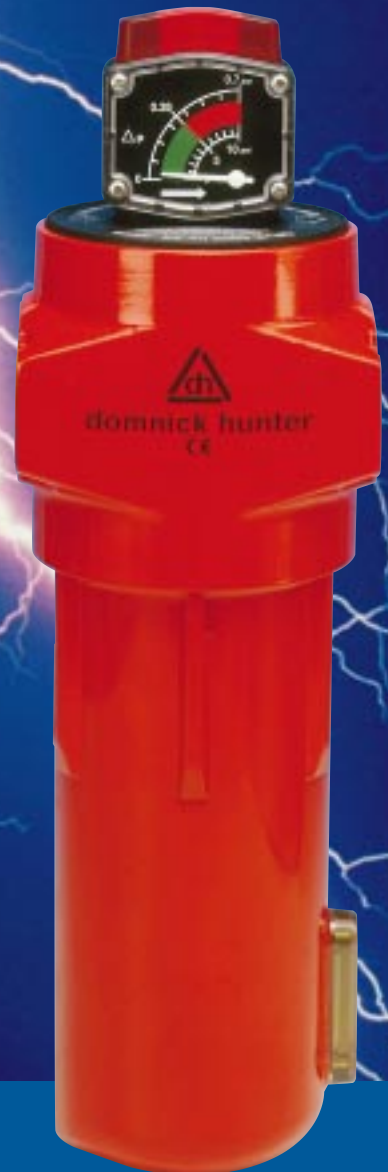




domnick hunter



OIL-X_{PLUS}

Filters for pure compressed air



Contamination costs money

Compressed air contamination

Compressed air is an essential power source that is widely used throughout industry. This safe, powerful and reliable utility can be the most important part of your production process. However, your compressed air will contain water, dirt, wear particles, bacteria and even degraded lubricating oil which all mix together to form an unwanted abrasive sludge.

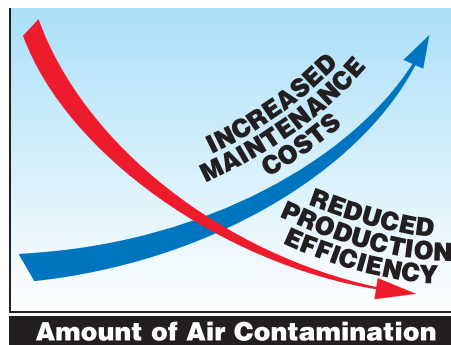
This sludge, often acidic, rapidly wears pneumatic machinery, blocks valves and orifices causing high maintenance and costly air leaks. It also corrodes piping systems and can bring your production process to an extremely expensive standstill!

All of these costly problems can be simply avoided by installing **domnick hunter OIL-X_{PLUS}** high efficiency compressed air filters.

OIL-X_{PLUS} will remove the oil, water and dirt particles to eliminate the abrasive sludge in your compressed air.

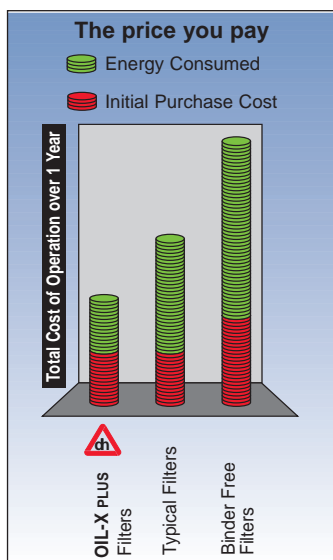


Unwanted abrasive sludge



Corrosion

Don't forget - cleaner compressed air means cheaper and more reliable production!



The price you pay

domnick hunter OIL-X_{PLUS} compressed air filters provide the highest standard ISO 8573.1 quality compressed air with the lowest running costs available. Save more than 50% in energy costs with **OIL-X_{PLUS}**. When compared to typical filters, **OIL-X_{PLUS}** has the highest performance and quality - better than 99.9999% efficiency and particle retention down to 0.01 micron.



OIL-X_{PLUS} - the guaranteed solution



Benefits

- LIFETIME GUARANTEE
- MANUFACTURED IN ACCORDANCE WITH ISO 9001
- GUARANTEED PERFORMANCE
- LONG LIFE FILTER ELEMENTS
- WORLDWIDE SUPPORT
- SUITABLE FOR ALL TYPES OF COMPRESSOR
- COMPATIBLE WITH ALL COMPRESSOR OILS

Guaranteed for life

All **domnick hunter OIL-X_{PLUS}** high efficiency compressed air filters carry a free lifetime guarantee based on the design life of the product.

Die-cast filter housings

Guaranteed for 10 years life under normal recommended use. The high quality traceable pressurised components ensure peace of mind and trouble free use.

Fabricated filter housings

Guaranteed for 10 years life under normal recommended use. These carbon steel housings are epoxy powder coated for maximum corrosion protection and manufactured to CE and other National and International Standards.

Coalescing filter elements

Guaranteed for one year under normal recommended use.

Further details are available on request.



OIL-X_{PLUS} - designed for performance



The new direct mounting differential pressure gauge with replacement element warning light (DPGL). Fitted as standard on filters 3/4" and larger (Except AC/ACS/AX filters). Highlighting the most economical time to change the filter element.



Calibrated for accurate running cost measurement.



Differential pressure indicator (DPI) is fitted as standard on filters up to 1/2" port size (Except AC/ACS/AX filters).



Pressure relief hole gives an audible warning if any attempt is made to remove filter bowl whilst under pressure.



Automatic drain valve is standard so collected condensate is always removed. (manual drain only on models AR, AAR, ACS).



A patented fixing kit connects two filters in series saving space.



Bleed valve for rapid depressurisation and autodrain function check.



Rapid maintenance.

Alocrom aluminium treatment -

A special feature of all **domnick hunter** die-cast filter housings

Corrosion protected inside and out with Alocrom treatment then a tough epoxy paint finish is baked on to give extra long life. Note the convincing results of a 150 hour salt spray test.



Rapid corrosion of untreated aluminium.

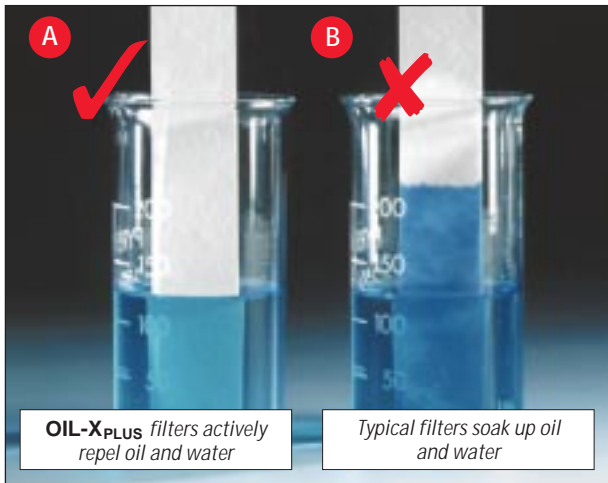


No corrosion with Alocrom treatment.



Slight glass gives a visual check of liquid collection and drain function.

OIL-X_{PLUS} - the inside story



A OIL-X_{PLUS} filters

Use specially treated borosilicate glass microfibres which actively repel oil and water to reduce pressure drop and running costs to an absolute minimum.

B Typical filters

Use regular glass microfibres which soak up oil and water increasing pressure drop, reducing efficiency and giving higher running costs.

OIL-X_{PLUS} high-efficiency filter elements

AIR TIGHT - Positive 'O' ring seal prevents contamination by-pass.

CHEMICAL RESISTANT - Tough corrosion resistant end caps withstand the worst compressed air conditions.

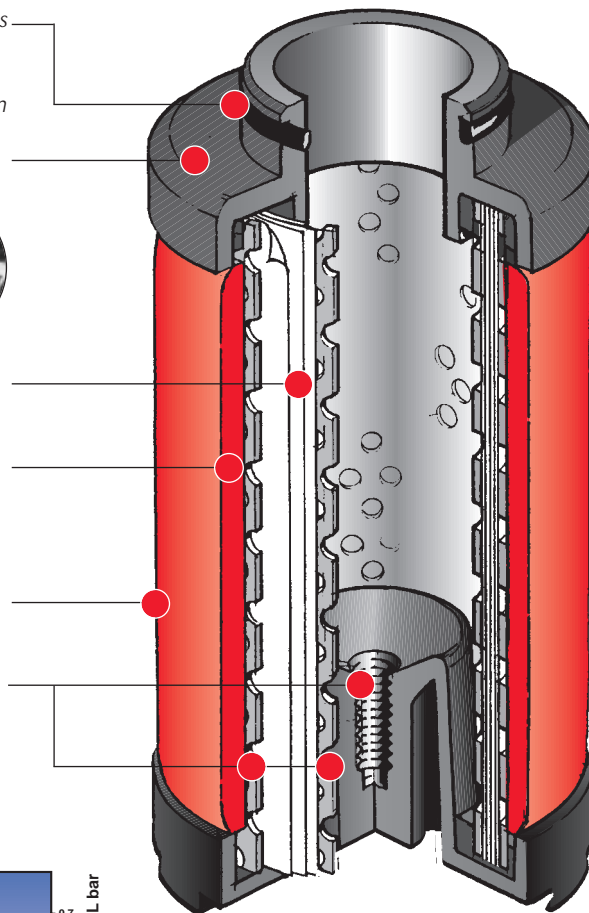


96% VOIDS VOLUME - gives long life with minimum energy costs.

HIGH EFFICIENCY - Anti re-entrainment barrier prevents oil/water carry over and is compatible with mineral or synthetic lubricants.

SILICONE FREE - For all critical applications.

MAXIMUM STRENGTH - Inner and outer stainless steel support screens and tie rod fixings gives up to 10 bar Δp .

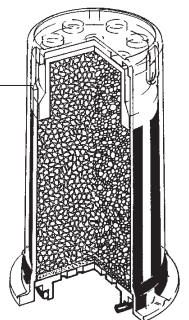
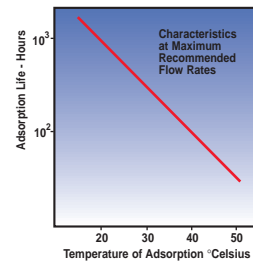


K003-K620 filter elements

High carbon content for long service life.

Oil soluble dye will indicate red if bulk oil is present

Typical activated carbon life



K006/13/25/40AC

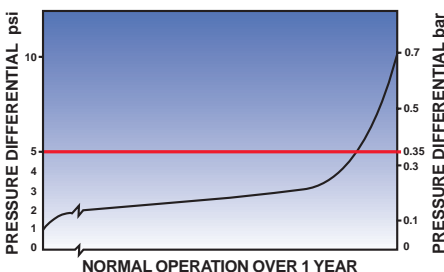
Filter element changes are essential

All OIL-X_{PLUS} coalescing filters are supplied with a maintenance sticker. It is essential to change the filter elements every year or earlier if the indicator/gauge changes to red.

Activated carbon filter elements (grades ACS and AC) should be changed every 1000 hours or earlier if odour is detected.



Typical AO/AA filter element life curve



Installation advice

GENERAL PURPOSE PROTECTION
(Air Quality to ISO 8573.1: Class 2.-.3)

General Ring Main Protection
Liquid and Solid - Bulk Contamination Removal
Particle Removal Only in 'Dry Systems'
Large Pneumatic Tools
Low Cost Automation

Pre-Filtration for Refrigeration Type Air Dryers
Pre-Filtration to High Efficiency Filters (Grade AA)
Pre-Filtration to Adsorption Type Air Dryers in 'Oil Free' Systems
Pre-Filtration to Air Sterilisation Filters in 'Oil-Free' Systems

OIL-LUBRICATED OR OIL-FREE COMPRESSOR
AFTER COOLER
WS WATER SEPARATOR
AO GRADE FILTER

'OIL FREE' AIR
(Air Quality to ISO 8573.1: Class 1.-.2)

'Oil-Free Air
Robotics
Air Logistics
Fine Pneumatic Tools
Instrumentation
Spray Painting
Air Gauging
Air Conveying
Air Bearings
Air Motors

Pipeline Purging
Temperature Control Systems
Pre-Filtration to Adsorption Type Air Dryers in Oil Contaminated Systems
Pre-Filtration to Air Sterilisation Filters in Oil Contaminated Systems

OIL-LUBRICATED OR OIL-FREE COMPRESSOR
AFTER COOLER
WS WATER SEPARATOR
AO GRADE FILTER
AA or AX GRADE FILTER

CRITICAL APPLICATIONS
(Air Quality to ISO 8573.1: Class 1.-.1)

Highest Quality - Clean, Oil and Odour Free Air
Breathing Air (Not when CO/CO₂ removal required)
See our Breathing Air Purifiers)
Blow Moulding of Plastics e.g. P.E.T. Bottles
Film Processing
Critical Instrumentation
Advanced Pneumatics
Air - Blast Circuit - Breakers

Decompression Chambers
Cosmetic Production
Foodstuffs Production/Packaging
Dairies Production/Packaging/transport
Breweries Production/Packaging/transport

OIL-LUBRICATED OR OIL-FREE COMPRESSOR
AFTER COOLER
WS WATER SEPARATOR
AO GRADE FILTER
AA GRADE FILTER
ACS GRADE FILTERS

REDUCED DEWPOINT SYSTEM
(Air Quality to ISO 8573.1: Class 1.4.1)
WHERE DEWPOINT IS NOT REQUIRED TO BE LESS THAN 3-10°C.

OIL-LUBRICATED OR OIL-FREE COMPRESSOR
AFTER COOLER
WS WATER SEPARATOR
AO GRADE FILTER
REFRIGERATION DRYER
AA GRADE FILTER
ACS GRADE FILTER FOR CRITICAL APPLICATIONS

EXTREMELY LOW DEWPOINT SYSTEM
(Air Quality to ISO 8573.1: Class 1.1.1 and 1.2.1)
WHERE TOTALLY DRY COMPRESSED AIR IS REQUIRED DEWPOINT BETWEEN -40°C AND -70°C. TO STOP CORROSION FROM COMPRESSED AIR AT 20°C AND 7 BAR G. A -30°C D.P. IS THE MINIMUM REQUIREMENT.

OIL-LUBRICATED OR OIL-FREE COMPRESSOR
AFTER COOLER
WS WATER SEPARATOR
AO GRADE FILTER
AA GRADE FILTER
REFRIGERATION DRYER
AA/AR GRADE FILTER

TERMINAL FILTRATION

SPRAY PAINTING BOOTHS
BREATHING AIR
ADVANCED PNEUMATICS
INSTRUMENTATION
BLOW GUNS
MEASURING EQUIPMENT
GAUGING EQUIPMENT
HAND TOOLS

*Where no main line filters are fitted or where the length of the pipe from the main filters is excessive. Grade AO pre-filters should be installed before the filters shown.

FROM MAIN LINE
TO INSTALLATION OR PNEUMATIC GAUGING
TO INSTRUMENTATION
TO BREATHING AIR
AA
AO
PF
FILTER HEATER
*HEATER FOR WATER SUPPLY

ISO 8573.1 QUALITY CLASSES

QUALITY CLASS	DIRT Particle size in Micron	WATER Pressure Dewpoint °C (ppm. vol.) at 7 bar g	OIL (Including vapour) mg/m ³
1	0.1	-70 (0.3)	0.01
2	1	-40 (16)	0.1
3	5	-20 (128)	1.0
4	15	+3 (940)	5
5	40	+7 (1240)	25
6	-	+10 (1500)	-

GRADE PF

Coarse Pre-Filtration
Particle removal down to 25 microns.

GRADE AO

High Efficiency General Purpose Protection
For the removal of particles down to 1 micron including coalesced liquid water and oil, providing a maximum remaining oil aerosol content of 0.5 mg/m³ @ 21°C.

GRADE AA

High Efficiency Oil Removal Filtration
For the removal of particles down to 0.01 micron including water and oil aerosols, providing a maximum remaining oil aerosol content of 0.01 mg/m³ @ 21°C. (Precede with Grade AO filter).

GRADE AX

Ultra High Efficiency Filtration
For the removal of particles down to 0.01 micron including water and oil aerosols, providing a maximum remaining oil aerosol content of 0.001 mg/m³ @ 21°C. (Precede with Grade AO filter).

GRADE AC & ACS

Activated Carbon Filtration
For the removal of oil vapour and hydrocarbon odours giving a maximum remaining oil content of <0.003 mg/m³ (<0.003 ppm) (excluding methane) @ 21°C. (Precede with Grade ACS with Grade AA filter). (AC filter combines AA and AC Grades).

GRADE AR

General Purpose Dust Filtration
For the removal of dust particles down to 1 micron.

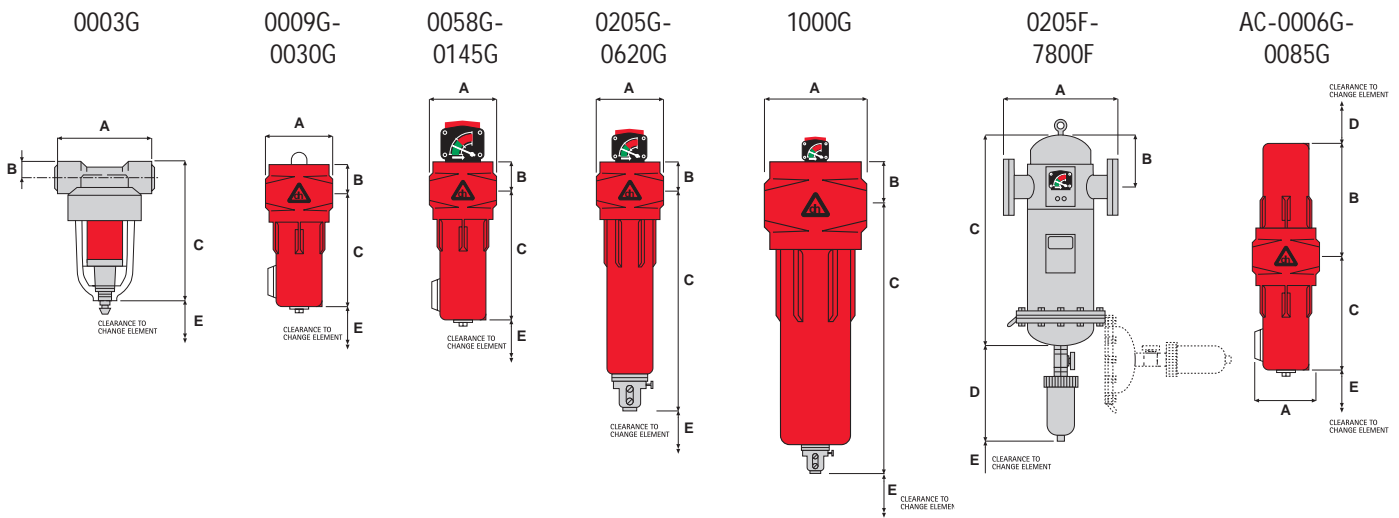
GRADE AAR

High Efficiency Dust Filtration
For the removal of dust particles down to 0.01 micron.

INSTALLATION HINTS

- Generally install filters downstream of aftercoolers and air receivers at the lowest installation temperature and as close to the point of application as possible. This ensures that in wet systems as much water and oil vapour has condensed out as possible which can be removed by the coalescing filters. Installing close to the application reduces the risk of pipe scale downstream or the filters contaminating the filtered air. Please refer to above installation hints.
- Filters should not be installed downstream of quick opening valves and should be protected from possible reverse flow or other shock conditions.
- It may be necessary to install a combination of main line filtration near the compressor installation before entry to the ring main and install terminal filtration at the critical points. Remember especially in existing installations the contamination already in the pipe system downstream of the filters will take a long time to disappear and probably never will completely.
- Purge all lines leading to the filters before installation and connection to the final application to be protected.
- Install filters in a vertical position ensuring that there is sufficient room below the filters to facilitate element change.
- Avoid by-pass lines whenever possible as contamination may leak through valves and by-pass the filters.
- Provide a facility to drain away collected liquids where applicable from the filter drains via suitable tubing taking care that no restrictions are caused.
- Install **domnick hunter** differential pressure gauges and kits to indicate the pressure drop across the filters. This will give an idea of the filter element condition (except Grade AC or ACS).
- domnick hunter** mounting kits are available for filter sizes up to 0620G. Care should be taken with larger filters to see that they are properly supported in the pipe line.
- If you have a problem on filter selection or installation please contact the **domnick hunter** Technical Sales Department or our representatives. We will be pleased to help you in selecting the installation for your requirements.

Technical specifications



FILTER TYPE	PIPE SIZE	FLOW RATES @ 7 bar g (100 psi g)			DIMENSIONS (mm)					WEIGHT (kg)	REPLACEMENT ELEMENT KIT	
		L/S	cfm	m ³ /hr	A	B	C	D	E		Type	No.
(grade) 0003G	8mm Push Fit**	3	6	11	58	9.75	89	-	45	0.1	K003 (grade)	1
(grade) 0009G	G¼	9	19	32	76	34.5	133	-	70	0.5	K009 (grade)	1
(grade) 0017G	G¾	17	36	61	89	42	158	-	95	1.0	K017 (grade)	1
(grade) 0030G	G½	30	64	108	89	42	194	-	130	1.1	K030 (grade)	1
(grade) 0058G	G¾	60	127	216	120	58	251	-	172	2.4	K058 (grade)-B*	1
(grade) 0080G	G1	80	170	288	120	58	351	-	272	2.9	K145 (grade)-B*	1
(grade) 0125G	G1¼	120	254	432	120	58	351	-	272	2.9	K145 (grade)-B*	1
(grade) 0145G	G1½	145	307	522	120	58	351	-	272	2.9	K145 (grade)-B*	1
(grade) 0205G	G1½	200	424	720	160	66.5	511	-	320	9.1	K220 (grade)-B*	1
(grade) 0220G	G2	220	466	792	160	66.5	511	-	320	9.1	K220 (grade)-B*	1
(grade) 0330G	G2	330	699	1188	160	66.5	816	-	625	12.9	K330 (grade)-B*	1
(grade) 0405G	G2½	400	848	1440	202	79	602	-	400	12.1	K430 (grade)-B*	1
(grade) 0430G	G3	430	911	1548	202	79	602	-	400	11.9	K430 (grade)-B*	1
(grade) 0620G	G3	620	1314	2232	202	79	844	-	625	20.9	K620 (grade)-B*	1
(grade) 1000G	G4	1000	2119	3600	420	82	1095	-	570	44.5	K330 (grade)-B*	3
(grade) 0205F	DN40	200	424	720	304	115	624	335	350	29	K220 (grade)	1
(grade) 0330F	DN50	330	669	1188	304	120	934	335	650	37	K330 (grade)	1
(grade) 0620F	DN80	620	1314	2232	390	177	1077	335	650	64	K620 (grade)	1
(grade) 1000F	DN100	1000	2119	3600	450	201	1140	335	650	95	K330 (grade)	3
(grade) 1300F	DN100	1300	2755	4680	500	230	1220	335	650	135	K330 (grade)	4
(grade) 1950F	DN150	1950	4132	7020	580	273	1294	335	650	177	K330 (grade)	6
(grade) 3250F	DN200	3250	6886	11700	750	361	1519	335	650	368	K330 (grade)	10
(grade) 5200F	DN250	5200	11018	18720	740	410	1684	335	800	515	K330 (grade)	16
(grade) 7800F	DN300	7800	16527	28080	1000	485	1777	335	850	684	K330 (grade)	24
AC-0006G [†]	G¼	6	13	22	76	133	133	70	70	1.0	K009AA & K006AC	1**
AC-0013G [†]	G¾	13	27	47	89	158	158	95	95	1.2	K017AA & K013AC	1**
AC-0025G [†]	G½	25	53	90	89	194	194	95	130	1.4	K030AA & K025AC	1**
AC-0040G [†]	G¾	40	84	144	120	251	251	125	172	3.2	K058AA & K040AC	1**
AC-0065G [†]	G1	65	136	234	120	251	351	125	272	3.7	K145AA & K065AC	1**
AC-0085G [†]	G1¼	85	178	306	120	351	351	225	272	3.8	K145AA & K085AC	1**

* Filter element codes for OIL-X_{PLUS} Grades PF, AO and AA only, e.g. K145AA-B. For Grades ACS or AX use code without -B, e.g. K145ACS. (-B denotes a filter element kit complete with a spare battery for the DPGL)

TECHNICAL DATA

Maximum operating pressure (0003G only)	10.5 bar g (150 psi g)	Maximum recommended operating temperature (Grade PF/AO/AA/AX/AR/AAR)**	66°C (150 °F)	Initial 'dry' differential pressure	Grade PF ~70 m bar (1.0 psi)	Initial 'wet' differential pressure	Grade PF ~100 m bar (1.5 psi)
Maximum operating pressure (0009G to 7800F) with Autodrain	16 bar g (232 psi g)	Maximum recommended operating temperature (Grade AC/ACS)	30°C (86°F)	Grade AO/AR ~70 m bar (1.0 psi)	Grade AO ~140 m bar (2.0 psi)	Grade AA ~200 m bar (3.0 psi)	Grade AA ~200 m bar (3.0 psi)
Maximum operating pressure (0009G to 1000G) with manual drain	20 bar g (290 psi g)	Minimum recommended operating temperature	1.5°C (35°F)	Grade AA/AAR ~100 m bar (1.5 psi)	Grade AX ~400 m bar (6.0 psi)	Grade AC ~300 m bar (4.5 psi)	Grade AC ~300 m bar (4.5 psi)
***Special TS Grade filter elements are available for higher filtration temperatures				Grade AC ~200 m bar (3.0 psi)	Grade ACS N/A	Grade AR/AAR N/A	Grade AR/AAR N/A
				Grade ACS ~70 m bar (1.0 psi)	Maximum recommended pressure differential for element change: (PF, AO, AA, AR and AAR filters only) ~340 m bar (AX filter only) ~700 m bar (10 psi)		

For flowrates at other pressures, apply the factor shown:

Line	bar g	1	2	3	5	7	9	11	13	15	17	20
Pressure	psi g	15	29	44	73	100	131	160	189	218	247	290
Correction Factor		0.38	0.53	0.65	0.85	1.0	1.13	1.25	1.36	1.46	1.56	1.7

Ordering Example:

To order a 0.01 micron filter flowing 60 L/s at 7 bar g specify type AA-0058G. Replacement element is K058AA-B.

+ Refers to OIL-X Grade AC double-stage filters only. **Grade AA and Grade AC required for double stage filter. (The grade AC and ACS filters WILL NOT remove CO/CO₂ or other toxic gases or fumes).

Why domnick hunter?

- A complete product range offering compressed air and gas purification for every application - all your filtration needs from one reliable supplier.
- Competitively priced solutions to your compressed air and gas problems.
- Technically trained worldwide support and service network.
- Worldwide stock availability.
- On-site testing and service.

Manufacturing to the highest standards



INTERNATIONAL PRESSURE VESSEL APPROVAL



CRN AS1210-199

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