# **HARMSCO®**

## **Poly-Pleat™ Series Filter Cartridges**

Absolute Rated

Designed for Filter Housings That Utilize 2-1/2", 2-3/4", 4-1/2" and 7-3/4" O.D. High Flow Cartridges.

#### **CERTIFIED: NSF/ANSI STANDARD 61**

**Drinking Water System Components - Health Effects** 

Substantially removes:
Cryptosporidium
Giardia cysts
Harmful organisms
Sediment
Silt

#### **Features**

**Turbidity** 

- Absolute rated one micron filter media removes cystsized particles for safe, cyst-free drinking water
- Pleated polypropylene filter media provides more surface area for longer filter life and increased particle removal
- FDA listed materials for use in potable water and liquid food applications
- End caps, center tubes and media are thermally bonded as one integral component for added strength and to provide superior end sealing
- Full product line for standard, Big-Blue\* and Hurricane® filter housings

\*Big-Blue is a registered trademark of Plymouth Products, Inc.



Harmsco® Poly-Pleat™ Series Filter Cartridges

## **Applications**

- Reverse Osmosis Pre-filtration
- Municipal Drinking Water Filtration
- Commercial/Residential Drinking Water Filtration
- Desalination Pre-filtration

- Industrial Water Filtration
- Chill Water Loop Filtration
- Food & Beverage Filtration
- Marine/Aquatic Filtration





### **Specifications**

- Micron rating One micron absolute for cryptosporidium and giardia cysts
- Filter media Meltblown polypropylene inner layer with outer layers of polypropylene scrim material for support
- Shrink Wrap Standard for all Poly-Pleat cartridges
- Temperature 140°F (60°C) max\*
  - \* Temperature limits vary and depend on pressure and time under load.
- Center tubes Rigid PVC with perforations or molded polypropylene
- Netting Polypropylene netting standard for 2-3/4" O.D.; 10" and 20" cartridges use polyethylene netting
- Flow Rates Up to .5 gpm ft2 media
- End Caps Pliable PVC, sealing surface built in

#### Independent Lab Validated

To verify the performance of Poly-Pleat™ cartridges and Harmsco® filter housings, Pace Analytical\*, a highly respected independent testing facility, was selected to conduct challenge tests to the NSF 53-2007 protocol for cysts reduction. The NSF 53-2007 protocol consists of two side-by-side systems operating on a 10-minute on/10-minute off cycle. Polystyrene 3-micron beads were injected after the 8th cycle and at 25%, 50%

and 75% reduction in flow rate. Results are listed on right: Pace Analytical is State Certified (CA, IA, MA, WI). Results are accepted by Water Quality Association (WQA), Underwriters Laboratory

#### **Results of Challenge Tests**

S	Sample Point	Particle Size (microns)	Percent Reduction
8	th Cycle	3	99.92
2	5% Reduction	3	99.95
5	0% Reduction	3	99.96
7	'5% Reduction	3	99.95



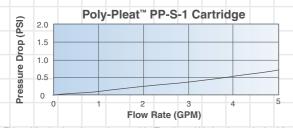
#### **Cartridge Selection/Sizing Guide**

2-1/2", 2-3/4", 4-1/2" and 7-3/4" O.D. - Harmsco" HIF filter housings use 9-3/4", 19-1/2" and 29-1/4" lengths only

Product Code	Pleated Media Area (sq ft)	Туре	Length (in.)	O.D. (in.)	Recommended Flow Rate (GPM)	No./Carton	
Poly-Pleat™ - 1 micron absolute, multi-layered media for 2 log removal							
PP-701-1/10	3	Standard	10	2-1/2	1.5	28	
PP-701-1/20	7	Standard	20	2-1/2	3.5	28	
PP-701-1/30	11	Standard	30	2-1/2	5.5	28	
PP-701-1/40	15	Standard	40	2-1/2	7.5	28	
PP-S-1	3.7	Standard	9-3/4	2-3/4	1.85	24	
PP-D-1	7.5	Standard	19-1/2	2-3/4	3.75	24	
PP-T-1	11	Standard	29-1/4	2-3/4	5.5	24	
PP-20E-1	7.5	Standard	20	2-3/4	3.75	24	
PP-BB-10-1	8	Calypso Blue <sup>™</sup>	9-3/4	4-1/2	4	8	
PPFS-BB-10-1	8	Calypso Blue <sup>™</sup>	9-3/4	4-1/2	4	8	
PPFS-BB-20-1	20	Calypso Blue <sup>™</sup>	20	4-1/2	10	4	
PP-BB-20-1	20	Calypso Blue <sup>™</sup>	20	4-1/2	10	4	
PP-BB-20-1	20	Calypso Blue <sup>™</sup>	20	4-1/2	10	4	
PP-HC-40-1	27	Hurricane <sup>®</sup>	9-5/8	7-3/4	13.5	1	
PPFS-HC-40-1	27	Hurricane <sup>®</sup>	9-5/8	7-3/4	13.5	1	
PP-HC-90-1	58	Hurricane <sup>®</sup>	19-1/2	7-3/4	29	1	
PPFS-HC-90-1	58	Hurricane <sup>®</sup>	19-1/2	7-3/4	29	1	
PP-HC-170-1	100	Hurricane <sup>®</sup>	30-3/4	7-3/4	50	1	
PPFS-HC-170-1	100	Hurricane <sup>®</sup>	30-3/4	7-3/4	50	1	

#### **Low Pressure Drop**

Initial pressure drop using Poly-Pleat™ cartridges is exceptionally low due to our pleated design and increased surface area. Pressure drop data is shown here, calculated for new cartridges in clear water.



Hurricane® Cartridge 5.0 4.0 (PSI) 90 Drop 3.0 170 40 Pressure 2.0 1.0 0 0 100 Flow Rate (GPM)

Note: This publication is to be used as a guide. The data within has been obtained from many sources and is considered to be accurate. Harmsco does not assume liability for the accuracy and/or completeness of this data. Changes to the data can be made without notification. Temperature, Pressure, Flow Rates, Differential Pressures, Chemical Combinations and other unknown factors can affect performance in unknown ways. Limited Warranty: Harmsco warrants their products to be free of material and workmanship defects. Determination of suitability of Harmsco products for uses and applications contemplated by Buyer shall be the sole responsibility of Buyer. The end user/installer/buyer shall be liable for the product's performance and suitability regarding their specific intended applications. End users should perform their own tests to determine suitability for each application.



2-1/2

2-3/4

4-1/2

7-3/4

HARMSCO® Filtration Products

P.O. Box 14066, North Palm Beach, FL 33408

(561) 848-9628 • Toll-free: (800) 327-3248 • Fax: (561) 845-2474 • E-mail: sales@harmsco.com

www.harmsco.com



© Harmsco, Inc.

30B 07 7/11