



**INTERCEPT® CARTRIDGE AND
DISPOSABLE FILTERS**

*Most advanced dual-retention filtration for
critical DHF/BOE cleaning applications*



highest flow hydrophilic membranes with the greatest particle removal

Overview

Advanced Membrane Technology

Entegris Intercept® filters use clean membranes that provide two particle capture mechanisms that, acting simultaneously, maintain the maximum particle retention. With sieving retention ratings down to 10 nm, Intercept filters can reliably meet the needs of today's HF and BOE processes to 32 nm. Since hydrophilic membranes do not require prewetting or flushing, process uptime is maximized.

Enhanced Particle Retention Capability

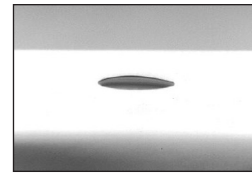
Sieving particle capture is always active and determined by the filter retention size rating. In addition to sieving, particle capture by physisorption is functional in conditions where pH < 3 and no surfactant is present. In applications where physisorption is operating, particle reduction below the rated pore size is achieved and process capability is improved.

Improved Bath Quality and Flow Rates

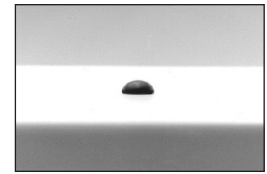
Intercept membranes' design eliminates nucleation sites to prevent microbubbles from forming in startup or during operation. By minimizing pore obstruction due to microbubbles, filter performance is maintained. The greater filter area provided by the "M" pleat design provides increased flow rates for demanding applications.

Lowest Cost of Ownership

Intercept filters deliver yield enabling technology for advanced applications and long filter life. Improved process capability is available by integrating Intercept technology.



Aqueous chemicals instantly wet hydrophilic membrane



PTFE membrane resists instantaneous wetting

Features	Benefits
Advanced membrane technology	Dual capture mechanism can improve process performance and reduce on-wafer particle defects Extremely clean for metal ions and extractables High sieving retention at rated pore size
Hydrophilic membrane	No prewetting or flushing required for rapid startup Eliminates IPA and the risk of chemistry interactions
Universal filter design	Optimized for acidic applications
Minimized cost of ownership	HPM/HSM format provides high membrane area for high flow and extended filter lifetime Hydrophilic membrane enables rapid filter changeout maximizing process uptime
Variety of pleating designs	HP, HPX, HPM and HSM filter designs for optimized flow/cost benefit
Disposable filter options	Requires less space for changeout Allows quick installation and minimizes downtime while limiting the handling and exposure to hazardous chemicals
Available in a variety of retention ratings	Wide range of retention ratings covers a broad scope of process requirements

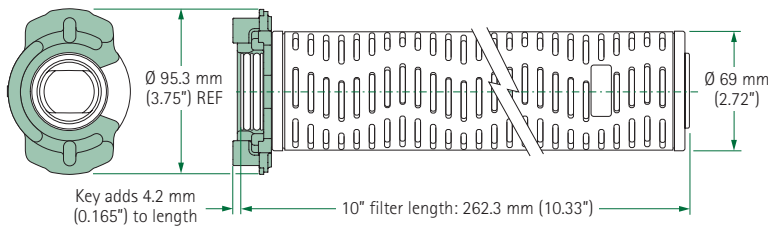
Specifications

Type	HP	HPX	HPM	HSM
Materials:	Membrane	Patented hydrophilic ultra-high molecular weight polyethylene (UPE)		Patented hydrophilic polysulfone (PS)
	Supports, sleeve, core, end caps	Nonwoven high-density polyethylene (HDPE)		
	Code 0 double 2-222 o-rings	Encapsulated fluoropolymer (E-FKM) or Kalrez® 4079		
	Chem-Line™ II disposables' outer shell	N/A	Polypropylene	Polypropylene
	Chem-Line I disposables' outer shell	N/A	N/A	PFA
Retention rating:	0.2, 0.1, 0.05 µm	0.2, 0.1, 0.05 µm	0.05, 0.03 µm, 10 nm	20 nm
Membrane surface area:	10": 0.85 m ²	4": 0.5 m ² 10": 1.1 m ² 20": 2.2 m ²	10": 1.9 m ² 20": 3.8 m ² 30": 5.7 m ²	4": 0.4 m ² 10": 1.05 m ² 20": 2.1 m ²
Maximum operating conditions:	Maximum forward differential pressure	0.34 MPa (3.4 bar; 50 psid) @ 25°C (77°F)		
	Maximum reverse differential pressure	0.21 MPa (2.1 bar; 30 psid) @ 25°C (77°F)		
	Maximum operating temperature	70°C (158°F) at the above conditions		

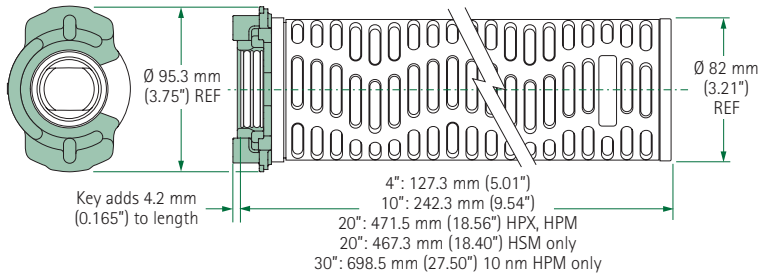
Intercept HP, HPX, HPM and HSM Cartridge Filters

Dimensions

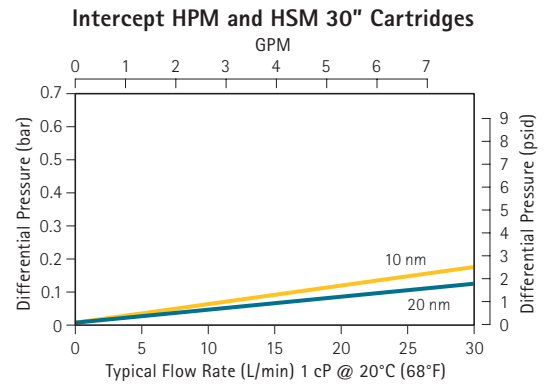
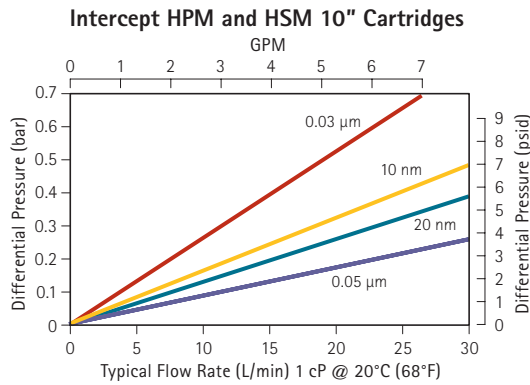
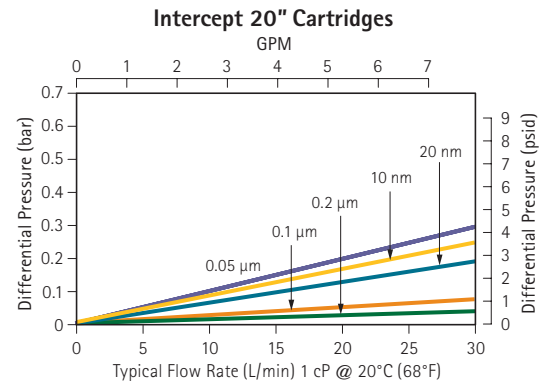
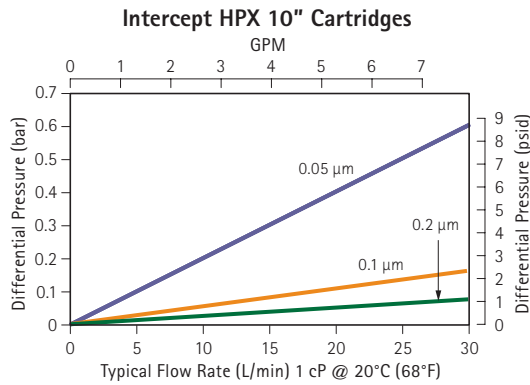
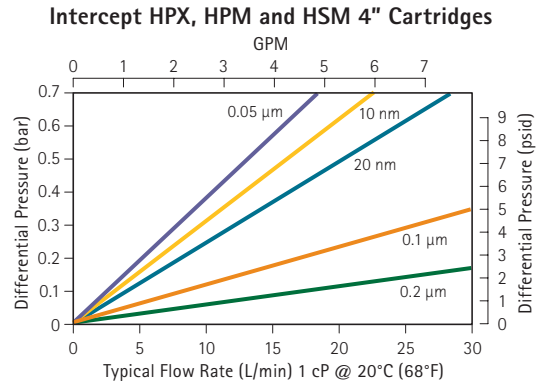
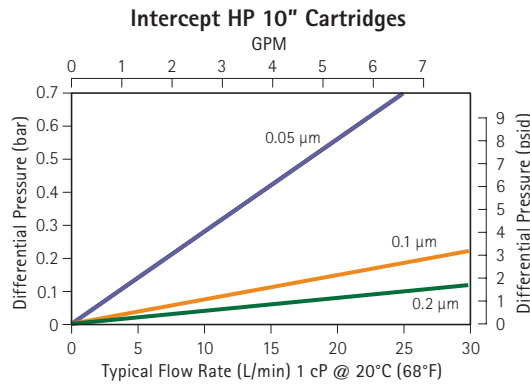
Intercept HP Cartridge Filters



Intercept HPX, HPM and HSM Cartridge Filters



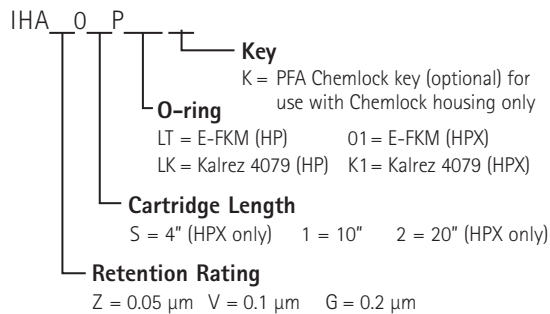
Performance Data



Ordering Information

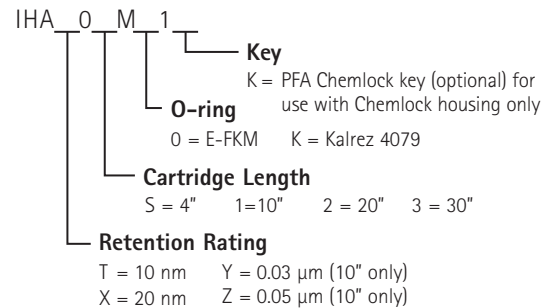
Intercept HP and HPX Cartridge Filters

Part Number



Intercept HPM and HSM Cartridge Filters

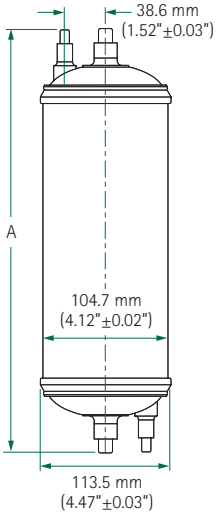
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Intercept Disposable Filters

Dimensions

Chem-Line II Disposable Filters

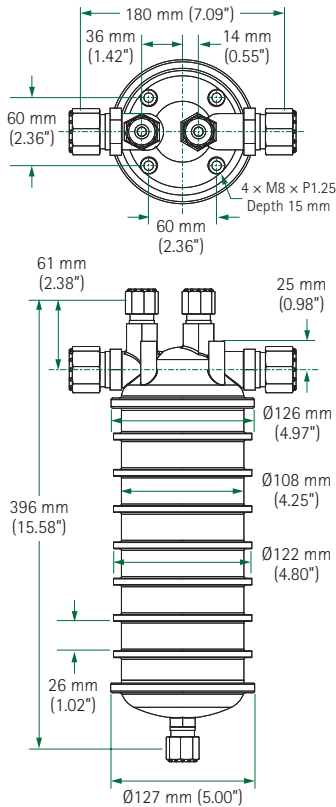


Dim A		
Inlet/Outlet Size	4" Disposable Filter with Flaretek® Fittings	10" Disposable Filter with Flaretek Fittings
3/8"	236.7 mm (9.32")	349.8 mm (13.77")
1/2"	246.9 mm (9.72")	359.9 mm (14.17")
3/4"	246.9 mm (9.72")	359.9 mm (14.17")
1"	257.1 mm (10.12")	370.1 mm (14.57")

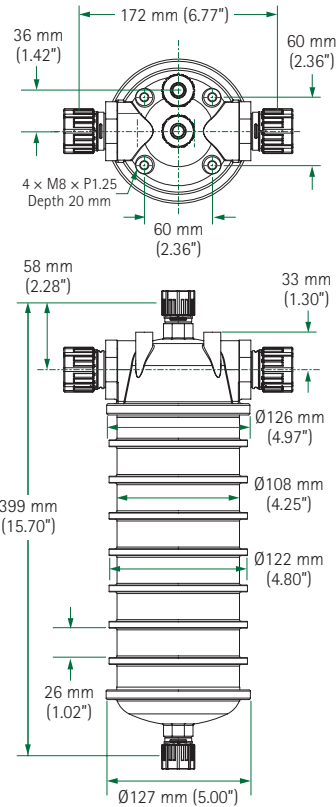
Vent/drain all versions: 1/4"

Chem-Line I Disposable Filters

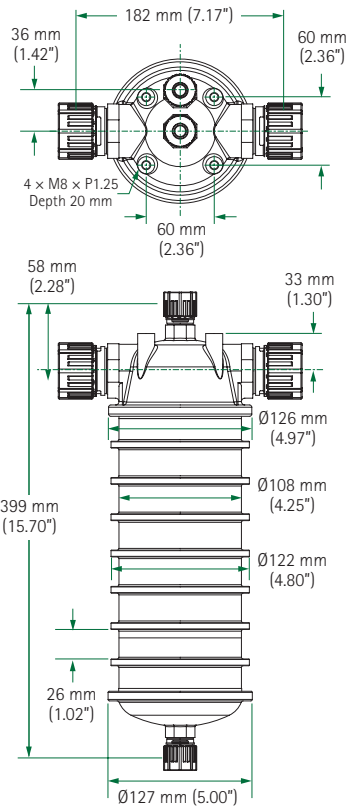
TH: T-Line 3/4" Super Type Pillar® Fittings



3S: T-Line 3/4" Super 300 Type Pillar Fittings

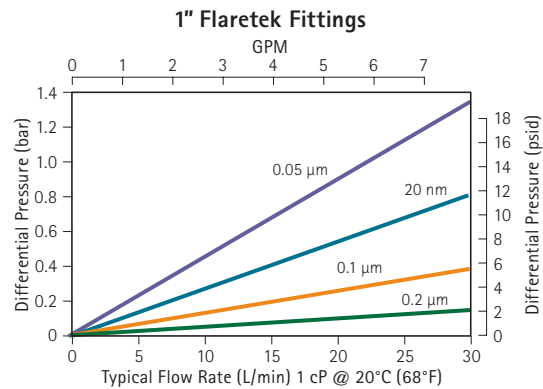
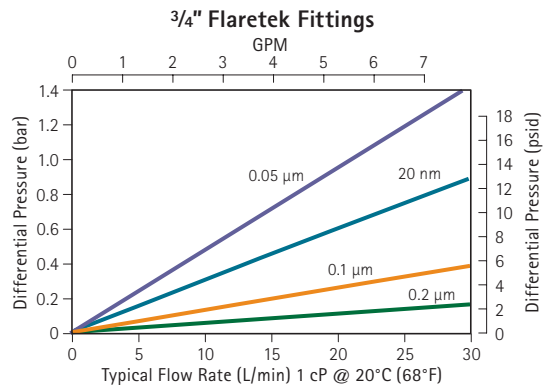
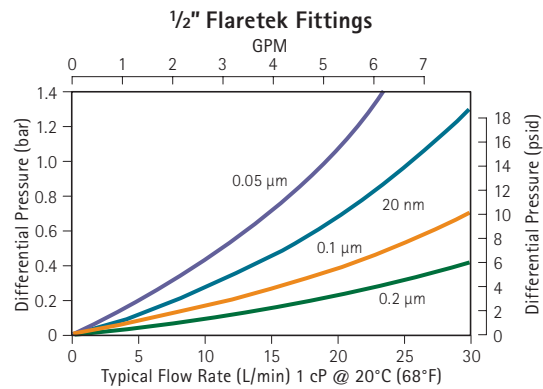
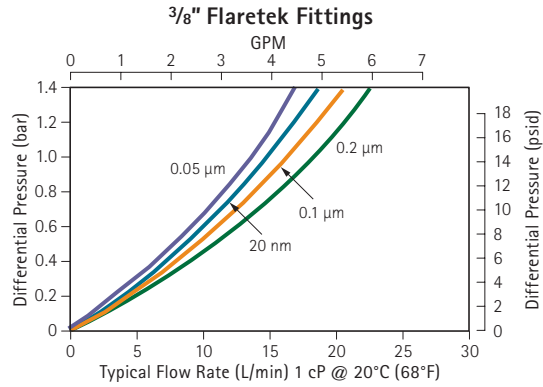


4S: T-Line 1" Super 300 Type Pillar Fittings

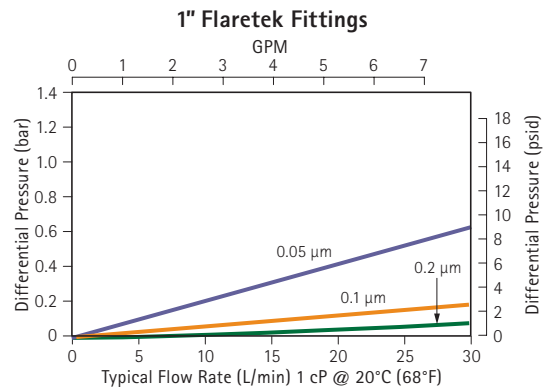
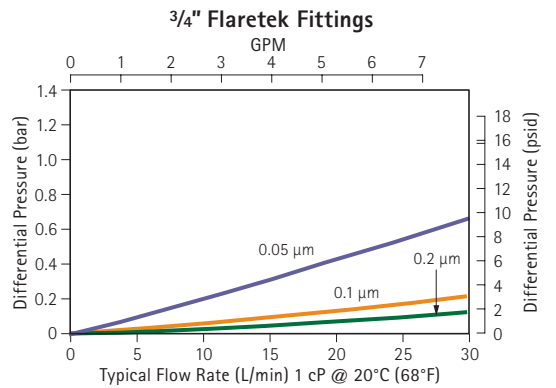
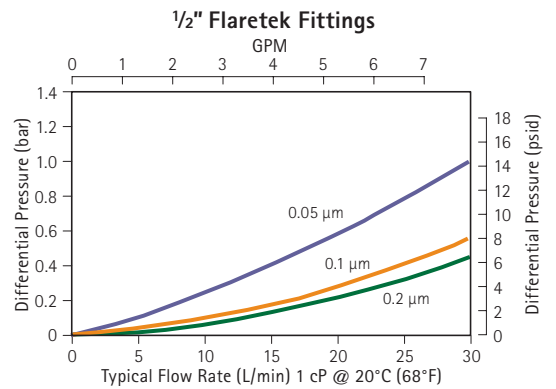
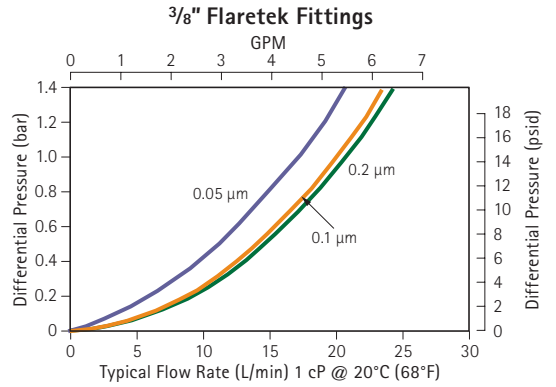


Performance Data

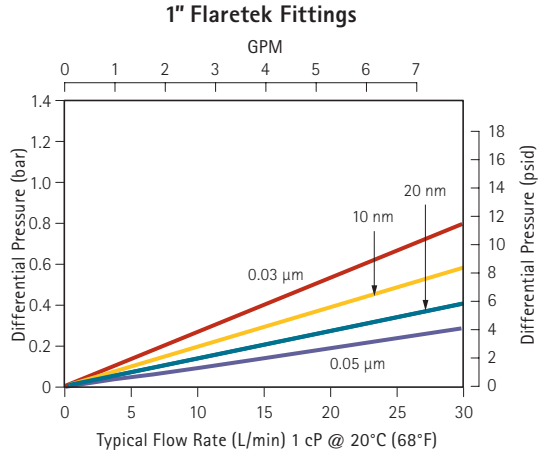
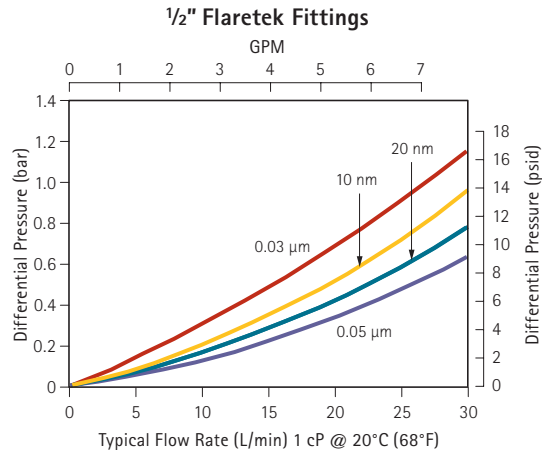
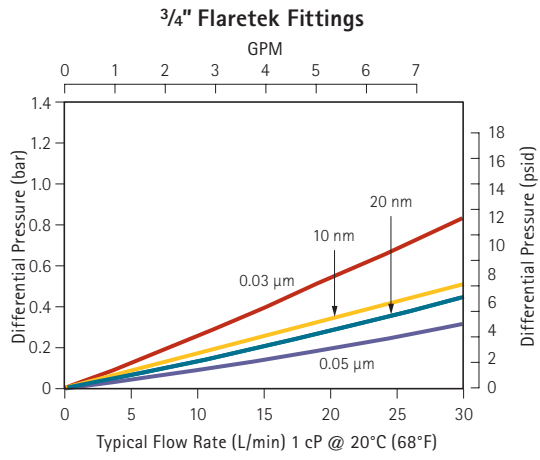
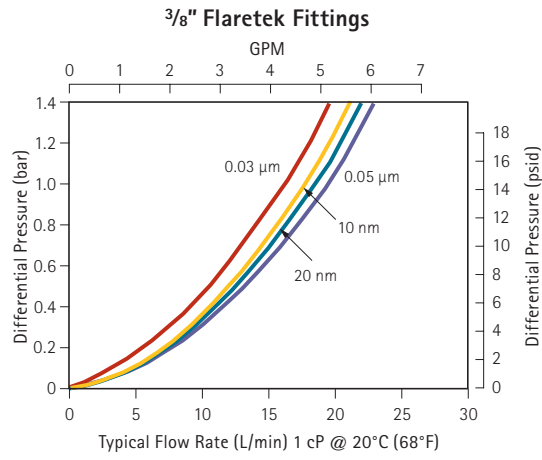
Intercept HPX and HSM 4" Disposable Filters



Intercept HPX 10" Disposable Filters



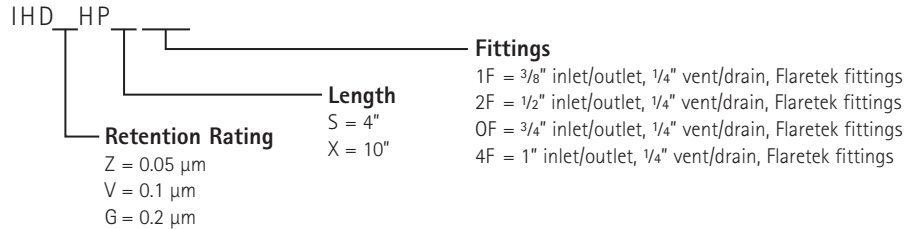
Intercept HPM and HSM 10" Disposable Filters



Ordering Information

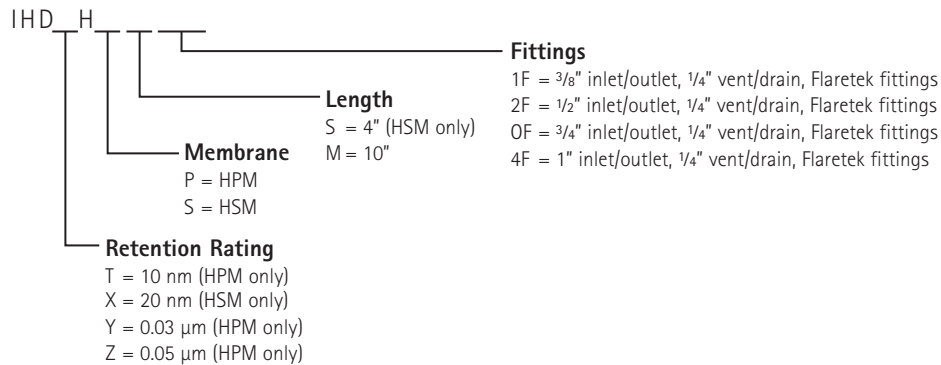
Intercept HPX Chem-Line II Disposable Filters

Part Number



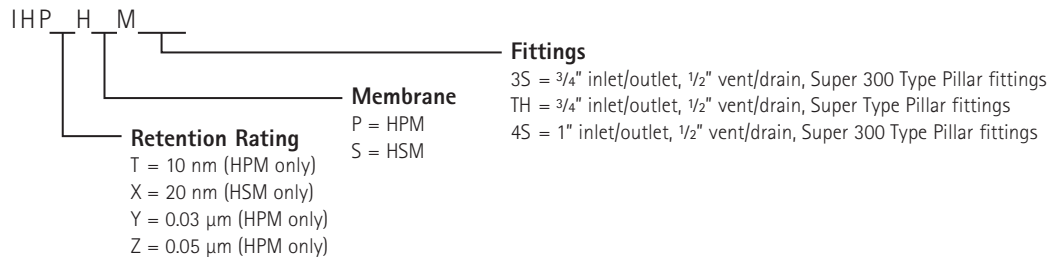
Intercept HPM and HSM Chem-Line II Disposable Filters

Part Number



Intercept HPM and HSM Chem-Line I Disposable Filters

Part Number



For More Information

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