



domnick hunter

OIL-X EVOLUTION

High Efficiency Point of Use Oil Vapor & Odor Removal Grade AC Combination Filter

domnick hunter OIL-X EVOLUTION AC filters have been designed to provide a cost effective solution to compressed air contamination, with delivered air quality to the latest ISO 8573.1 : 2001 international standards, and with the lowest of operational costs.

Designed to be installed directly at the point of use, OIL-X EVOLUTION AC filters combine two grades of filtration into one convenient housing.

Liquid aerosols and solid particles are removed using a deep pleated high efficiency coalescing filter element, while oil vapors are removed by an activated carbon adsorption cartridge.

Each OIL-X EVOLUTION AC filter employs a unique, air flow management system to ensure pressure losses start low and stay low throughout the life of the filter elements. This ensures operational costs are kept as low as possible.



Benefits

- Delivered air quality to international standards
- Tested in accordance with ISO 8573.2 for oil aerosol, ISO8573.4 for solid particulate & ISO8573.5 for oil vapor
- Third party independent performance validation (Lloyds Register)
- Combines OIL-X EVOLUTION high efficiency grade AA and grade ACS oil vapor removal elements into one housing
- Low pressure losses for low operational costs
- Choice of port sizes available
- Ideal protection of point of use equipment
- Compact size and low weight with minimal service clearances required
- Low maintenance
- 10 Year Housing Guarantee
- Optional bulk oil indicator

Typical Applications

- Critical Instrumentation
- Dental Air
- Medical Air
- Paint Spraying
- Breathing Air not requiring CO or CO₂ removal
- Food Packaging
- Pre-filtration for Gas Separation Membranes



INTERNATIONAL APPROVALS



Product Selection & Technical Data

| Model | Pipe Size | scfm | L/s | Nm ³ /min | Nm ³ /hr | Max Operating Pressure | | Max Operating Temperature | Min Operating Temperature | Replacement Elements | | Line Pressure | | Correction Factor | | |
|---------|-----------|------|-----|----------------------|---------------------|------------------------|-------|---------------------------|---------------------------|----------------------|-------|---------------|--------|-------------------|----|------|
| | | | | | | psi g | bar g | | | psi g | bar g | | | | | |
| AC010AN | 1/4" | 13 | 6 | 0.4 | 22 | 232 | 16 | 86°F | 30°C | 35°F | 1.5°C | 010AA | 010AC | 15 | 1 | 0.38 |
| AC010BN | 3/8" | 13 | 6 | 0.4 | 22 | 232 | 16 | 86°F | 30°C | 35°F | 1.5°C | 010AA | 010AC | 29 | 2 | 0.53 |
| AC010CN | 1/2" | 13 | 6 | 0.4 | 22 | 232 | 16 | 86°F | 30°C | 35°F | 1.5°C | 010AA | 010AC | 44 | 3 | 0.65 |
| AC015BN | 3/8" | 27 | 13 | 0.8 | 46 | 232 | 16 | 86°F | 30°C | 35°F | 1.5°C | 015AA | 015AC | 58 | 4 | 0.76 |
| AC015CN | 1/2" | 27 | 13 | 0.8 | 46 | 232 | 16 | 86°F | 30°C | 35°F | 1.5°C | 015AA | 015AC | 73 | 5 | 0.85 |
| AC020CN | 1/2" | 53 | 25 | 1.5 | 90 | 232 | 16 | 86°F | 30°C | 35°F | 1.5°C | 020AA | 020AC | 87 | 6 | 0.93 |
| AC020DN | 3/4" | 53 | 25 | 1.5 | 90 | 232 | 16 | 86°F | 30°C | 35°F | 1.5°C | 020AA | 020AC | 100 | 7 | 1.00 |
| AC020EN | 1" | 53 | 25 | 1.5 | 90 | 232 | 16 | 86°F | 30°C | 35°F | 1.5°C | 020AA | 020AC | 116 | 8 | 1.07 |
| AC025DN | 3/4" | 84 | 40 | 2.4 | 143 | 232 | 16 | 86°F | 30°C | 35°F | 1.5°C | 025AA | 025DAC | 131 | 9 | 1.13 |
| AC025EN | 1" | 136 | 65 | 3.9 | 231 | 232 | 16 | 86°F | 30°C | 35°F | 1.5°C | 025AA | 025EAC | 145 | 10 | 1.19 |
| AC030EN | 1" | 180 | 85 | 5.1 | 305 | 232 | 16 | 86°F | 30°C | 35°F | 1.5°C | 030AA | 030AC | 160 | 11 | 1.25 |
| AC030FN | 1 1/4" | 180 | 85 | 5.1 | 305 | 232 | 16 | 86°F | 30°C | 35°F | 1.5°C | 030AA | 030AC | 174 | 12 | 1.31 |
| AC030GN | 1 1/2" | 180 | 85 | 5.1 | 305 | 232 | 16 | 86°F | 30°C | 35°F | 1.5°C | 030AA | 030AC | 189 | 13 | 1.36 |
| | | | | | | | | | | | | | | 203 | 14 | 1.41 |
| | | | | | | | | | | | | | | 218 | 15 | 1.46 |
| | | | | | | | | | | | | | | 232 | 16 | 1.51 |

Stated flows are for operation at 100 psi g (7 bar g) with reference to 68°F (20°C), 1 bar (a), 0% relative water vapor pressure.

Filter Coding and Product Selection

| GRADE | MODEL | PIPE SIZE | CONNECTION TYPE | DRAIN OPTION | BULK OIL INDICATOR |
|-------|--------------------------|--------------------------|-----------------|-------------------------|------------------------------------|
| AC | 3 digit code shown above | Letter denotes pipe size | N=NPT B=BSPT | F = Float M = Manual | X = None I = Bulk Oil Indicator |
| AC | 010 | A | N | F | X |

AC models are supplied with a float drain as standard. For Pressures of 232 to 290 psi g (16 to 20 bar g) a manual drain must be used.

Selecting a AC model to match a system flow rate and pressure.

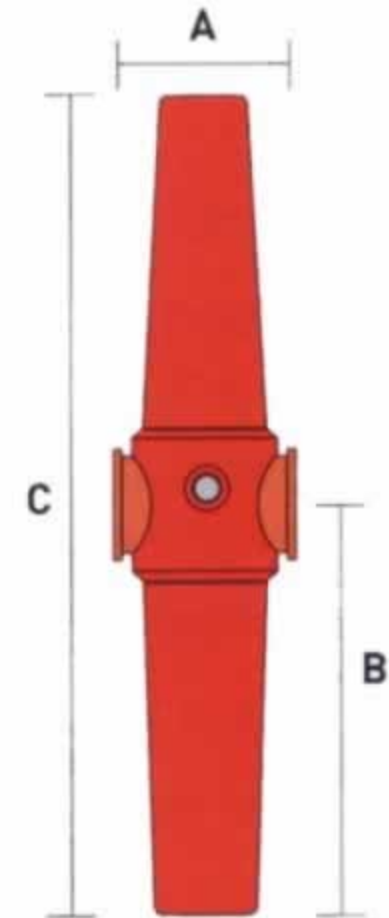
Example: System flow 14 scfm (24 Nm³/hr) at a pressure of 123 psi g (8.5 bar g)

- Obtain pressure correction factor from table.
Correction factor for 123 psi g (8.5 bar g) = 1.10
- Divide system flow by correction factor to give equivalent flow rate at 100 psi g (7 bar g) 14 scfm (24 Nm³/hr) ÷ 1.10 = 12 scfm (21 Nm³/hr) [at 100 psi g (7 bar g)]
- Select a filter model from the above table with a flow rate above or equal to 12 scfm (21 Nm³/hr). AC filter model selected : 010
- Select pipe connection & Thread type
System uses 1/2" piping and NPT threads : Model AC010CN
- Select drain type
Pressure is below 232 psi g (16 bar g), automatic float drain fitted as standard. Model AC010CNF
- Select if optional bulk oil indicator is required.
Non required Model AC010CNFX

| When ordering an AC Combination Filter for pressures above 232 psi g (16 bar g), use manual drain. Replace F with M in product code. E.g. AC010ANFX now AC010ANMX. | | |
|--|----|------|
| 247 | 17 | 1.56 |
| 261 | 18 | 1.60 |
| 275 | 19 | 1.65 |
| 290 | 20 | 1.70 |

Weights and Dimensions

| Model | Pipe Size | A | | B | | C | | Weight | |
|---------|-----------|-----|------|------|-------|------|-------|--------|------|
| | | ins | mm | ins | mm | ins | mm | lbs | Kg |
| AC010AN | 1/4" | 3 | 76 | 6 | 153.5 | 12.3 | 311.5 | 1.79 | 0.81 |
| AC010BN | 3/8" | 3 | 76 | 6 | 153.5 | 12.3 | 311.5 | 1.79 | 0.81 |
| AC010CN | 1/2" | 3 | 76 | 6 | 153.5 | 12.3 | 311.5 | 1.79 | 0.81 |
| AC015BN | 3/8" | 3.8 | 97.5 | 9.3 | 235 | 18.7 | 474.5 | 3.53 | 1.60 |
| AC015CN | 1/2" | 3.8 | 97.5 | 9.3 | 235 | 18.7 | 474.5 | 3.53 | 1.60 |
| AC020CN | 1/2" | 3.8 | 97.5 | 9.3 | 235 | 18.7 | 474.5 | 3.20 | 1.45 |
| AC020DN | 3/4" | 3.8 | 97.5 | 9.3 | 235 | 18.7 | 474.5 | 3.20 | 1.45 |
| AC020EN | 1" | 3.8 | 97.5 | 9.3 | 235 | 18.7 | 474.5 | 3.20 | 1.45 |
| AC025DN | 3/4" | 5.1 | 129 | 10.8 | 275 | 21.8 | 554 | 7.80 | 3.54 |
| AC025EN | 1" | 5.1 | 129 | 10.8 | 275 | 21.8 | 554 | 7.60 | 3.43 |
| AC030EN | 1" | 5.1 | 129 | 14.3 | 364 | 28.9 | 733 | 9.04 | 4.10 |
| AC030FN | 1 1/4" | 5.1 | 129 | 14.3 | 364 | 28.9 | 733 | 9.04 | 4.10 |
| AC030GN | 1 1/2" | 5.1 | 129 | 14.3 | 364 | 28.9 | 733 | 9.04 | 4.10 |



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