

SUPAPORE TC

Pleated Membrane Filter Capsules



SupaPore TC microfiltration membrane capsules are fully disposable filter units for small and medium scale air and gas processing applications. They are ready-to-use, avoiding the need to purchase or maintain filter housings and are easy to change-out with minimum downtime. The filtration unit is permanently enclosed inside the capsule shell to minimise post-use cleaning and operator exposure to process fluids.

SupaPore TC capsules are available with PTFE membranes and offered with a range of inlet/outlet connections to suit most process systems.

The filters are supplied in a wide range of lengths from 50mm to 750mm long and two diameters of 75mm and 90mm.

Product Features

- Thermally bonded and adhesive free construction
- Capsules are non-pyrogenic and can be autoclaved multiple times
- Materials meet US FDA CFR Title 21 requirements
- Available in a range of grades and pore sizes
- Manufactured in clean room facilities under ISO quality system



SupaPore TC Capsules - PTFE

- Naturally hydrophobic PTFE membrane
- 100% polypropylene hardware
- Available in a range of Absolute removal ratings
- Integrity testable

Features and Benefits

- Fully disposable unit avoids the need to purchase a filter housing
- Ready to use for easy filter change-out and minimum downtime
- Enclosed filter unit minimises operator exposure and post-use cleaning
- Wide range of inlet and outlet connections available so suitable for most process systems
- All capsules feature Luer-lok vent and drain
- All polymer construction
- Full product validation guide available

Industries and Applications

- Development and pilot plant applications
- Equipment requiring filtration of air and gas
- Venting and process air filtration
- Manufacturers of small or medium size batches of products where batch to batch cleaning is an issue
- Multi-purpose plants where flexibility is needed

SupaPore TC Technical Data

Dimensions

Outside Diameter: 90mm (Junior capsule 75mm)

Filter Module Length	Nominal Capsule Length (Hose Barb connections)	Typical Surface Area	Capsule Volume (Litre)
Junior 50mm (2")	117mm	0.05m ²	0.11
50mm (2")	147mm	0.13m ²	0.23
125mm (5")	220mm	0.36m ²	0.57
250mm (10")	339mm	0.76m ²	1.0
500mm (20")	582mm	1.52m ²	1.9
750mm (30")	824mm	2.29m ²	2.8

Sterilisation and Sanitisation

Autoclave: 135°C for 30 mins (25 cycles)

Hot Water: Up to 90°C

Maximum Operating Conditions

Maximum Temperature: 43°C @ 2.0 Bar

Maximum Pressure: 5.5 Bar @ 20°C (Liquid)

4.1 Bar @ 20°C (Gas)

Max Differential Pressure: 3.4 Bar @ 20°C (Forward Flow)

2.7 Bar @ 20°C (Reverse Flow)

Recommended change-out differential pressure: 2.5 Bar

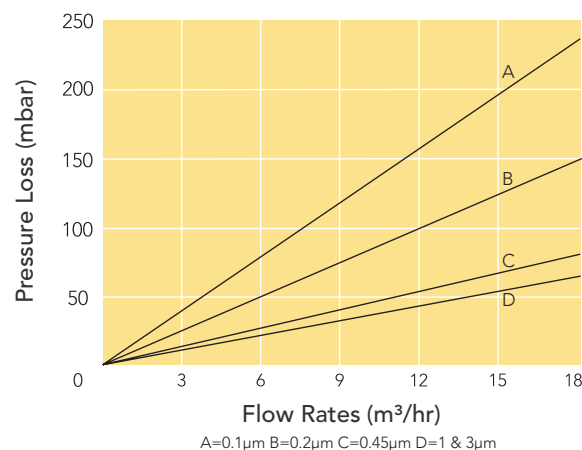
Standard Materials of Construction

Filter media: Polytetrafluoroethylene (PTFE)

Media Support: Polypropylene

Assembly: Polypropylene

Flow Rates Air
(2" Capsule - 0 bar Pressure)



Integrity Test Specification, B grade only

Capsules	Test Pressure		Maximum Water Intrusion (ml/10 min)
	Bar	PSI	
2" Junior	2.5	36	2
2"	2.5	36	5
5"	2.5	36	9
10"	2.5	36	16
20"	2.5	36	32
30"	2.5	36	46

*The above values refer to a single 0.2 micron capsule tested in water at 20°C.

To convert maximum Water Intrusion Flow values to maximum Water Flow values divide the WIT flow rate by 3.5. The test pressure remains the same.

Ordering Guide

16TC	G	001 -	09	A	A	A
Media	Grade	Micron Rating	Length	Inlet	Outlet	Branding
TC - PTFE	G - General B - Biological	001 - 0.1µm 002 - 0.2 004 - 0.45 010 - 1.0 030 - 3.0	Junior J2 - 117	Junior Capsule H - 3mm Hosebarb Straight I - 6mm Hosebarb Straight J - 12mm Hosebarb Straight K - 1/2" Sanitary Flange BS4825 L - Luer-Lok	Junior Capsule H - 3mm Hosebarb Straight I - 6mm Hosebarb Straight J - 12mm Hosebarb Straight K - 1/2" Sanitary Flange BS4825 L - Luer-Lok	A - Amazon
			Standard 02 - 147mm 05 - 220 09 - 339 20 - 582 30 - 824	Standard Capsule A - 8.5-16mm Hosebarb Tapered B - 1/4" NPTM C - 1/4" NPTF D - 3/8" NPTF E - 1/2" NPTM F - 1/2" NPTF G - 1" Sanitary Flange BS4825	Standard Capsule A - 8.5-16mm Hosebarb Tapered B - 1/4" NPTM C - 1/4" NPTF D - 3/8" NPTF E - 1/2" NPTM F - 1/2" NPTF G - 1" Sanitary Flange BS4825	

Example: 16TCB002-20GAA = PTFE media, 0.2µm, 20" long, Sanitary Flange inlet and Hosebarb outlet.

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