

# NSPD® grade

*Nano-Spun + Polypropylene Media Filter Cartridges  
engineered and manufactured for cost effective filtration*

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NSPD media filter cartridges have been designed to hold large amounts of contaminant and still provide 99% retention efficiencies at the rated pore size. These cartridges can be used wherever a high contamination load application requires retention efficiencies above nominal.

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

**Filtration Media:** ..... Hydrophilic Polypropylene  
**End Caps:** ..... Polypropylene  
**Center Core:** ..... Polypropylene  
**Standard O-rings:** ..... EP  
**Optional O-rings:** Buna, Silicone, Viton, EPR, Teflon® Encapsulated.

<sup>1</sup> All materials of construction are FDA accepted. Final assemblies have been validated to pass USP class 6 Toxicology extractable tests, oxidizable substances for plastics, endotoxin level and other quality tests.

### Maximum Operating Parameters

**Forward Differential Pressure:** ..... 40 PSI  
**Reverse Differential Pressure:** ..... 20 PSI  
**Maximum Operating Temperature:** ..... 140°F (60°C)  
**Recommended Change Out:** ..... 25 PSID

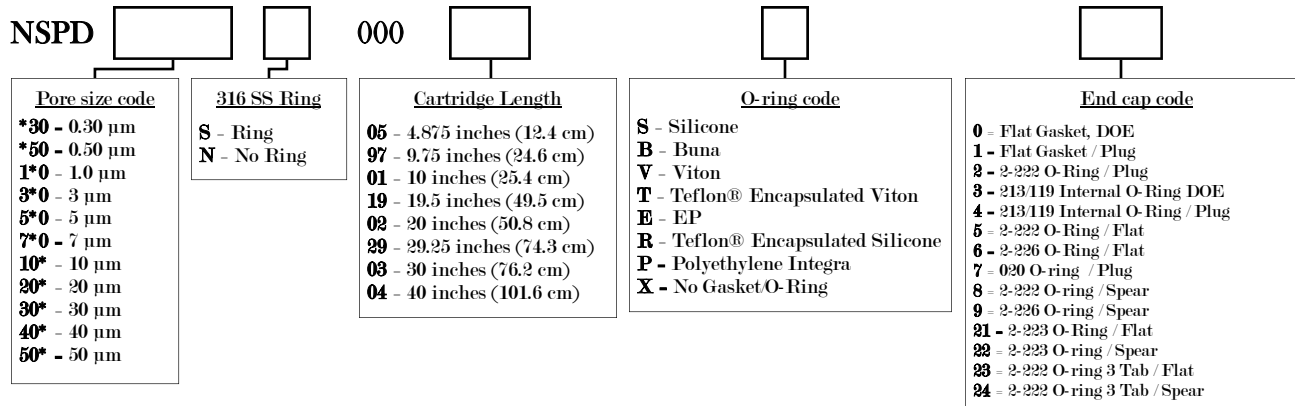
### Flow Rate

The following table represents typical water flow at a one psi (69 mbar) pressure differential across a single 10 inch cartridge element. The test fluid is water at ambient temperature. Extrapolation for housings with multiple elements and higher pressure drops is acceptable, but as flows increase the pressure drop of the housing becomes more apparent.

Pore Size	0.3um	0.5um	1.0um	3um	5um	7um	10um	20um	30um	40um	50um
GPM	.20	.25	1.0	1.25	2.25	2.65	3.25	4.0	6.0	8.0	9.0
LPM	0.76	0.95	3.78	4.73	8.51	10.03	12.30	15.14	22.71	30.28	34.07

### 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 10µm, 10 inch long cartridge with a Polyethylene Integra, Flat Gasket, Double Open End would be designated as: NSPD10\*N00001P0.



### Description and Construction

Spun media cartridges are created by laying down graded density fibers on a spinning core. These fibers are engineered so as to provide the maximum amount of retention at the rated pore size as well as maximum dirt holding capability. The tightly controlled manufacturing process produces consistent, highly retentive filters.

### Dimensions

**Length:** ..... 5 to 40 inches (12.4 to 101.6 cm) nominal  
**Outside Diameter:** ..... 2.75 inches (7.0 cm) nominal