



Donaldson
FILTRATION SOLUTIONS

Compressed Air Filtration

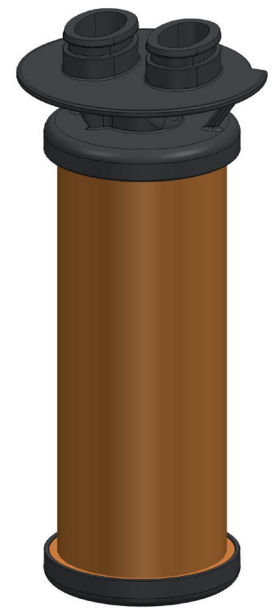
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Depth Filter / Particle filter

B

MAIN FEATURES & BENEFITS:

- Pre-filter / particle filter for the retention of oil and water aerosols as well as particles from compressed air or gases in industrial applications
- Innovative filtration technology; highly porous sintered bronze filter medium with high dirt-holding capacity; achievement of high retention rates with low differential pressure
- Validated performance data; reliable achievement of compressed air quality acc. to ISO 8573-1
- Flow-optimised design, minimum pressure loss for economic compressed air purification (saving of energy costs)
- Possible regeneration of the sintered bronze filter medium



Depth filter B

INDUSTRIES



- Chemical and pharmaceutical industry



- PCB assembly and CD manufacturing



- Surface finishing



- Machine building industry and plant engineering / construction



- Energy and power generation

Donaldson Filtration Deutschland GmbH
Büssingstr. 1
D-42781 Haan
Tel.: +49 (0) 2129 569 0
Fax: +49 (0) 2129 569 100
E-Mail: CAP-de@donaldson.com
Web: www.donaldson.com

Donaldson®
Ultrafilter

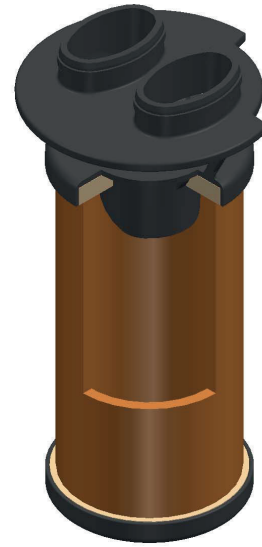
PRODUCT DESCRIPTION

The Ultraporex prefilter contains a highly porous sinter bronze filter medium.

It ensures the retention of coarse solid and liquid particles.

By utilising various filtration mechanisms such as retention by direct impact, sieve effect and diffusion effect, liquid aerosols and solid particles will be retained in the filter down to a 25 µm particle size.

The high-grade sinter bronze medium guarantees not only a high load of contaminants but also the regeneration of the filter element.



Cross section of the depth filter

The B filter element is designed and developed for the following applications:

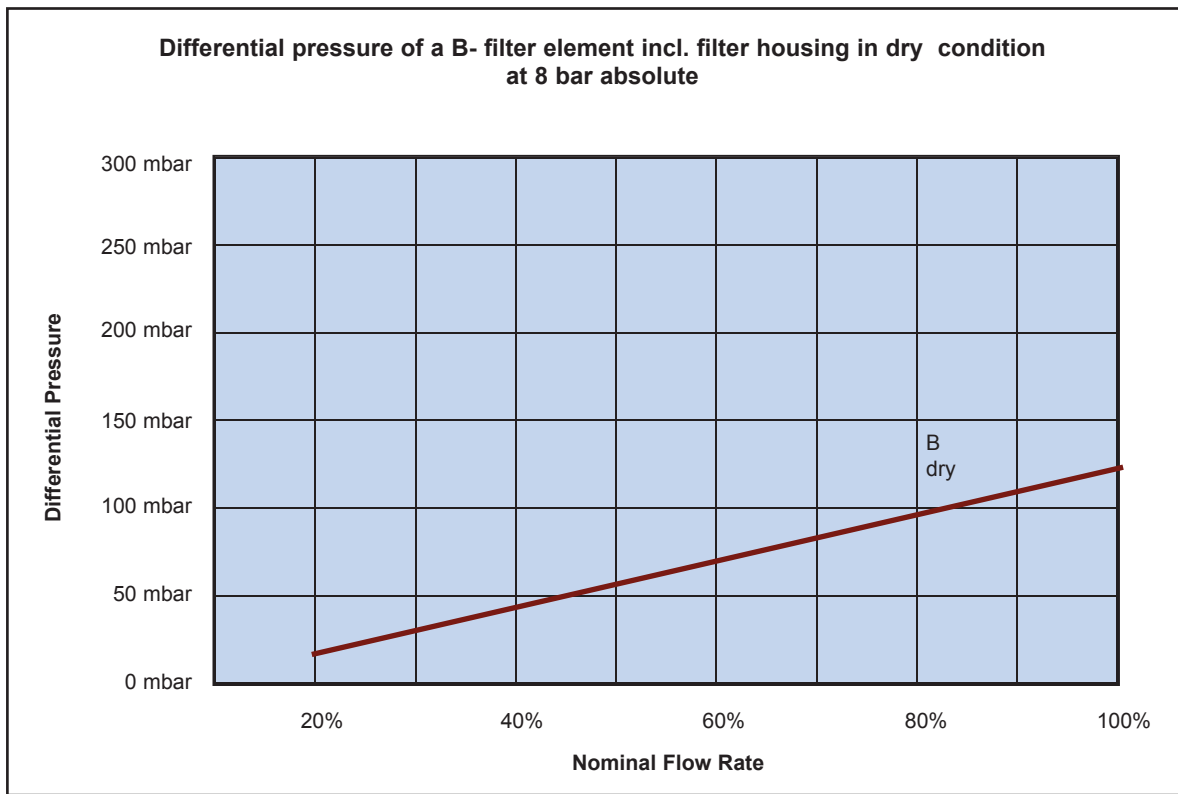
- **Central compressed air processing:**
 - Particle filtration downstream cyclone separators
 - Prefilter upstream filter stages "M and "S"
- **Adsorption dryers / Activated carbon adsorbers:**
 - Particle filter for the retention of adsorbent abrasion
- **Automotive industry:**
 - Purification of paint- and lacquering finishing air

PRODUCT SPECIFICATIONS

Features	Benefits
Intelligent overall concept	Flow range, filtration grades, efficiencies and available options perfectly meet requirements of air purification
Flow-optimised Design	Minimum pressure losses, thereby savings of energy costs
Void volume: porosity grade larger than 60%	High dirt holding capacity: lower differential pressure
Regenerative- repeatable regeneration possible, combined with exact retention rates	Economical, longer service life time
Removal of contaminants down to 25 µm	Guaranteed retention rates

Materials	
Filter medium	Pure, sintered bronze material no. 2.1052
End caps	Glass fibre reinforced polymer
O-rings	Viton: silicone free and free of compound (Standard)
Bonding	Polyurethane

PERFORMANCE DATA



Operating pressure bar g	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Conversion factor fp	0,25	0,38	0,50	0,63	0,75	0,88	1,00	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13

Element Type	Nominal Flow Rate at 7 bar g m³/h*	Sizing example for pressure which deviates from nominal pressure
0035	35	$V_{nom} = 350 \text{ m}^3/\text{h}$, operating pressure = 9 bar (g) $V_{corr} = \frac{V_{nom}}{fp}$ $V_{corr} = \frac{350 \text{ m}^3/\text{h}}{1,25} = 280 \text{ m}^3/\text{h}$ Calculated size: Type 0320
0070	70	
0120	120	
0210	210	
0320	320	
0450	450	
0600	600	
0750	750	
1100	1100	

* m³ related to 1 bar abs. and 20°C

CERTIFICATE

Certificate of compliance with the order

according to
DIN EN 10204 2.2

Confirmation of Design and Performance Data with Test Report.

Filter type	B	Filter size	0035 - 1100
Retention of particles			
Particle diameter [µm]		25	
Particle retention rate at 8 bar absolute [%]		100	

**Wolfgang Bongartz**

Product Line Manager Industrial Filtration Technology
Donaldson Filtration Deutschland GmbH