

# Borosilicate pleated filters

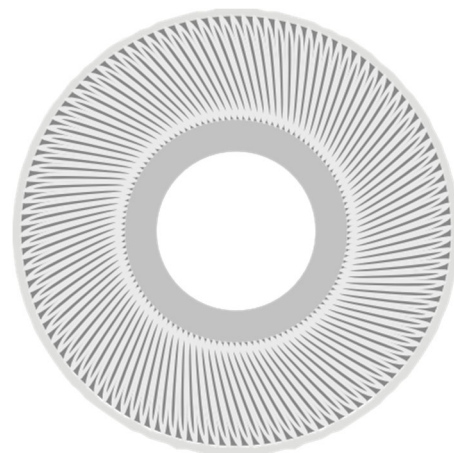
High performance depth filters with positive zeta charge (Z+)

## MICROGLASS

### High performance depth filters with positive zeta charge (Z+)

MICROGLASS cartridges have been designed to retain particles, colloids and micro-organisms. These provide the ideal solution for separating sub-micron cloudiness from an extensive range of fluids. The MICROGLASS filtration system consists of different layers of graded porosity borosilicate (z+), sealed in a sandwich of two robust, inert polypropylene or polyester membranes, with the whole assembly thermo-bonded to a polypropylene structure. As with filter sheets, the mechanical retention process is augmented by the electrostatic action of the fibres in the filter media, which remove, by adsorption, all negatively charged particles (yeasts, bacteria, moulds and contaminants) even at dimensions smaller than the removal rating.

MICROGLASS is therefore an excellent prefilter and a valuable ally to prolong the lifespan of the final membrane, preventing its premature blocking. The unique construction results in a very rigid element with outstanding mechanical stability of the filter media, totally preventing fibre release even when the cartridge is subjected to mechanical and physical stress. The use of thermo-bonding and ultrasound bonding processes in assembly without the use of resins or adhesives eliminates all extractables and makes the whole component compact and resilient.



## MICROGLASS

Efficient, economical and safe for extreme filtration grades.

## TECHNICAL SPECIFICATIONS

- absolute retention ratings, consistent quality performance right up until blocking
- high z+ charge and superior fines retention capacity
- controlled porosity and uniform filtration across the entire surface
- no fibre release from the filter media
- All materials meet FDA CFR 21; Plastics compliant with USP Class VI “Plastic Biosafety”
- In compliance with the EU regulation for food contact in EC Countries (10/2011 + amendments; 1935/2004;1895/2005)

## OPERATING CONDITIONS

<b>Max operating pressure (<math>\Delta p</math>)</b>	90°C @ 1.3 bar 60°C @ 2.7 bar 20°C @ 5.0 bar
<b>Recommended replacement pressure drop</b>	2.5 bar @20°C
<b>Suggested operating pressure range</b>	0.1 to 1.5 bar

## FILTER RATINGS

**0.4 – 0.5 – 0.6 – 0.8 – 1.0 – 2.5 – 3.0 – 5.0 – 10.0 – 20.0um**

**Absolute rating : 99.99% - ISO4572 Multipass Test AC Fine Test Tust**

## FLOW RATE

<b>Water Flow 20°C @0.1 bar /10"</b>	0.4-0.5um	0.6-0.8um	1.0um	2.5-3.0um	5.0um	10-20.0um
<b>Typical Flow Rate L/min</b>	11	13-15	17	40	50	50

Extrapolation for multiple housings and higher pressure drops is acceptable, but as flows increase the pressure drop of the housing becomes more apparent

## FILTRATION AREA

0.6m<sup>2</sup>/10"

## MATERIALS

<b>Filtering media</b>	Borosilicate
<b>Supports</b>	Polypropylene
<b>Inner sleeve</b>	Polypropylene
<b>Connections and tip</b>	Polypropylene
<b>Gaskets</b>	Silicone (standard), EPDM, Viton, FEP

## SEALING

Ultrasound / Heat sealing

## DIMENSION

<b>Length</b>	254mm (10")-508mm (20")-762mm (30")-1016mm (40")
<b>Outer diameter</b>	69mm
<b>Inner diameter</b>	26mm

## TRACEABILITY

Each filter element is identified by a lot number for complete traceability.