

- single-use liquid filters
- polyethersulphone

PROPOR SG sterilising grade disposable capsules feature a patented, microbially retentive polyethersulphone membrane for fast, reliable and cost-effective sterile filtration of pharmaceutical fluids.

The asymmetric pore structure and high voids volume of the PROPOR SG membrane allow high throughputs and exceptionally high flow rates compared with competitive PES and alternative membranes. Low protein and preservative binding properties minimise product loss due to adsorption.

PROPOR SG sterilising grade disposable capsules are optimised for pharmaceutical processing. They have low extractable levels and broad chemical compatibility across the full pH range including organic solvents.

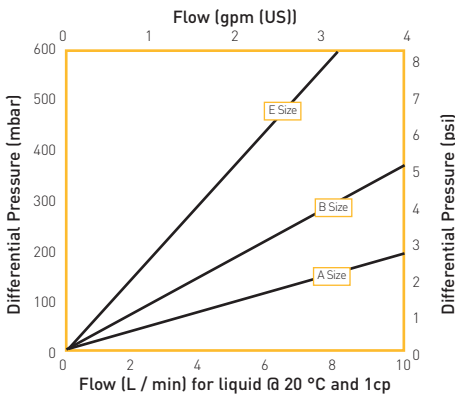
Features and Benefits

- Up to 3.5 times higher flow rates than most competitive sterilising grade membranes
- Fully validated and integrity testable membrane for assurance of sterility
- Low binding for minimal product loss
- Can be gamma-irradiated and autoclaved

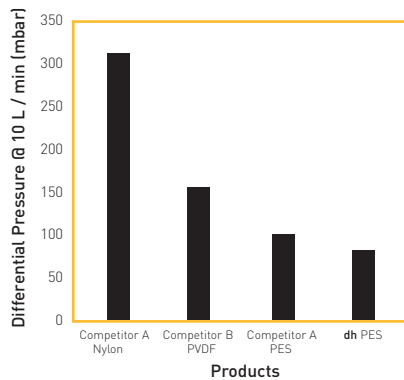


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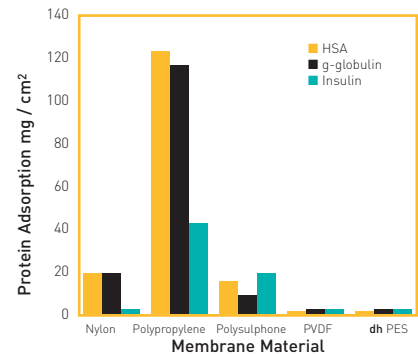
Performance Characteristics



Capsule flow rates



Differential pressure comparison of 10" sterilising grade filters



Protein binding on membrane materials

Specifications

Materials of Construction

- Filtration Membrane: Polyethersulphone
- Upstream Support: Polyester
- Downstream Support: Polyester
- Core: Polypropylene
- Sleeve: Polypropylene
- End Caps: Nylon
- Capsule Body: Nylon
- Capsules Vent Seals: Silicone
- Filling Bell: Polycarbonate

Recommended Operating Conditions

PROPOR SG disposable capsules may be operated up to a temperature of 40 °C (104 °F) at line pressures up to 5.0 bar (72 psig).

Effective Filtration Area (EFA)

- A size: 0.20 m² (2.2 ft²)
- B size: 0.10 m² (1.1 ft²)
- E size: 0.05 m² (0.6 ft²)

Autoclave Sterilisation

PROPOR SG disposable capsules can be autoclaved for 10 x 30-minute cycles at 130 °C [266 °F].

Gamma-Irradiation

PROPOR SG disposable capsules can be gamma-irradiated up to a maximum dosage of 40 kGy.

Biological Safety

Materials conform to the relevant requirements of 21CFR Part 177 and current USP Plastics Class VI - 121 °C and ISO10993 equivalents.

Non-Volatile Extractables (NVE)

Total NVEs extracted in the first 5 litre flush of purified water for an A size capsule are <5 mg.

Oxidisable Substances

PROPOR SG disposable capsules meet current USP and EP quality standards for sterile purified water for oxidisable substances following a <1 litre water flush.

TOC / Conductivity

The filtrate quality from an A size PROPOR SG conforms to the requirements of current USP <643> (TOC) and USP <645> (conductivity) within the first 200 ml flush of purified water.

Endotoxins

Aqueous extracts from the A size PROPOR SG capsule contain < 0.125 EU / ml when tested in accordance with the Limulus Amoebocyte Lysate test.

Retention Characteristics

PROPOR SG disposable capsules are validated by bacterial challenge testing with *Brevundimonas diminuta* to current ASTM F838-05 methodology (10⁷ organisms / cm² EFA minimum) with typical in-house challenge levels being 10¹¹ organisms per 10 inch module.

Integrity Test Data

All filters are integrity testable to the following limits when wet with water and using air as the test gas.

Micron Rating		0.2
Min. Bubble Point	(barg)	3.38
	(psig)	49.0
Diffusional Flow	(barg)	2.8
Test Pressure	(psig)	40.6
Max. Diffusional Flow	(A)	6.0
	(B)	3.0
	(E)	1.4

Quality Standards

Pharmaceutical grade products are manufactured in accordance with cGMP, 100% flushed with pharmaceutical purified water and integrity tested prior to despatch. A sample of each lot is tested to demonstrate conformity to validated claims.

Pharmaceutical Validation

A full validation guide is available upon request from Laboratory Services Group (LSG).

Ordering Information

ZESG - - -

Code	Length (Nominal)	Code	Micron	Code	Inlet Connection	Code	Outlet Connection	Code	Variant	Code	Grade	Code	Specification	Code	Accessory
E	4.4" (113 mm)	020	0.2 µm	T	1" Tri-Clamp	T	1" Tri-Clamp	P	Pharmaceutical	N	Non-sterile	3	Pack of 3	FB	Filling Bell
B	5.5" (140 mm)			N	1/2" NPT Male	N	1/2" NPT Male			S	Presterilised				
A	7.9" (200 mm)			H	1/2" Hosebarb	H	1/2" Hosebarb			Y	(>25 kGy)				<small>G & H styles only</small>
				G	Stepped Hosebarb	G	Stepped Hosebarb								
				M	1/4" NPT Male	M	1/4" NPT Male								
				Q	Walther QC	Q	Walther QC								
				R	Grommel / QC	R	Grommel / QC								

Inlet / Outlet Connection Styles



1" Tri-Clamp



Stepped Hosebarb



1/4" NPTM Thread



1/2" Hosebarb



1/2" NPTM Thread

Other Available Formats



Filter Discs



Syringe Filters



MURUS™
Large Scale
Disposable
Capsules



Filter Cartridges

