAR grade filters are supplied with a manual drain [M] as standard.

Filter Grade	Filter Models	Max Operating Pressure		Max Recommended Operating Temperature		Min Recommended Operating Temperature	
		bar g	psi g				
AO	010 [] [] F [] - 055 [] [] F []	16	232	80°C	176°F	1.5°C	35°F
AO	010 [] [] M [] - 055 [] [] M []	20	290	100°C	212°F	1.5°C	35°F
AA	010 [] [] F [] - 055 [] [] F []	16	232	80°C	176°F	1.5°C	35°F
AA	010 [] [] M [] - 055 [] [] M []	20	290	100°C	212°F	1.5°C	35°F
AR	010 [] [] M [] - 055 [] [] M []	20	290	100°C	212°F	1.5°C	35°F
AAR	010 [] [] M [] - 055 [] [] M []	20	290	100°C	212°F	1.5°C	35°F
ACS	010 [] [] M [] - 055 [] [] M []	20	290	50°C	122°F	1.5°C	35°F