

## Ultraporex B

The prefilter for the removal of oil, water and dust particles with absolute retention efficiency.

### Product description:

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

It ensures the retention of coarse solid and liquid particles.

### Characteristics:

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.



Ultraporex depth filter

### Applications:

The Ultraporex prefilter is for example being utilised in the following industries

- Particle filtration downstream cyclonic separators
- Central pre-filtration in compressor stations
- Removal of larger amounts of condensate
- Pre-filter upstream filter grades “M” and “S”
- Applications with aggressive condensates

Element Type	Flowrate at 7 bar g m <sup>3</sup> /h *
0035	0035
0070	0070
0120	0120
0210	0210
0320	0320
0450	0450
0600	0600
0750	0750
1100	1100

**Sizing example for pressure which deviates from nominal pressure:**  
 $\dot{V}_{nom} = 350 \text{ m}^3/\text{h}$ , operating pressure = 9 bar (g)

$$\dot{V}_{corr} = \frac{\dot{V}_{nom}}{f_p}$$

$$\dot{V}_{corr} = \frac{350 \text{ m}^3/\text{h}}{1.25} = 280 \text{ m}^3/\text{h}$$

**Calculated Size: Type 0320**

Operating Pressure bar g	Pressure conversion factor $f_p$
1	0.25
2	0.38
3	0.50
4	0.63
5	0.75
6	0.88
7	1.00
8	1.13
9	1.25
10	1.38
11	1.50
12	1.63
13	1.75
14	1.88
15	2.00
16	2.13

\* m<sup>3</sup>/h related to 1 bar abs. and 20°C

# Ultraporex B

Features:	Benefits:
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

Retention rate:
100% in gases; defined retention rate of particles larger than the pore size (25 µm)

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

