

## Filter Data Sheet

### *PTM grade Teflon® Membrane Media Filter Cartridges developed for the special needs of the pharmaceutical industry*

**Dist. by: H.R. Peterson Co. - 814 Prior Ave. No. - St. Paul, MN 55104**  
**Telephone: 651-646-4529 Toll Free: 1-800-646-4505 Fax: 651-646-8792**

PTM cartridge filters are manufactured for the specific needs of the pharmaceutical industry. Manufactured with inherently hydrophobic PTFE membrane, these cartridges are designed for use in the filtration of aggressive solvents, and as compressed gas and vent filters. Each cartridge module is individually bubble point tested using 60/40 IPA and water before it is released from manufacture. The cartridge surface area, filter core design, pleat configuration and pleat packing density have been optimized to provide increased cartridge life resulting in lower filtration operating costs. Rugged construction ensures repeatable steaming and testing.

#### Construction Materials<sup>1</sup>

**Filtration Media:** .....Teflon®  
**Filtration Media Support:** .....Polypropylene  
**End Caps:** .....Polypropylene  
**Center Core:** .....Polypropylene  
**Outer support Cage:** .....Polypropylene  
**O-rings:** Buna, Viton, Silicone, EPR, Teflon® Encapsulated Silicone, Teflon® Encapsulated Viton

<sup>1</sup> All materials of construction are FDA accepted. Final assemblies have been

#### Sterilization/Sanitization

**Autoclave:** .....127<sup>0</sup> C, 30 minutes, multiple cycles  
**In-line Steam:** .....135<sup>0</sup> C, 30 minutes, multiple cycles

#### Flow Rate

The following table represents typical water flow and air flow rates. These values are approximations because of the differences in pressure drop encountered in housings and piping systems. Extrapolation to multiple length cartridges in multi-round housings can be done for sizing purposes. Exact flow rates will be installation dependent.

Pore Size	0.1 µm	0.22 µm
SCFM	>25 SCFM/psid/10 inch cartridge length	>40 SCFM/psid/10 inch cartridge length
GPM	1.25 gpm/psid/10 inch cartridge length	2.0 gpm/psid/10 inch cartridge length

#### Dimensions

**Length:** .....10 to 40 inches (25.4 to 101.6 cm.) nominal  
**Outside Diameter:** .....2.75 inches (7.0 cm.) nominal

#### Integrity Test Specifications

(60/40, IPA/waterwetted membrane)

Pore Size	Bubble Point
0.10 µm	18 psig
0.22 µm	14 psig

#### Maximum Differential Pressures

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

#### Ordering Information

The cartridge catalog number is made up of several variable characters i.e. pore size, end cap code, length, and O-ring material. For example: a 0.10 µm, 20 inch (50.8 cm.) long cartridge with 2-222, Teflon® Encapsulated Viton O-rings, no spear (flat top) and no 316 SS Ring would be designated as: PTM\*10N0000?T5.

PTM     0000

<p><u>Pore size code</u></p> <p>*10 = 0.10 µm *20 = 0.22 µm</p>	<p><u>316 SS Ring</u></p> <p>S = Ring N = No Ring</p>	<p><u>Cartridge Length</u></p> <p>1 = 10 inches (25.4 cm) 2 = 20 inches (50.8 cm) 3 = 30 inches (76.2 cm) 4 = 40 inches (101.6 cm)</p>	<p><u>O-ring code</u></p> <p>S - Silicone B - Buna V - Viton T - Teflon® Encapsulated Viton E - EPR R - Teflon® Encapsulated Sili-</p>	<p><u>End cap code</u></p> <p>0 - Flat Gasket, double open end 5 - 2-222 O-ring 7 - 020 O-ring 8 - 2-222 O-ring with Spear 9 - 2-226 O-ring with Spear</p>
---	---	--	--	--

Data Sheet PTMDS0101