

# Compressed Air Particulate Filters

Models | A30006 to A31500

Flow Rates 6 SCFM (10 Nm<sup>3</sup>/hr) to 1500 SCFM (2550 Nm<sup>3</sup>/hr)

**Advancements in filtration technology, improved low differential pressure and a step change in performance ensures the Alpha Particulate (Dust) Filters are the ideal solution for installation downstream of regenerative compressed air and gas dryers.**

With exceptional results in particle retention of up to 99.999%, and significantly reduced pressure loss, Alpha Particulate Filters ensure total protection of manufacturing equipment from dust carryover.

Available in a range of connection sizes from 1/8" to 3", Alpha Particulate Filters have a maximum temperature of 120°C (248°F) and increased operating pressure of 20.7 barg (300 psig).

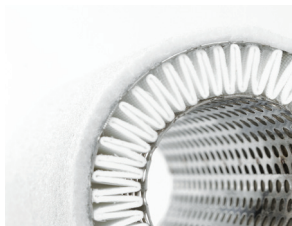


**Up to 99.999%  
particle retention  
when tested in  
accordance with  
ISO 12500-3**



**Modular Filter**

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



**Filtration Technology**

Alpha deep pleated media technology delivers a step change in performance



**Product Safety in Mind**

Lock indication arrows ensure effective sealing

- **Flow-Optimised Design** Advanced filter head design for optimised 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** Profiled bowl design and push fit elements ensure quick and reliable maintenance
- **Corrosion Protection** Internal and external electrophoretic paint finish followed by a tough exterior polyester powder coating
- **Colour Coded Element End Caps** Easy and accurate grade identification



# Technical Specification

| Filter model   | Pipe size inches | Inlet flow rate*    |      | Dimensions mm |    |      |     | Weight Kg | Element model  |
|----------------|------------------|---------------------|------|---------------|----|------|-----|-----------|----------------|
|                |                  | Nm <sup>3</sup> /hr | SCFM | A             | B  | C    | D   |           |                |
| A30006 (grade) | 1/8              | 10                  | 6    | 50            | 17 | 157  | 60  | 0.3       | E30306 (grade) |
| A30015 (grade) | 1/4              | 25                  | 15   | 50            | 17 | 157  | 60  | 0.3       | E30306 (grade) |
| A30025 (grade) | 1/4              | 42                  | 25   | 70            | 23 | 231  | 70  | 0.6       | E30408 (grade) |
| A30032 (grade) | 3/8              | 54                  | 32   | 70            | 23 | 231  | 70  | 0.6       | E30408 (grade) |
| A30050 (grade) | 1/2              | 85                  | 50   | 70            | 23 | 231  | 70  | 0.6       | E30412 (grade) |
| A30070 (grade) | 1/2              | 119                 | 70   | 127           | 32 | 285  | 80  | 1.7       | E30612 (grade) |
| A30085 (grade) | 3/4              | 144                 | 85   | 127           | 32 | 285  | 80  | 1.7       | E30612 (grade) |
| A30105 (grade) | 1                | 178                 | 105  | 127           | 32 | 285  | 80  | 1.7       | E30612 (grade) |
| A30125 (grade) | 3/4              | 212                 | 125  | 127           | 32 | 370  | 80  | 2.0       | E30621 (grade) |
| A30175 (grade) | 1                | 297                 | 175  | 127           | 32 | 370  | 80  | 2.0       | E30621 (grade) |
| A30280 (grade) | 1 1/4            | 476                 | 280  | 140           | 41 | 476  | 85  | 3.0       | E30731 (grade) |
| A30320 (grade) | 1 1/2            | 544                 | 320  | 140           | 41 | 476  | 85  | 3.0       | E30731 (grade) |
| A30400 (grade) | 1 1/2            | 680                 | 400  | 170           | 53 | 508  | 100 | 4.9       | E30831 (grade) |
| A30450 (grade) | 2                | 765                 | 450  | 170           | 53 | 508  | 100 | 4.9       | E30831 (grade) |
| A30700 (grade) | 2                | 1189                | 700  | 170           | 53 | 708  | 100 | 5.5       | E30850 (grade) |
| A30850 (grade) | 2 1/2            | 1444                | 850  | 220           | 70 | 736  | 100 | 10.5      | E31140 (grade) |
| A30900 (grade) | 3                | 1529                | 900  | 220           | 70 | 736  | 100 | 10.5      | E31140 (grade) |
| A31250 (grade) | 3                | 2125                | 1250 | 220           | 70 | 857  | 100 | 11.5      | E31160 (grade) |
| A31500 (grade) | 3                | 2550                | 1500 | 220           | 70 | 1005 | 100 | 12.5      | E31175 (grade) |

\* Rated flow at 7 barg, reference conditions at 1 bar (a) 20°C

| Grade                                | RX25      |          | RX5       |          | RX1       |          | RXA         |          | RAC                     |          |
|--------------------------------------|-----------|----------|-----------|----------|-----------|----------|-------------|----------|-------------------------|----------|
| Particle removal                     | 25 micron |          | 5 micron  |          | 1 micron  |          | 0.01 micron |          | 0.01 micron             |          |
| Maximum particle size class**        | -         |          | 4         |          | 3         |          | 1           |          | 1                       |          |
| Maximum oil carryover at 20°C (68°F) | -         |          | -         |          | -         |          | -           |          | 0.003 mg/m <sup>3</sup> |          |
| Pressure loss - clean & dry          | 30 mbar   | 0.4 psi  | 40 mbar   | 0.6 psi  | 75 mbar   | 1.1 psi  | 100 mbar    | 1.5 psi  | 75 mbar                 | 1.1 psi  |
| Pressure loss - element change       | 12 mths   | 8000 hrs | 12 mths   | 8000 hrs | 12 mths   | 8000 hrs | 12 mths     | 8000 hrs | at least every 6 mths   |          |
| Maximum temperature                  | 120°C     | 248°F    | 120°C     | 248°F    | 120°C     | 248°F    | 120°C       | 248°F    | 50°C***                 | 122°F*** |
| Maximum working pressure             | 20.7 barg | 300 psig | 20.7 barg | 300 psig | 20.7 barg | 300 psig | 20.7 barg   | 300 psig | 20.7 barg               | 300 psig |
| Element end cap colour               | Black     |          | Green     |          | Red       |          | Blue        |          | Black                   |          |

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

| Pressure correction factors    | For maximum flow rate, multiply model flow rate by the correction factor corresponding to the minimum operating pressure |        |        |         |         |          |          |          |          |            |
|--------------------------------|--|--------|--------|---------|---------|----------|----------|----------|----------|------------|
|                                | 4 (58)   | 5 (72) | 6 (87) | 7 (100) | 8 (115) | 10 (145) | 12 (174) | 14 (203) | 16 (232) | 20.7 (300) |
| Operating pressure barg (psig) | 4 (58)   | 5 (72) | 6 (87) | 7 (100) | 8 (115) | 10 (145) | 12 (174) | 14 (203) | 16 (232) | 20.7 (300) |
| 7 barg - correction factor     | 0.76   | 0.84   | 0.92   | 1       | 1.07    | 1.19     | 1.31     | 1.41     | 1.51     | 1.73       |

## Technical Notes

- Direction of air flow is outside to in through the filter element.
- Pop up indicators (65DPUG3) are fitted to models A30025 to A30050 as standard. Differential pressure indicators (65DPIG) are fitted to models A30070 to A31500 as standard. Activated Carbon (AC) grade filters do not include DP equipment. Volt free contact options are available upon request - see price guide.
- Manual drain valves (MDV25 on models A30006 to A30050 and MDVE25 on models A30070 to A31500), are fitted as standard.
- 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 (CO<sub>2</sub>).
- Alpha Filters are manufactured from cast aluminium alloy and are PED 2014/68/EU compliant for group 2 gases.
- Threaded connections are Rp (BSP Parallel) to ISO 7-1 or NPT to ANSI/ASME B1.20.1 if supplied within North America. Rc (BSP Taper) to ISO 7-1 also available.
- For NPT threads, add the suffix N, e.g., A30070NRXA, and for Rc threads add the suffix C, e.g. A30070CRXA.
- Filters are suitable for use with mineral and synthetic oils plus oil-free compressed air applications.
- Filter elements should be changed every 12 months / 8000 hours (whichever comes first). Activated carbon filter elements should be changed every 6 months.

