PROPOR SG MURUS Disposable Capsules

- liquid filters
- polyethersulphone membrane

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

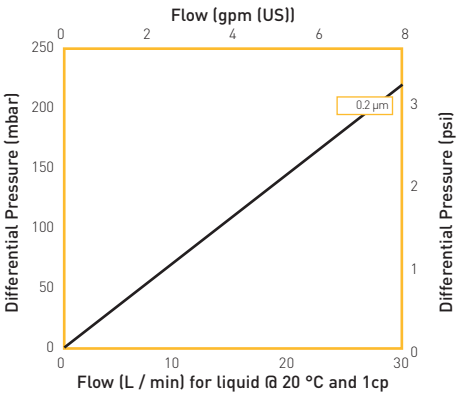
The MURUS capsule range incorporates simple but effective design solutions such as stability feet for increased safety of operation.

Note: PROPOR & MURUS are registered trademarks of Parker domnick hunter

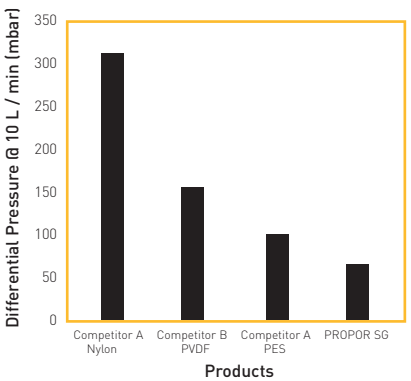
Features and Benefits

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

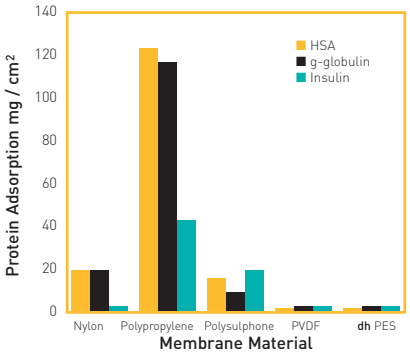
Performance Characteristics



Capsule flow rates (10¨ Size (250 mm))



Differential pressure comparison of 10¨ sterilising grade filters



Protein binding on membrane materials

PROPOR SG MURUS Disposable Capsules

Specifications

Materials of Construction

Filtration Membrane:	Polyethersulphone
Upstream Support:	Polyester
Downstream Support:	Polyester
Core:	Polypropylene
Sleeve:	Polypropylene
Standard o-rings / gaskets:	Silicone
Capsule Body:	Polypropylene
Capsule Vent Seals:	Silicone

Recommended Operating Conditions

PROPOR SG large scale disposable capsules may be operated under the following conditions: 5.5 barg @ 25 °C / 2.8 barg @ 60 °C.

Parker Hannifin certify that this product complies with the European Council Pressure Equipment Directive (PED) 97/23/EC Article 3, Paragraph 3 - Sound Engineering Practice (SEP). This product is intended for use with Group 1 & 2 Dangerous and Harmless Liquids and Group 2 Harmless Gases at the operating conditions stated in this document : In compliance with PED Article 3, Paragraph 3, SEP, this product does not bear the CE mark.

Effective Filtration Area (EFA)

10″ (250 mm)	0.55 m^2 (5.9 ft^2)
K size:	0.26 m^2 (2.8 ft^2)

Autoclave Sterilisation

PROPOR SG large scale disposable capsules can be autoclaved for 5 x 30 minute cycles at 134 °C (273 °F).

Gamma-Irradiation

PROPOR SG large scale 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 a 10″ capsule are <10 mg.

Oxidisable Substances

PROPOR SG large scale 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 a 10″ PROPOR SG capsule 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 10″ PROPOR SG capsule contain < 0.25 EU / ml when tested in accordance with the Limulus Amoebocyte Lysate test.

Retention Characteristics

PROPOR SG large scale disposable capsules are validated by bacterial challenge testing with *Brevundimonas diminuta* to current ASTM F838-05 methodology (10^7 organisms / cm^2 EFA minimum) with typical in-house challenge levels being 10^{11} 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 Test Pressure	(barg)	2.8
	(psig)	40.6
Max. Diffusional Flow (ml / min)	(10″)	16.0
	(K)	7.5

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

ZLSG [ ] - [ ] [ ] [ ] - [ ] [ ] - [ ] - [ ]

Code	Length (Nominal)
K	5″ (125 mm)
1	10″ (250 mm)
2	20″ (500 mm)
3	30″ (750 mm)
4	40″ (1000 mm)

Code	Micron
020	0.2 µm

Code	Inlet Connection
T	1″ Tri-Clamp
A	3/4″ Tri-Clamp
B	1 1/2″ Tri-Clamp
D	1″ Hosebarb

Code	Outlet Connection
T	1″ Tri-Clamp
A	3/4″ Tri-Clamp
B	1 1/2″ Tri-Clamp
D	1″ Hosebarb

Code	Variant
P	Pharmaceutical

Code	Grade
N	Non-sterile
S	Presterilised ϒ (>25 kGy)

Code	Design
L	In-Line
T	T-Port

Code	O-rings[1]
E	EPDM[2]
S	Silicone
V	Viton™ [3]

[1] *Silicone o-ring supplied as standard without having to specify the 'S' code*
[2] *EPDM - Ethylene Propylene Diene Monomer Rubber*
[3] *Viton™ - is a registered trademark of DuPont Dow Corporation*

Inlet / Outlet Connection Styles

1″ Hosebarb | 3/4″ Tri-Clamp | 1″ Tri-Clamp | 1 1/2″ Tri-Clamp | T-Port

Other Available Formats

Filter Discs | Syringe Filters | DEMICAP™ Disposable Capsules | Filter Cartridges

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