

# 5" Hollow Fiber PM50 Water Cartridges

Hollow Fiber Ultrafiltration Cartridges for Industrial and Municipal Water Applications

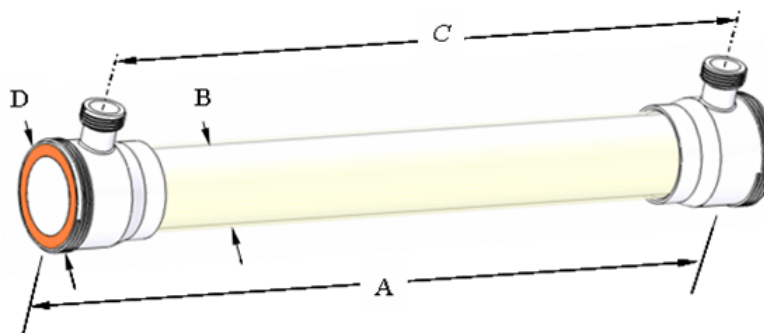
PRODUCT DESCRIPTION	
Membrane Chemistry:	Polysulfone
Membrane Type:	PM50
Molecular Weight Cut-Off:	50,000 Daltons (nominal)
Nominal Fiber ID:	0.035 inch (0.9 mm)
Housing Construction:	Proprietary Polysulfone
Seal:	Epoxy
Regulatory Status:	UL Listed to ANSI/NSF Standard 61
Storage Solution:	Glycerin

SPECIFICATIONS		
Part Number	Model	Active Membrane Area ft <sup>2</sup> (m <sup>2</sup> )
0720267	HF 5043-82-35-PM50	82 (7.6)

OPERATING AND DESIGN INFORMATION*	
Maximum Inlet Pressure During Operation:	75 psi (5.2 bar)
Maximum Inlet Pressure During Cleaning:	45 psi (2.8 bar)
Maximum Transmembrane Pressure:	35 psi (2.4 bar)
Maximum Operating Temperature (at pH 6.0-8.0):	104°F (40°C)
Maximum Cleaning Temperature:	110°F (43°C)
Maximum Permeate Side Back Pressure:	20 psi (1.4 bar)
Maximum Feed Side Pressure Drop:	20 psi @ 104°F (1.4 bar @ 40°C)
Allowable pH:	1.5 – 13.0 @ 104°F (40°C)
Maximum Total Chlorine Exposure at 77° F (25° C) or lower:	200 ppm @ 10.5 pH or higher, during intermittent backflush
Maximum Total Chlorine Contact:	200,000 ppm-hrs cumulative
Maximum Chemical Cleaning Step Duration:	30 minutes of chemical contact
Maximum intermittent Backflush Duration:	5 minutes per hour of chemical contact

\*Consult KSS Process Technology Group for specific applications.

## NOMINAL DIMENSIONS



Part #	A		B		C		D		Permeate Connection	Process Connection
	inches	mm	inches	mm	inches	mm	inches	mm		
0720267	43	1092	5.0	127	38 5/8	981	6.0	152	1 1/2" NPSM	6" NPSM

\*Dimensions are provided for reference only and should not be interpreted as accurate specifications.

## OPERATING GUIDELINES

**Membrane Characteristics:**

KSS PM50 cartridges should be selected for filtration of liquids based on the separation range needed. They provide stable productivity, ease of cleaning and reliable operation. KSS PM50 cartridges are crossflow-type filters, in which the feed solution is pumped across the cartridge to minimize solids cake buildup on the membrane. Crossflow filters provide efficient filtration at low operating pressure, allowing long process runs while reducing cleaning time, cleaning frequency, and labor costs.

**Exposure to Chemical Oxidants:**

While not recommended for use on a daily basis, exposure to chemical oxidants for thorough cleaning and sanitization may prove necessary and useful.

Potassium metabisulfite (without catalyst such as cobalt) is the preferred chemical to eliminate residual chlorine or similar oxidizers prior to processing process liquid.

**Lubricants:**

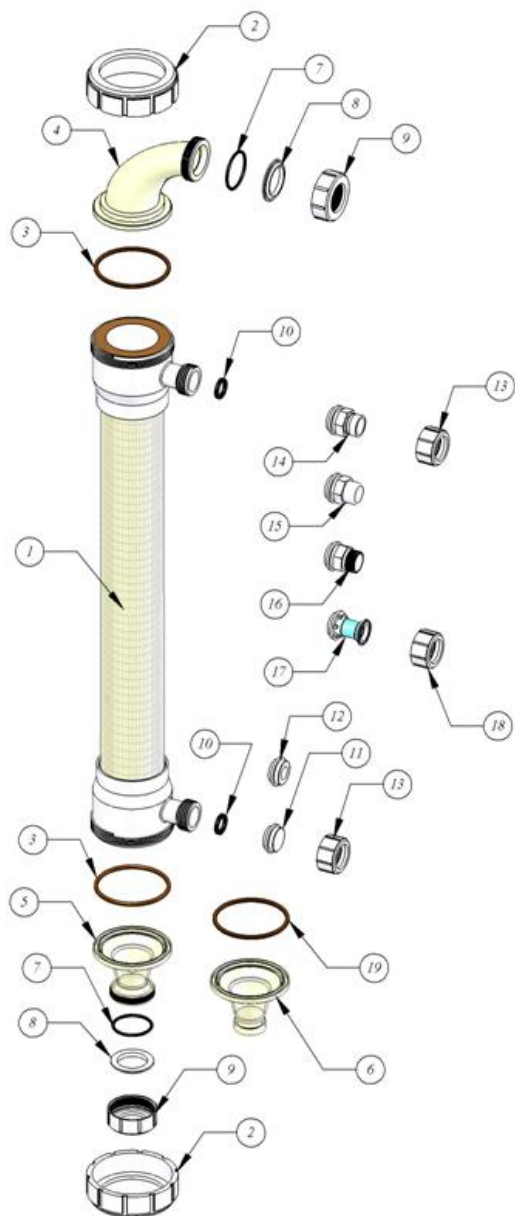
For cartridge installation, use only water or glycerin to lubricate seals. The use of petroleum or vegetable-based oils or solvents may damage the cartridge and will void the warranty.

**5" HOLLOW FIBER CARTRIDGE HARDWARE**

Item	Part Description		KPN
1	5" HF Cartridge		
2	Process Cap Nut		0040364
3	Cartridge Gasket	EPDM	0090443
		BUNA	0090444
4	Cartridge Reducing Elbow		0040365
5	Cartridge Straight adapter (threaded)		0040376
6	Cartridge Straight adapter (Victaulic)		0213000
7	Manifold Gasket	EPDM	0090439
		BUNA	0090432
8	Cartridge Backup Ring		0040368
9	Manifold Cap Nut		0040367
10	Permeate Port Gasket	EPDM	0090447
		BUNA	0090446
11	Permeate Plug		0040375
12	Permeate Adapter 3/4" NPTF		0040372
13	Permeate Cap Nut (for 14, 15, 16)		0040370
14	Permeate Adapter (Victaulic)		0213076
15	Permeate Adapter Plain		0213093
16	Permeate Adapter NPT		0213077
17	Permeate Adapter Sanitary		0211787
18	Permeate Cap Nut (for part 17)		0040377
19	Cartridge Seal		0211094

**Service and Ongoing Technical Support**

KSS has an experienced staff of professionals available to assist end-users and OEMs for optimization of existing systems and support the development of new applications. Along with the availability of supplemental technical bulletins, KSS also offers a complete line of cleaning chemicals.



*The information contained in this publication is believed to be accurate and reliable, but is not to be construed as implying any warranty or guarantee of performance. We assume no responsibility, obligation or liability for results obtained or damages incurred through the application of the information contained herein. Refer to Standard Terms and Conditions of Sale and Performance Warranty documentation for additional information*

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