

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 *Applies to non gamma sterilised option only

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

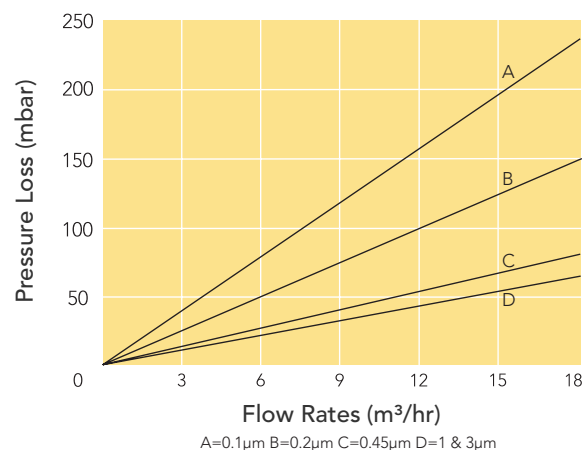
Standard Materials of Construction

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.

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 - ½" Sanitary Flange BS4825 L - Luer-Lok | Junior Capsule H - 3mm Hosebarb Straight I - 6mm Hosebarb Straight J - 12mm Hosebarb Straight K - ½" 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 - ¼" NPTM C - ¼" NPTF D - ¾" NPTF E - ½" NPTM F - ½" NPTF G - 1" Sanitary Flange BS4825 | Standard Capsule A - 8.5-16mm Hosebarb Tapered B - ¼" NPTM C - ¼" NPTF D - ¾" NPTF E - ½" NPTM F - ½" 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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