High-Performance Filters & Prefilters
Trust Donaldson to deliver a complete range of compressed air purification solutions that improve air quality throughout your plant—from compressor room to all points of use. With over 30 years of expertise in compressed air filtration and separation, Donaldson delivers the most efficient and cost-effective pre-filters and after-filters engineered to provide lower pressure drop, longer filter life, quick and easy element change-outs and more predictable maintenance.

**Ultrafilter® High-Performance Filters**

**Ultradepth™ FF, MF & SMF Filter Elements (A)** High performance Ultradepth™ filter elements are engineered with a patented design process for two-stage filtration within one element. With a binder-free borosilicate glass fiber media that eliminates any potential contamination and prevents particulate from clogging the filter mesh, Ultradepth™ offers excellent filtration efficiencies of 99.999%, 99.99998% and 99.99999% respectively on up to 0.01 µm particle size.

- Longer Filter Life
- Higher Quality Air
- Less Maintenance
- More Cost-Effective Filtration

**Stainless Steel Inner and Support Cores** Manufactured from high-grade stainless steel, our inner and support cores withstand rust and other forms of corrosion. Featuring a mesh design to provide the highest void-to-material surface area ratio, they provide the highest airflow volume and lowest pressure drop, resulting in lower replacement costs and greater energy savings.

**Ultrac™ AK Activated Carbon Adsorption Filter Element (B)** The patented two-stage design of Ultrac™ AK adsorption filter elements provide a large surface area on the element’s inner lobes for absolute retention of oil vapour and other hydrocarbons. This unique design extends filter life and lowers replacement costs.

- Higher Airflow Volume
- Fewer Filter Changes
- Lower Pressure Drop
- Increased Cost Savings

**Ultrapoly® PE (C)** This fully regenerable element with high quality corrosion resistant aluminium end-caps provides excellent operating cost savings and maximum strength. Featuring a double o-ring seal that prevents leakage, Ultrapoly® PE is the ideal pre-filter solution for the removal of oil, water and dust particles.

**Ultraporex® SB (D)** Precision engineered for high temperature applications, Ultraporex® SB elements are designed with sintered bronze media, aluminium end-caps and double o-ring seals to withstand temperatures up to 120°C (248°F) and prevent leakage. Available for a wide range of retention ratings—from 5, 25 or 50 µm particle size—Ultraporex® SB is the reliable and economical pre-filter solution for removing oil, water and dust particles.
Donaldson’s AG/SG Superplus housings are equipped with our patented, programmable differential pressure gauge, which notifies maintenance personnel when to change filter elements based on stored data of important parameters. The indicator LED light visually alerts the operator when change-outs are needed while the analogue display indicates differential pressure value. The gauge can also be connected to a central monitoring system for convenient off-site monitoring.

- **Reduced Operating Costs Up to 70%**
- **Longer Filter Life**
- **Greater Energy Savings**
- **User-Friendly Maintenance**

The patented Economizer continuously compares the measured values of the filter to the individually stored data and thus calculates the operating expenses due to the increasing contamination of the filter element. The most economic time for an exchange of the elements is indicated when the differential pressure of the element is so high, that the additional energy costs exceed the costs for an exchange of the filter element.

<table>
<thead>
<tr>
<th>Type</th>
<th>Initial $\Delta p$ (psid)</th>
<th>Particle Size</th>
<th>Efficiency</th>
<th>Residual Oil Content</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ultrapoly® PE</td>
<td>0.4</td>
<td>5 µm</td>
<td>100%</td>
<td>N/A</td>
<td>Particulate</td>
</tr>
<tr>
<td>Ultraporex® SB</td>
<td>0.4</td>
<td>5 µm</td>
<td>100%</td>
<td>N/A</td>
<td>Particulate</td>
</tr>
<tr>
<td>Ultrair® FF Fine Filter</td>
<td>0.7</td>
<td>0.01 µm</td>
<td>99.999%</td>
<td>0.1 ppm</td>
<td>Coalescing/Particulate</td>
</tr>
<tr>
<td>Ultrair® MF Micro Filter</td>
<td>1.2</td>
<td>0.01 µm</td>
<td>99.9998%</td>
<td>0.03 ppm</td>
<td>Coalescing/Particulate</td>
</tr>
<tr>
<td>Ultrair® SMF Sub Micro Filter</td>
<td>1.7</td>
<td>0.01 µm</td>
<td>99.99999%</td>
<td>&lt;0.01 ppm</td>
<td>Coalescing/Particulate</td>
</tr>
</tbody>
</table>
AG / SG Superplus Filter Housings (F) Donaldson’s high quality AG Superplus housings are designed with all of the features required to make them the most efficient and cost effective filters for your compressed air system. Featuring a three-part aluminium design, optimal flow-path design and a tapered bowl and non-turbulent lower filter zone, these housings are engineered for easy maintenance and maximum performance. The SG Superplus housing feature a 2 piece steel housing with flange connections.

• Simple Disassembly
• Lower Pressure Drop
• Easy Change-Outs
• No Condensate Re-Entrained in Air Stream

Condensate Drain Ultramat UFM-T (G) Engineered for compact spaces, Ultramat UFM-T drains condensate from compressed air systems and filters while electronically regulating discharge to prevent loss of valuable compressed air. Designed with an electronic liquid level sensor with no moving parts for fail-safe operation, a sloped display for easy reading and sophisticated electronic controls. Designed for a wide selection of voltage ranging from 24V to 230V and the option of a heater or no heater is available with sizes 20 and 100.

• Reduced Downtime
• More Reliable Operation
• Increased Cost Savings
• Safer Operation

Intelligent in stead of energy consumption

Energy costs
Replacement costs for a filter element
Total cost per year
Element changeout frequency
### Technical Data

**High Efficiency Filter Superplus**

<table>
<thead>
<tr>
<th>Filter Type</th>
<th>Capacity</th>
<th>Connection</th>
<th>Filter</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>nominal m³/h</td>
<td>maximum m³/h</td>
<td>G/DN</td>
</tr>
<tr>
<td>0002</td>
<td>20</td>
<td>40</td>
<td>G ¼</td>
</tr>
<tr>
<td>0004</td>
<td>40</td>
<td>60</td>
<td>G ½</td>
</tr>
<tr>
<td>0006</td>
<td>60</td>
<td>90</td>
<td>G ¾</td>
</tr>
<tr>
<td>0009</td>
<td>90</td>
<td>120</td>
<td>G ½</td>
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<tr>
<td>0012</td>
<td>120</td>
<td>180</td>
<td>G ½</td>
</tr>
<tr>
<td>0018</td>
<td>180</td>
<td>270</td>
<td>G ¾</td>
</tr>
<tr>
<td>0027</td>
<td>270</td>
<td>360</td>
<td>G 1</td>
</tr>
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<td>G 1 ¼</td>
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<td>720</td>
<td>G 1 ½</td>
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<tr>
<td>0072</td>
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<td>1080</td>
<td>G 2</td>
</tr>
<tr>
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<tr>
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<td>1920</td>
<td>G 2 ½</td>
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<td>1920</td>
<td>2880</td>
<td>G 3</td>
</tr>
<tr>
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<td>2880</td>
<td>4320</td>
<td>G 3</td>
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<tr>
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<td>DN 65</td>
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<tr>
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</tr>
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<td>5760</td>
<td>7680</td>
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<tr>
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<tr>
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<tr>
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<td>15360</td>
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<td>DN 200</td>
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<tr>
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<td>19200</td>
<td>23040</td>
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<tr>
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<td>23040</td>
<td>30720</td>
<td>DN 250</td>
</tr>
<tr>
<td>3072</td>
<td>30720</td>
<td>38400</td>
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<tr>
<td>3840</td>
<td>38400</td>
<td>51072</td>
<td>DN 300</td>
</tr>
</tbody>
</table>

* related to the intake of the compressor +20°C, 1 bar abs., at 7 bar g operating pressure

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**Options**

**Econometer (ECO-KD, ECO-NG 50)** Contact differential pressure gauge available in a variety of pressure ranges. Available as standard in AG/SG Standard housing.

**Ultradrain Manual Condensate Drain UFM-P** Applicable for manual drainage applications. The non-electrical operation ensures safer operations in harsh environments with inflammable liquid and gases.
Donaldson offers a wide variety of solutions to reduce your energy costs, improve your productivity, guarantee production quality and help preserve the environment.

**PRODUCTS**
- Activated carbon filters
- Adsorption dryers
- Breathing-air units
- Cartridge filters
- Chillers
- Condensate drains
- Coolers
- Cyclone separators
- Demisters
- Disposable filters
- Elements
- Emulsion separators
- Filters
- Fine filters
- Filter housing
- High-performance filters
- High-pressure filters
- Maintenance units
- Medical vacuum filters
- Membrane dryers
- Micro filters
- Oil/vapour absorbers
- Oil/water separators
- Oil/water separation systems
- Pocket filters
- Pre-filters
- Pre-separators
- Process filter elements
- Process filter housing
- Processing plants
- Pure gas filters
- Refrigeration compressed air dryers
- Silicon-free filters
- Steam filters
- Sterile air-conditioning plants
- Sterile filters
- Sub-micro filters
- Systems engineering
- System solution
- Vacuum filters
- Vent filters

**SERVICES**
- Air Audit – Detailed analysis with optimisation action plan
- Air flow measurement
- Air Performance – Optimisation of compressed air networks
- Air Survey – Analysis of compressed air systems
- Condensate sampling
- Dew point measurement
- Differential pressure measurement
- Integrity tests
- Leak localisation
- Maintenance agreement
- Oil-aerosol measurement
- Service agreement