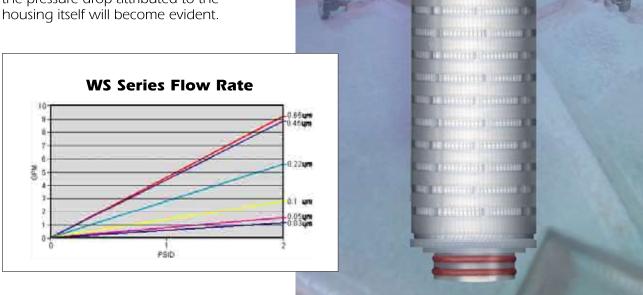
Rosedale Water Service Membrane **Cartridges**Cost effective units for DI

Water applications

WS Series Membrane Cartridges are designed to meet the special needs of the electronics and high purity chemical industries. These cartridges are resistant to most acids and bases and capable of handling strong sanitization agents. The high flow rates achieved by our cartridges make them an ideal source for central DI water systems. They also handle elevated process temperatures in compatible fluids.

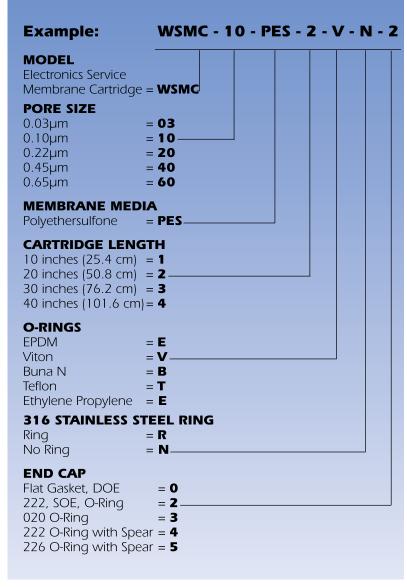
Flow Rate

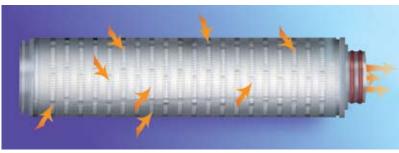
The following table represents typical water flow at one psid (69 mbar) across a single 10 inch cartridge element. The test fluid is water at ambient temperature. Extrapolation for housings with multiple elements or higher pressure drops is acceptable. However, as flow increases, the pressure drop attributed to the



Shown with Spear Guide

Build an ordering code as shown in the example





Dimensions

Length: 10 to 40 inches

(25.4 to 101.6 cm) nominal 2.75 inches (7.0 cm) nominal

Maximum Differential Pressure

Forward: 50 psi (3.4 bar) at 20° C **Reverse:** 40 psi (2.7 bar) at 20° C

Construction Materials

Filtration Media: Polyethersulfone Media Support: Polypropylene End Caps: Polypropylene Center Core: Polypropylene Outer Support Cage: Polypropylene O-Ring Material: EPDM, Viton, Buna N, Teflon, Ethylene Propylene

Sanitization/Sterilization

Chemical

Sanitization: Industry standard

concentrations of hydrogen peroxide, peracetic acid, sodium hypochlorite and other selected chemicals.

Integrity Test Specifications

| PORE SIZE | AIR DIF | USIC | ON RATE |
|-----------|---|------|---------|
| | <cc @<="" min="" th=""><th>psi</th><th>mbar</th></cc> | psi | mbar |
| 0.03µm | 30 | 60 | 4137 |
| 0.05µm | 30 | 56 | 3860 |
| 0.10µm | 30 | 48 | 3307 |
| 0.22µm | 30 | 35 | 2412 |
| 0.45µm | 30 | 20 | 1378 |
| 0.65µm | 30 | 15 | 1044 |

Rosedale Pharmaceutical Service Membrane Cartridges

Cost effective units for Pharmaceutical Industry applications

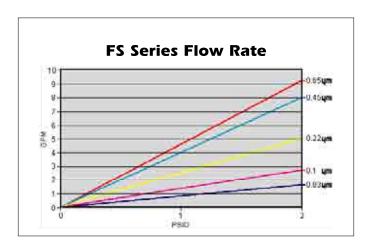
PS Series Membrane Cartridges are designed to be used as sterilizing grade cartridges for the pharmaceutical industry. The PS Series Membrane is optimized for retention, so additional layers are not necessary. Ideal for use in Sterile Fill applications and SVPs and bio products. Polyethersulfone is particularly suited for filtration of products whose constituents, such

as preservatives, can adsorb to the media. Also works well with valuable protein solutions such as vaccines and other biological substances.

Flow Rate

The following table represents typical water flow at one psid (69 mbar) across a single 10 inch cartridge element.

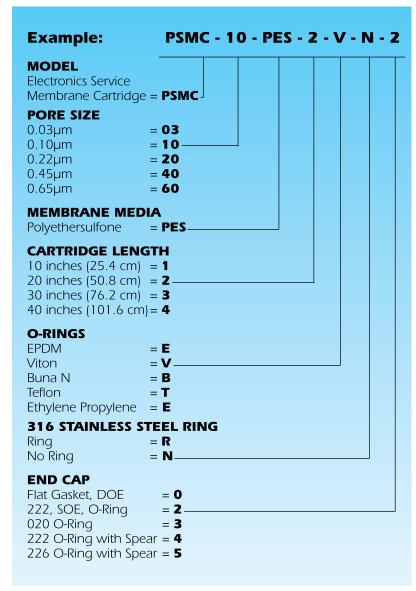
The test fluid is water at ambient temperature. Extrapolation for housings with multiple elements or higher pressure drops is acceptable. However, as flow increases, the pressure drop attributed to the housing itself will become evident.

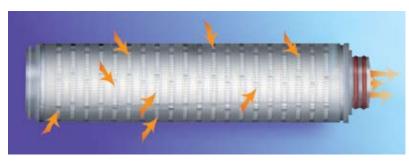




Spear Guide is shown above

Build an ordering code as shown in the example





Dimensions

Length: 10 to 40 inches

(25.4 to 101.6 cm) nominal 2.75 inches (7.0 cm) nominal

Maximum Differential Pressure

Forward: 50 psi (3.4 bar) at 20° C **Reverse:** 40 psi (2.7 bar) at 20° C

Construction Materials

Filtration Media: Polyethersulfone Media Support: Polypropylene Polypropylene Center Core: Polypropylene Outer Support Cage: Polypropylene Co-Ring Material: Propylene Propylene

Sanitization/Sterilization

Filtered Hot Water: 90°

Autoclave: 127° C, 30 minute

multiple cycles

In-Line Steam: 135° C, 30 minute

multiple cycles

Chemical Industry standard **Sanitization:** concentrations of

hydrogen perox-

ide, peracetic acid,

sodium hypochlo-

rite and other selected

chemicals.

Integrity Test Specifications

| PORE SIZE | AIR DIFFUSION RATE | | |
|-----------|---|-----|------|
| | <cc @<="" min="" th=""><th>psi</th><th>mbar</th></cc> | psi | mbar |
| 0.03µm | 15 | 60 | 4137 |
| 0.10µm | 15 | 48 | 3307 |
| 0.22µm | 15 | 35 | 2412 |
| 0.45µm | 15 | 20 | 1378 |
| 0.65µm | 15 | 15 | 1044 |

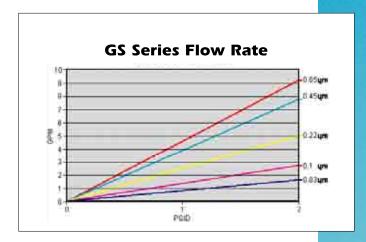
Rosedale General Service Membrane Filter Cartridges

Cost effective units for industrial applications

GS Series Membrane Cartridges are designed for general industrial service where the need for cost effective filtration is a must. These cartridges utilize a pleated membrane design, incorporating the maximum amount of media that can be used in a cartridge. These units, manufactured for general industrial use, are manufactured to the same high standards as our special application cartridges. Pore sizes start at 0.03 µm with a polyethersulfone membrane.

Flow Rate

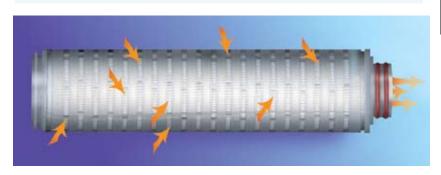
The following table represents typical water flow at one psid (69 mbar) across a single 10 inch cartridge element. The test fluid is water at ambient temperature. Extrapolation for housings with multiple elements or higher pressure drops is acceptable. However, as flow increases, the pressure drop attributed to the housing itself will become evident.





Build an ordering code as shown in the example

GSMC - 10 - PES - 2 - V - N - 2 **Example: MODEL Electronics Service** Membrane Cartridge = **GSMC**-**PORE SIZE** 0.03µm = 03= 10 0.10µm 0.22µm = 20 0.45µm = 40 0.65µm = 60 **MEMBRANE MEDIA** Polyethersulfone = PES **CARTRIDGE LENGTH** 10 inches (25.4 cm) = 120 inches (50.8 cm) = 230 inches (76.2 cm) = 340 inches (101.6 cm) = 4**O-RINGS EPDM** = E Viton = VBuna N $= \mathbf{B}$ Teflon = **T** Ethylene Propylene = **E** 316 STAINLESS STEEL RING $= \mathbf{R}$ Ring No Ring = N**END CAP** Flat Gasket, DOE = 0222, SOE, O-Ring **= 2** 020 O-Ring = 3 222 O-Ring with Spear = 4 226 O-Ring with Spear = 5



Dimensions

Length: 10 to 40 inches

(25.4 to 101.6 cm) nominal

OD: 2.75 inches (7.0 cm) nominal

Maximum Differential Pressure

Forward: 50 psi (3.4 bar) at 20° C **Reverse:** 40 psi (2.7 bar) at 20° C

Construction Materials

Filtration Media: Polyethersulfone Media Support: Polypropylene End Caps: Polypropylene Center Core: Polypropylene Outer Support Cage: Polypropylene C-Ring Material: EPDM, Viton, Buna N, Teflon, Ethylene Propylene

Sanitization/Sterilization

Filtered Hot Water: 90°

Chemical Industry standard concentrations of

hydrogen peroxperacetic

ide, acid,

sodium hypochlorite and other selected chemicals.

Integrity Test Specifications

| PORE SIZE | AIR DIFF | usio | N RATE |
|-----------|---|------|--------|
| | <cc @<="" min="" td=""><td>psi</td><td>mbar</td></cc> | psi | mbar |
| 0.03µm | 55 | 60 | 4137 |
| 0.10µm | 55 | 48 | 3307 |
| 0.22µm | 55 | 35 | 2412 |
| 0.45µm | 55 | 20 | 1378 |
| 0.65µm | 55 | 15 | 1044 |

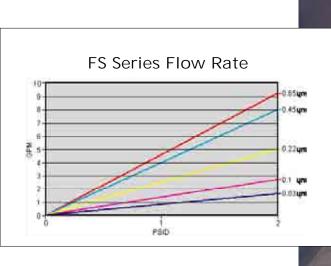
Rosedale Food, Wine and Beverage Service Membrane Cartridges

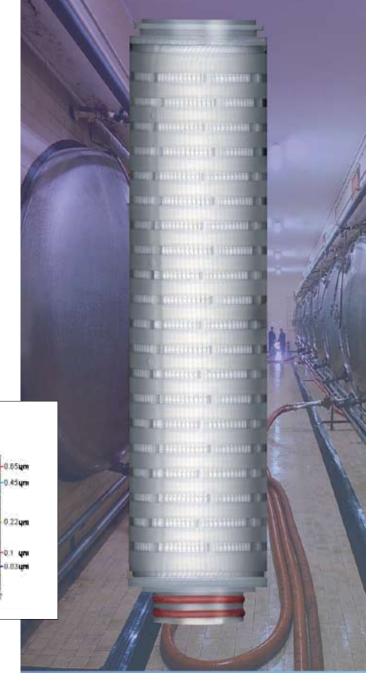
Cost effective units for food applications

FS Series Membrane Cartridges are designed to comply with all FDA rules and regulations for the food industry. The properties of Polyethersulfone make it an excellent choice for use with fermented beverages. Cartridges are designed to provide maximum throughput, while easily sanitized or cleaned.

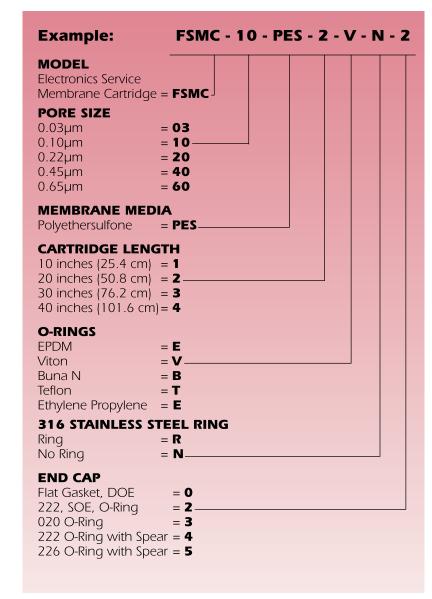
Flow Rate

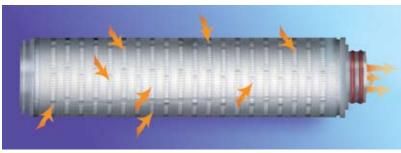
The following table represents typical water flow at one psid (69 mbar) across a single 10 inch cartridge element. The test fluid is water at ambient temperature. Extrapolation for housings with multiple elements or higher pressure drops is acceptable. However, as flow increases, the pressure drop attributed to the housing itself will become evident.





Build an ordering code as shown in the example





Dimensions

Length: 10 to 40 inches

(25.4 to 101.6 cm) nominal 2.75 inches (7.0 cm) nominal

Maximum Differential Pressure

Forward: 50 psi (3.4 bar) at 20° C **Reverse:** 40 psi (2.7 bar) at 20° C

Construction Materials

Filtration Media: Polyethersulfone Media Support: Polypropylene End Caps: Polypropylene Center Core: Polypropylene Outer Support Cage: Polypropylene O-Ring Material: EPDM, Viton, Buna N, Teflon, Ethylene Propylene

Sanitization/Sterilization

Filtered Hot Water: 90°

Autoclave: 127° C, 30 minute

multiple cycles

In-Line Steam: 135° C, 30 minute

multiple cycles

Chemical Industry standard

Sanitization: concentrations of

hydrogen peroxperacetic acid,

ide, peracetic acid,

sodium hypochlorite and other selected

chemicals.

Integrity Test Specifications

| PORE SIZE | AIR DIFFUSION RATE | | | |
|-----------|---|-----|------|--|
| | <cc @<="" min="" th=""><th>psi</th><th>mbar</th></cc> | psi | mbar | |
| 0.03µm | 30 | 60 | 4137 | |
| 0.10µm | 30 | 48 | 3307 | |
| 0.22µm | 30 | 35 | 2412 | |
| 0.45µm | 30 | 20 | 1378 | |
| 0.65µm | 30 | 15 | 1044 | |

Rosedale Electronics Service Membrane Cartridges

Cost effective units for Electronics Industry applications

ES Series Membrane Cartridges are designed to meet the special needs of the electronics and high purity chemical industries. The high flow rates achieved by our cartridges make them an ideal source for central DI water systems. They also handle elevated process temperatures in compatible fluids.

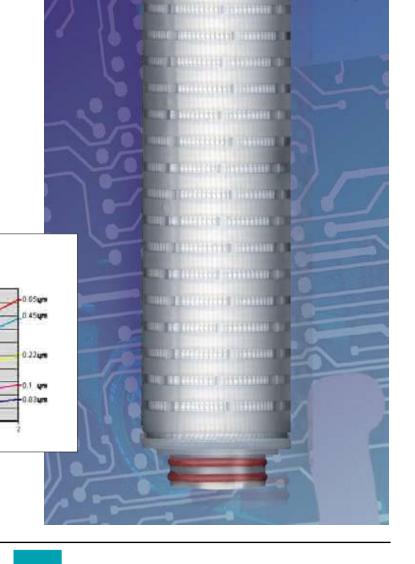
Flow Rate

菱

The following table represents typical water flow at one psid (69 mbar) across a single 10 inch cartridge element. The test fluid is water at ambient temperature. Extrapolation for housings with multiple elements or higher pressure drops is acceptable. However, as flow increases, the pressure drop attributed to the housing itself will become evident.

FS Series Flow Rate

POID



NO BRIDGE LAND DESCRIPTION OF

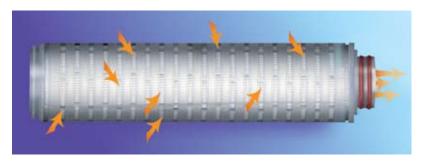
THE RESERVE OF THE PERSON OF

Berthall British

SHEELE HALL HARRIST IN

Build an ordering code as shown in the example

ESMC - 10 - PES - 2 - V - N - 2 **Example: MODEL** Electronics Service Membrane Cartridge = **ESMC**^J **PORE SIZE** 0.03µm = 03 $0.10 \mu m$ = 100.22µm = 20 0.45µm = 40 0.65µm = 60 **MEMBRANE MEDIA** Polyethersulfone = PES-**CARTRIDGE LENGTH** 10 inches (25.4 cm) = 120 inches (50.8 cm) = 230 inches (76.2 cm) = 340 inches (101.6 cm) = 4**O-RINGS EPDM** = E Viton = **V**-Buna N $= \mathbf{B}$ Teflon = TEthylene Propylene = **E 316 STAINLESS STEEL RING** Ring $= \mathbf{R}$ No Ring = N**END CAP** = 0Flat Gasket, DOE **= 2** 222, SOE, O-Ring 020 O-Ring = 3 222 O-Ring with Spear = 4 226 O-Ring with Spear = 5



Dimensions

Length: 10 to 40 inches

(25.4 to 101.6 cm) nominal

OD: 2.75 inches (7.0 cm) nominal

Maximum Differential Pressure

Forward: 50 psi (3.4 bar) at 20° C **Reverse:** 40 psi (2.7 bar) at 20° C

Construction Materials

Filtration Media: Polyethersulfone Media Support: Polypropylene End Caps: Polypropylene Polypropylene Outer Support Cage: O-Ring Material: Polypropylene EPDM, Viton, Buna N, Teflon, Ethylene Propylene

Sanitization/Sterilization

Chemical Industry standard sanitization: concentrations of

hydrogen peroxide, peracetic acid, sodium hypochlorite and other selected chemicals.

Integrity Test Specifications

| PORE SIZE | AIR DIFFUSION RATE | | | |
|-----------|--|---|-----|------|
| | <cc min<="" th=""><th>@</th><th>psi</th><th>mbar</th></cc> | @ | psi | mbar |
| 0.03µm | 30 | | 60 | 4137 |
| 0.10µm | 30 | | 48 | 3307 |
| 0.22µm | 30 | | 35 | 2412 |
| 0.45µm | 30 | | 20 | 1378 |
| 0.65µm | 30 | | 15 | 1044 |