

Compressed Air Coalescing Filters

Models | A3011 to A3303

Flow Rates 6 SCFM (10 Nm³/hr) to 1500 SCFM (2550 Nm³/hr)

Introducing the New Alpha, Walker Filtration's latest range of market leading compressed air and gas filters. With enhanced housing features and a step change in element performance, the New Alpha delivers a high quality filtration solution you can trust.

Offered in a range of 18 models with connection sizes ranging from 1/8" to 3", the New Alpha Series has been tested to provide a saturated differential pressure of <1.8 psi (125 mbar) across X1 and XA grades - proving to be our most advanced filter to date.

With class leading performance and exceptional results in oil aerosol and particle retention, the New Alpha delivers significantly reduced pressure loss and optimum filtration efficiencies - to ensure continually low operational costs.



NEW Modular Filter

Low cost connecting kits and new filter head design enables easy close coupling assembly



NEW Filtration Technology

New Alpha deep pleated media technology delivers a step change in performance



NEW Externally Accessible Drain

Eliminates the need to access the inside of the filter housing when servicing the drain

- **Flow-Optimized Design** Advanced filter head design for optimized flow performance
- **Flexible Installation** Modular design and accessible fixings enable simple close coupling assembly
- **Market Leading Performance** Custom engineered filtration media delivers optimum performance in line with air quality standard ISO 8573-1: 2010
- **Simplified Serviceability** New externally accessible drain, profiled bowl design and unique push fit elements ensure quick and reliable maintenance
- **Corrosion Protection** Internal and external electrophoretic paint finish followed by a tough exterior polyester powder coating
- **Color Coded Element End Caps** Easy and accurate grade identification
- **Product Safety in Mind** Guaranteed safe housing closure with rotational safety stop

For further information please visit www.walkerfiltration.com



Market leading differential pressure of <1.8 psi across X1 and XA grades



For further information please call: +1 814 836 2900



Technical Specification

| Filter model | Pipe size inches | Inlet flow rate* | | Dimensions inches (mm) | | | | Weight | | Element model |
|---------------|------------------|------------------|---------------------|------------------------|-----------|--------------|------------|--------|------|----------------|
| | | SCFM | Nm ³ /hr | A | B | C | D | lbs | Kg | |
| A3011 (grade) | 1/8 | 6 | 10 | 1.97 (50) | 0.67 (17) | 6.18 (157) | 2.36 (60) | 0.6 | 0.3 | E30306 (grade) |
| A3021 (grade) | 1/4 | 15 | 25 | 1.97 (50) | 0.67 (17) | 6.18 (157) | 2.36 (60) | 0.6 | 0.3 | E30306 (grade) |
| A3022 (grade) | 1/4 | 25 | 42 | 2.76 (70) | 0.94 (24) | 9.09 (231) | 2.76 (70) | 1.3 | 0.6 | E30408 (grade) |
| A3031 (grade) | 3/8 | 32 | 54 | 2.76 (70) | 0.94 (24) | 9.09 (231) | 2.76 (70) | 1.3 | 0.6 | E30408 (grade) |
| A3051 (grade) | 1/2 | 50 | 85 | 2.76 (70) | 0.94 (24) | 9.09 (231) | 2.76 (70) | 1.3 | 0.6 | E30412 (grade) |
| A3052 (grade) | 1/2 | 70 | 119 | 5.00 (127) | 1.26 (32) | 11.22 (285) | 3.15 (80) | 3.7 | 1.7 | E30612 (grade) |
| A3071 (grade) | 3/4 | 85 | 144 | 5.00 (127) | 1.26 (32) | 11.22 (285) | 3.15 (80) | 3.7 | 1.7 | E30612 (grade) |
| A3101 (grade) | 1 | 105 | 178 | 5.00 (127) | 1.26 (32) | 11.22 (285) | 3.15 (80) | 3.7 | 1.7 | E30612 (grade) |
| A3072 (grade) | 3/4 | 125 | 212 | 5.00 (127) | 1.26 (32) | 14.60 (371) | 3.15 (80) | 4.4 | 2.0 | E30621 (grade) |
| A3102 (grade) | 1 | 175 | 297 | 5.00 (127) | 1.26 (32) | 14.60 (371) | 3.15 (80) | 4.4 | 2.0 | E30621 (grade) |
| A3122 (grade) | 1 1/4 | 280 | 476 | 6.69 (170) | 2.08 (53) | 20.00 (508) | 3.94 (100) | 10.8 | 4.9 | E30831 (grade) |
| A3151 (grade) | 1 1/2 | 400 | 680 | 6.69 (170) | 2.08 (53) | 20.00 (508) | 3.94 (100) | 10.8 | 4.9 | E30831 (grade) |
| A3201 (grade) | 2 | 450 | 765 | 6.69 (170) | 2.08 (53) | 20.00 (508) | 3.94 (100) | 10.8 | 4.9 | E30831 (grade) |
| A3202 (grade) | 2 | 700 | 1189 | 6.69 (170) | 2.08 (53) | 27.87 (708) | 3.94 (100) | 12.1 | 5.5 | E30850 (grade) |
| A3251 (grade) | 2 1/2 | 850 | 1444 | 8.66 (220) | 2.75 (70) | 28.97 (736) | 3.94 (100) | 23.1 | 10.5 | E31140 (grade) |
| A3301 (grade) | 3 | 900 | 1529 | 8.66 (220) | 2.75 (70) | 28.97 (736) | 3.94 (100) | 23.1 | 10.5 | E31140 (grade) |
| A3302 (grade) | 3 | 1250 | 2125 | 8.66 (220) | 2.75 (70) | 33.74 (857) | 3.94 (100) | 25.4 | 11.5 | E31160 (grade) |
| A3303 (grade) | 3 | 1500 | 2550 | 8.66 (220) | 2.75 (70) | 39.56 (1005) | 3.94 (100) | 27.6 | 12.5 | E31175 (grade) |

*Rated flow at 100 psig (7 barg), reference conditions at 14.5 psi (a) (1 bar (a)) 68°F (20°C)

| Grade | X5 | X1 | XA | AC | | | | |
|--|----------|---------------------|-------------|-----------------------|----------|------------------------|-----------------------|-------------------------|
| Particle removal | 5 micron | 1 micron | 0.01 micron | 0.01 micron | | | | |
| Maximum particle size class** | 4 | 3 | 1 | 1 | | | | |
| Maximum oil content** | 4 | 3 | 1 | 1 | | | | |
| Maximum oil carryover at 68°F (20°C) | 5 ppm | 5 mg/m ³ | 0.3 ppm | 0.3 mg/m ³ | 0.01 ppm | 0.01 mg/m ³ | 0.003 ppm | 0.003 mg/m ³ |
| Pressure loss - clean & dry | 0.6 psi | 40 mbar | 0.8 psi | 55 mbar | 1.2 psi | 85 mbar | 1.7 psi | 115 mbar |
| Pressure loss - saturated | 1.1 psi | 75 mbar | 1.8 psi | 125 mbar | 1.8 psi | 125 mbar | N/A | N/A |
| Pressure loss - element change | 12 mths | 8000 hrs | 12 mths | 8000 hrs | 12 mths | 8000 hrs | at least every 6 mths | |
| Maximum temperature - automatic drain | 176°F | 80°C | 176°F | 80°C | 176°F | 80°C | 122°F*** | 50°C*** |
| Maximum working pressure - automatic drain | 232 psig | 16 barg | 232 psig | 16 barg | 232 psig | 16 barg | 232 psig | 16 barg |
| Maximum temperature - manual drain | 248°F | 120°C | 248°F | 120°C | 248°F | 120°C | 122°F*** | 50°C*** |
| Maximum working pressure - manual drain | 300 psig | 20.7 barg | 300 psig | 20.7 barg | 300 psig | 20.7 barg | 300 psig | 20.7 barg |
| Element end cap color | Green | Red | Blue | Black | | | | |

to ISO 8573-1: 2010 *Maximum recommended operating temperature 77°F (25°C)

| Pressure correction factors | For maximum flow rate, multiply model flow rate by the correction factor corresponding to the minimum operating pressure | | | | | | | | | |
|--------------------------------|--|--------|--------|---------|---------|----------|----------|----------|----------|----------|
| Operating pressure psig (barg) | 58 (4) | 72 (5) | 87 (6) | 100 (7) | 115 (8) | 145 (10) | 174 (12) | 203 (14) | 232 (16) | 290 (20) |
| 100 psig - correction factor | 0.76 | 0.84 | 0.92 | 1.00 | 1.07 | 1.19 | 1.31 | 1.41 | 1.51 | 1.60 |

Technical notes

- Direction of air flow is inside to out through the filter element.
- Pop up indicators (65DPUG3) are fitted to models A3022 to A3051 as standard. Differential pressure indicators (65DPIG) are fitted to models A3052 to A3303 as standard. Activated Carbon (AC) grade filters do not include DP equipment. Volt free contact options are available upon request - see price guide.
- Coalescing Filters are fitted as standard with normally open float operated automatic drain valves, ADVS16 on models A3011 to A3051 and ADVSE16 on models A3052 to A3303, and manual drain valves on Activated Carbon Filters. Standard filters can operate at 232 psig (16 barg) at 176°F (80°C). Normally closed operated automatic drain valves (ADVS16C) are available for low range flow applications (2.5 SCFM, 4.2 Nm³/hr or lower). 300 psig (20.7 barg) range at 248°F (120°C) is available when supplied with a manual drain valve (MDV25 on models A3011 to A3051 and MDVE25 on models A3052 to A3303).
- Activated Carbon Filters must not operate in oil saturated conditions and will not remove certain types of gases including carbon monoxide (CO) and carbon dioxide (CO₂).
- New Alpha Filters are manufactured from cast aluminum alloy and are PED 2014/68/EU compliant for group 2 gases.
- Standard threaded connections are NPT to ANSI/ASME B1.20.1. RP (BSP Parallel) to ISO 7-1 and RC (BSP Taper) to ISO 7-1 are also available upon request.
- Filters are suitable for use with mineral and synthetic oils plus, oil-free compressed air applications.

