Walker Filtration’s New Alpha Simplex and Duplex Vacuum Pump Exhaust Filters are designed to remove oil mist from lubricated Vacuum Pumps – providing unrivalled filtration performance, reduced exhaust noise levels and an oil free working environment.

The New Alpha Vacuum Pump Exhaust Filters feature a comprehensive range with connection sizes ranging from ⅜” to 3”. High performing Simplex Filters deliver exceptional results in oil mist removal from vacuum pumps, whilst the two-stage Duplex Filter removes both oil mist and odour.

The New Alpha elements utilise custom engineered media technology to provide market leading performance, significantly reducing pressure loss and energy consumption for low operational costs and increased operating efficiencies.

- **Effective Oil Mist Removal** Preventing potentially harmful contaminants being exhausted into the atmosphere
- **Optimised Filtration Performance** New Alpha custom engineered media technology delivers a step change in performance
- **Duplex Filtration** Two-stage filtration within one filter unit
- **Exceptional Drainage** Manual drain fitted to all Vacuum Pump Protection Filters as standard
- **Market Leading Performance** Custom filter construction delivers optimum performance
- **Simplified Serviceability** New profiled bowl design and unique push fit elements ensure quick and reliable maintenance
- **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) | Dimensions mm | Weight Kg | Element model | Element model | No. of Elements
---|---|---|---|---|---|---|---
A3031EF | 7/8 | 7 | 4 | 70 | 199 | 204 | 70 | 0.6 | E30408EF | E30408DAC | 1/1
A2051EF | 1/2 | 11 | 7 | 70 | 199 | 204 | 70 | 0.6 | E30412EF | E30412DAC | 1/1
A3052EF | 1/2 | 20 | 12 | 127 | 236 | 240 | 80 | 2.3 | E30616EF | E30616DAC | 1/1
A3071EF | 3/4 | 25 | 15 | 100 | 236 | 240 | 80 | 2.3 | E30616EF | E30616DAC | 1/1
A3101EF | 1 | 29 | 17 | 127 | 236 | 240 | 80 | 2.3 | E30616EF | E30616DAC | 1/1
A2072EF | 7/8 | 35 | 21 | 127 | 371 | 80 | 2 | E30621EF | E30621DAC | 1/1
A3102EF | 1 | 50 | 29 | 127 | 371 | 80 | 2 | E30621EF | E30621DAC | 1/1
A3122EF | 1 1/4 | 75 | 44 | 170 | 508 | 100 | 4.9 | E30821EF | E30821DAC | 1/1
A3151EF | 1 1/2 | 100 | 59 | 170 | 508 | 100 | 4.9 | E30821EF | E30821DAC | 1/1
A2011EF | 2 | 115 | 68 | 170 | 508 | 100 | 4.9 | E30821EF | E30821DAC | 1/1
A2022EF | 2 | 180 | 106 | 170 | 508 | 100 | 5.5 | E30821EF | E30821DAC | 1/1
A2025EF | 2 1/2 | 200 | 118 | 220 | 736 | 100 | 10.5 | E31140EF | E31140DAC | 1/1
A2031EF | 3 | 234 | 138 | 220 | 736 | 100 | 10.5 | E31140EF | E31140DAC | 1/1
A2302EF | 3 | 360 | 212 | 220 | 736 | 100 | 11.5 | E31160EF | E31160DAC | 1/1
A3033EF | 3 | 489 | 288 | 220 | 1005 | 100 | 12.5 | E31175EF | E31175DAC | 1/1

### Grade

<table>
<thead>
<tr>
<th></th>
<th>EF</th>
<th>DAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particle removal</td>
<td>0.1 micron</td>
<td>0.1 micron</td>
</tr>
<tr>
<td>Maximum oil carryover at 20ºC (68ºF)</td>
<td>1 mg/m³</td>
<td>0.003 mg/m³</td>
</tr>
<tr>
<td>Pressure loss - clean &amp; dry</td>
<td>25 mbar</td>
<td>0.36 psi</td>
</tr>
<tr>
<td>Pressure loss - saturated</td>
<td>70 mbar</td>
<td>1 psi</td>
</tr>
<tr>
<td>Pressure loss - element change</td>
<td>12 mths</td>
<td>8000 hrs</td>
</tr>
<tr>
<td>Maximum temperature</td>
<td>120ºC</td>
<td>248ºF</td>
</tr>
<tr>
<td>Maximum working pressure</td>
<td>20.7 barg</td>
<td>300 psig</td>
</tr>
<tr>
<td>Element end cap colour</td>
<td>Black</td>
<td>Black</td>
</tr>
</tbody>
</table>

### Technical notes

1. Duplex filters provide a DEF grade element in the lower section for oil removal and a DAC grade element in the upper section for odour removal. Direction of air flow is inside to out through EF grade and outside to in through AC grade filter element.
2. Pop up indicators (65DPUGA3-100) are fitted to models A3031 to A3051. Differential pressure gauges (65DPUG250G) are fitted to models A3052 to A3303 as standard.
3. Manual drain valves (MDV25 on models A3031EF to A3051EF, D3038EFC to D3109EFC and MDVE25 on models A3052EF to A3303EF) are fitted as standard.
4. Drain flasks are available for liquid collection, for use at atmospheric pressure or vacuum only - see price guide.
5. New Alpha Filters are manufactured from cast aluminium alloy and are PED 2014/68/EU compliant for group 2 gases.
6. 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).
7. 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.
8. For NPT threads, add the suffix N, e.g., A3052EF, and for Rc threads add the suffix C, e.g. A3052CEF.
9. Filter elements should be changed every 12 months / 8000 hours (whichever comes first). Activated Carbon Filter elements should be changed at least every 6 months.

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