



Vacuum Pump Protection Filters

Models | A30032 to A31500

Flow Rates 4 SCFM (7 Nm³/hr) to 288 SCFM (489 Nm³/hr)

Essential for the removal of liquid and particulate contamination, Walker Filtration's Alpha Vacuum Pump Protection Filters offer a high efficiency solution for both rough and high vacuum applications.

Offered in a range of 16 models with threaded connections from ³/₈" to 3", Alpha high efficiency filters prevent process contamination from entering liquid or dry running vacuum pumps - helping to prevent damage to rotating parts and costly downtime.

Alpha filter elements utilise custom engineered media technology to deliver market leading performance, significantly reducing pressure loss and energy consumption for low operational costs and increased performance. The VLR grade is used for liquid aerosol and high dirt removal, and the VX1 grade is used for fine particulate removal.



Assured Protection

Highly efficient removal of solid particles and other contaminants ensure prevention of damage to the Vacuum Pump



Optimised Filtration Performance

Alpha's custom engineered media technology delivers a step change in performance



Product Safety in Mind

Lock indication arrows assure effective sealing

- Market Leading Performance Custom engineered filtration media delivers optimum performance
- Simplified Serviceability Profiled bowl design and unique push fit filter elements ensure quick and reliable maintenance
- Exceptional Drainage Manual drain fitted to all Vacuum Pump Protection Filters as standard
- Product Safety in Mind Guaranteed safe housing closure with rotational safety stop
- Corrosion Protection Internal and external electrophoretic paint finish followed by a tough exterior polyester powder coating





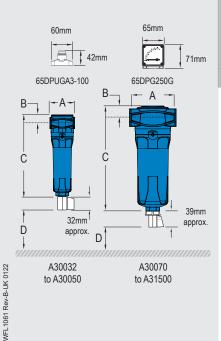
Technical Specification

| Filter model | Pipe size inches | Exhaust flow rate* (vacuum displacement) | | | Dimens | ions mm | Weight Kg | Element model | | |
|----------------|------------------|--|------|-----|--------|---------|-----------|---------------|----------------|--|
| | | Nm/hr | SCFM | Α | В | С | D | | | |
| A30032 (grade) | 3/8 | 7 | 4 | 70 | 23 | 231 | 70 | 0.6 | E30408 (grade) | |
| A30050 (grade) | 1/2 | 11 | 7 | 70 | 23 | 231 | 70 | 0.6 | E30412 (grade) | |
| A30070 (grade) | 1/2 | 20 | 12 | 127 | 32 | 285 | 80 | 1.7 | E30612 (grade) | |
| A30085 (grade) | 3/4 | 25 | 15 | 127 | 32 | 285 | 80 | 1.7 | E30612 (grade) | |
| A30105 (grade) | 1 | 29 | 17 | 127 | 32 | 285 | 80 | 1.7 | E30612 (grade) | |
| A30125 (grade) | 3/4 | 35 | 21 | 127 | 32 | 370 | 80 | 2.0 | E30621 (grade) | |
| A30175 (grade) | 1 | 50 | 29 | 127 | 32 | 370 | 80 | 2.0 | E30621 (grade) | |
| A30280 (grade) | 11/4 | 75 | 44 | 140 | 41 | 476 | 85 | 3.0 | E30731 (grade) | |
| A30320 (grade) | 11/2 | 85 | 50 | 140 | 41 | 476 | 85 | 3.0 | E30731 (grade) | |
| A30400 (grade) | 11/2 | 100 | 59 | 170 | 53 | 508 | 100 | 4.9 | E30831 (grade) | |
| A30450 (grade) | 2 | 115 | 68 | 170 | 53 | 508 | 100 | 4.9 | E30831 (grade) | |
| A30700 (grade) | 2 | 180 | 106 | 170 | 53 | 708 | 100 | 5.5 | E30850 (grade) | |
| A30850 (grade) | 2½ | 200 | 118 | 220 | 70 | 736 | 100 | 10.5 | E31140 (grade) | |
| A30900 (grade) | 3 | 234 | 138 | 220 | 70 | 736 | 100 | 10.5 | E31140 (grade) | |
| A31250 (grade) | 3 | 360 | 212 | 220 | 70 | 857 | 100 | 11.5 | E31160 (grade) | |
| A31500 (grade) | 3 | 489 | 288 | 220 | 70 | 1005 | 100 | 12.5 | E31175 (grade) | |

*Rated flow at atmospheric pressure,1 bar (a) and 20°C

| Grade | VL | .R | VX1 | | | | | |
|--------------------------------|-----------|----------|-------------|----------|--|--|--|--|
| Particle removal | 5 mi | cron | 1 micron | | | | | |
| Maximum temperature | 120°C | 248°F | 120°C | 248°F | | | | |
| Pressure loss - clean & dry | 20 mbar | 0.3 psi | 40 mbar | 0.6 psi | | | | |
| Pressure loss - element change | 12 mths | 8000 hrs | 12 mths | 8000 hrs | | | | |
| Maximum working pressure | 20.7 barg | 300 psig | 20.7 barg | 300 psig | | | | |
| Maximum working vacuum | Full va | acuum | Full vacuum | | | | | |
| Element end cap colour | Gre | en | Red | | | | | |

| Vacuum Correction Factors | | For maximum flow rate, multiply model flow rate by the correction factor corresponding to the minimum operating pressure | | | | | | | | |
|---------------------------|----------|--|------|------|------|------|------|------|------|------|
| Operating vacuum | Mbar abs | Atmospheric | 900 | 800 | 700 | 600 | 500 | 400 | 300 | 200 |
| | Torr | 760 | 675 | 600 | 525 | 450 | 375 | 300 | 225 | 150 |
| | InchHg | 29.9 | 26.6 | 23.6 | 20.7 | 17.7 | 14.8 | 11.8 | 8.9 | 5.9 |
| | Psia | 14.7 | 13.0 | 11.6 | 10.2 | 8.7 | 7.3 | 5.8 | 3.3 | 2.9 |
| Correction factor | | 1.00 | 0.93 | 0.86 | 0.79 | 0.71 | 0.64 | 0.57 | 0.50 | 0.43 |



Technical Notes

- 1. Direction of air flow is inside to out through VLR grade and outside to in through VX1 grade.
- Pop up indicators (65DPUGA3-100) are fitted to models A30032 to A30050. Differential pressure gauges (65DPG250G) are fitted to models A30070 to A31500 as standard. Volt free contact options are available upon request - see price guide.
- Manual drain valves (MDV25 on models A30032 to A30050 and MDVE25 on models A30070 to A31500) are fitted as standard.
- 4. Drain flasks are available for liquid collection for use at atmospheric pressure or vacuum only.
- 5. 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.
- 7. For NPT threads, add the suffix N, e.g., A30070NVLR, and for Rc threads add the suffix C, e.g. A30070CVLR.
- 8. Filter elements should be changed every 12 months / 8000 hours (whichever comes first).







