

# PORLAS (Fiber glass pleated filter)

## Description

PORLAS cartridges are pleated with absolute grade of fiber glass. This is designed to provide efficient particles removal in both liquids and gases system. The use of glass fiber media as a vent filter can be used in applications where a sterile environment must be maintained but an exchange of gases is critical such as bioreactors, isolation or environmental chambers and fermentation tanks, etc.



## Features

- Excellent chemical compatibility and thermal resistance
- Superior efficiency
- High dirt holding capacity
- Long service time
- High flow rate

## Applications

Chemical Industry	High viscose and purity fluid
Pharmaceutical & Biological Industry	Bio-reactor, vaccines, reagent, buffer
General Process Industry	Air vent, solvent, paint, ink, oil, organic chemical

## Specifications

Dimension & Structure	Length	9.75", 10", 19.65", 20", 29.5", 30", 39.5", 40" / 250, 254, 500, 508, 750, 762, 1000, 1016 mm
	ID	30 mm
Materials of Construction	OD	68 mm
	Effective filtration area	0.34 ~ 0.53m <sup>2</sup> per 10 inch
	Filtration media	Fiber glass
Operating Conditions	Support layers	Polypropylene
	Core & case	Polypropylene, reinforced PP by Talc, high density polyethylene
	O-ring & gaskets	Silicone, EPDM, Viton, TEV
Operating Conditions	Maximum differential pressure	30 psid / 2.1 bar at 60 °C 60 psid / 4.2 bar at 30 °C
	Maximum operating temperature	212 °F / 100 °C

## Liquid Particle Retention Ratings

Removal Rating ( $\mu\text{m}$ )	$\beta = 5,000$	$\beta = 1,000$	$\beta = 10$
	99.98%	99.90%	90.00%
0.45	< 0.5*	< 0.4*	< 0.4*
1	< 1*	< 0.8*	< 0.5*
5	3	< 1.7*	< 1*
10	10	3	4.5

\* Extrapolated value

## Pressure Drop vs. Water Flow Rate

