

Supor[®] Filter Cartridges For Fine Colloids Removal

Supor filter cartridges are specifically engineered for fine colloids removal in water applications.

Description

Supor filters incorporate pleated polyethersulfone (PES) media into single open ended (SOE) cartridges to fit in sanitary filter housings. These elements provide reliable, economical and efficient fine colloids removal for water applications.

Supor filters are suitable for exposure to repeated hot water and *in situ* steam sanitization cycles for longer service life.

Features	Benefits
Hydrophilic media in multiple retention ratings	 Consistent filtrate quality Targeted fine colloids removal in water applications Easy to wet and integrity test
Cartridges resistant to numerous sanitization cycles produced with no adhesives or surfactants	Process reliabilityCost effective filtration
Individually serialized cartridges	Full traceability

Quality

- Cartridges produced in a controlled environment
- Manufactured according to ISO 9001:2008 certified Quality Management System

Food Contact Compliance

Please refer to the Pall website http://www.pall.com/foodandbev for a Declaration of Compliance to specific National Legislation and/or Regional Regulatory requirements for food contact use.



Supor Filter Cartridges

Materials of Construction

Filter Media	Proprietary hydrophilic Supor membrane
Support and Drainage	Polypropylene
Cage, Core, End Cap and Fin End	Polypropylene
Adaptor	Polypropylene with an internal stainless steel reinforcing ring
O-ring Seal	Silicone Elastomer

Technical Information

Maximum Differential Pressure for Cartridge Stability¹

At 40 °C (104 °F) 5 bar (72.5 psi) At 80 °C (176 °F) 3 bar (43.5 psi)

¹In fully compatible fluids which do not chemically attack, soften or adversely affect the filter in any way

Sanitization / Sterilization

Supor filters can be repeatedly steam sterilized *in situ*, or they can be sanitized with hot water or disinfected with chemicals.

Media	Supor Grade	Temperature	Number of Cycles (20 min duration)	Cumulative Time ² (hours)
Steam ²	HTRA	125 °C (257 °F)	105	35
	LTRA HTRB		150	50
Hot Water ⁴	All	85 °C (185 °F)	150	50
1600 ppm total peroxides (325 ppm PAA)		Ambient	NA	2505
9600 ppm total peroxides (1950 ppm PAA) ⁶		Ambient	NA	20

² Measured under laboratory test conditions. The actual cumulative time depends on the process conditions.

 $^{\rm 3}$ The maximum allowable pressure drop (forward) during steam steaming at 125 °C (257 °F) is 0.3 bard (4 psid). The filter must be wet prior to steam sterilization.

 4 The maximum allowable pressure drop (forward) during hot water sanitization at 85 °C (185 °F) is 2.5 bard (36.3 psid).

⁵ Corresponds to one 20 minute disinfection cycle per day, 7 working days per week and 52 weeks a year during 2 years.

⁶ An 'over concentration' of disinfecting solution. Corresponds to 60 20-minute disinfection cycles

Pressure Drop vs. Liquid Flow Rate⁷

Supor Grade	Clean Water Flow / Pressure Drop Flow at 100 mbar per 254 mm cartridge (flow at 1 psi per 10 in cartridge)	
HTRA	10 LPM (1.8 GPM)	
LTRA	20 LPM (3.6 GPM)	
HTRB	17 LPM (3.1 GPM)	

⁷ Typical initial clean media differential (DP) per 254 mm (10 in) element for water at 20 °C(68°F); viscosity 1 centipoise. For 505 mm, 762 mm and 1016 mm configurations divide the differential pressure by 2, 3 and 4 respectively.

Ordering Information

This is a guide to the Part Numbering structure only. For specific options, please contact Pall.

Part Number: AB	Table 1	Table 2	Table 3	WS
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Table 1: Nominal Length

Code	Description	
2	508 mm (20")	
3	762 mm (30")	
4	1016 mm (40")	

Table 2: Removal Rating

Code	Description
HTRA	High efficiency for 0.2 μ m fine colloids removal
LTRA	For 0.2 µm fine colloids removal
HTRB	High efficiency for 0.45 µm fine colloids removal

Table 2: Adaptor

Code	Description
7	SOE – single open end with fin end and external 222 O-rings
28	SOE – single open end with fin end, 3 locking tabs and external 222 O-rings





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Pall Corporation has offices and plants throughout the world. For Pall representatives in your area, please go to www.pall.com/corporate_contact.asp

Please contact Pall Corporation to verify that the product conforms to your national legislation and/or regional regulatory requirements for water and food contact use.

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