



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:	Classified by UL to NSF/ANSI Standard 61 and in accordance with NSF/ANSI Standard 372
Storage Solution:	Glycerin

SPECIFICATIONS

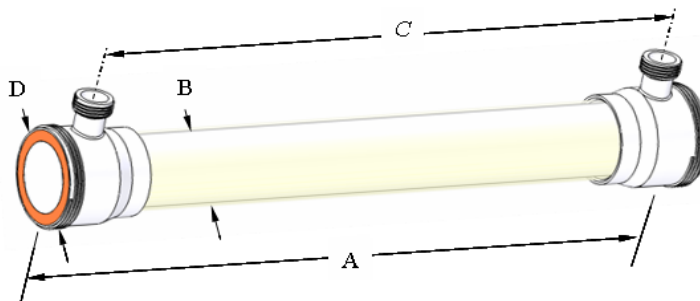
Part Numbers	Model	Active Membrane Area	
		ft ²	(m ²)
0720251	HF 5043-82-35-PM50	82	(7.6)
0720255	HF 5072-137-35-PM50	137	(12.7)

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 KMS Process Technology Group for more information.

NOMINAL DIMENSIONS*



Part #	A inches (mm)	B inches (mm)	C inches (mm)	D inches (mm)	Permeate Connection	Process Connection
0720251	43 (1092)	5.0 (127)	38 5/8 (981)	6.0 (152)	1 1/2" NPSM	6" NPSM
0720255	72 (1829)	5.0 (127)	67 5/8 (1718)	6.0 (152)	1 1/2" NPSM	6" NPSM

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

KMS 5" HOLLOW FIBER PM50 WATER CARTRIDGES

Membrane Characteristics:

KMS 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. KMS 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:

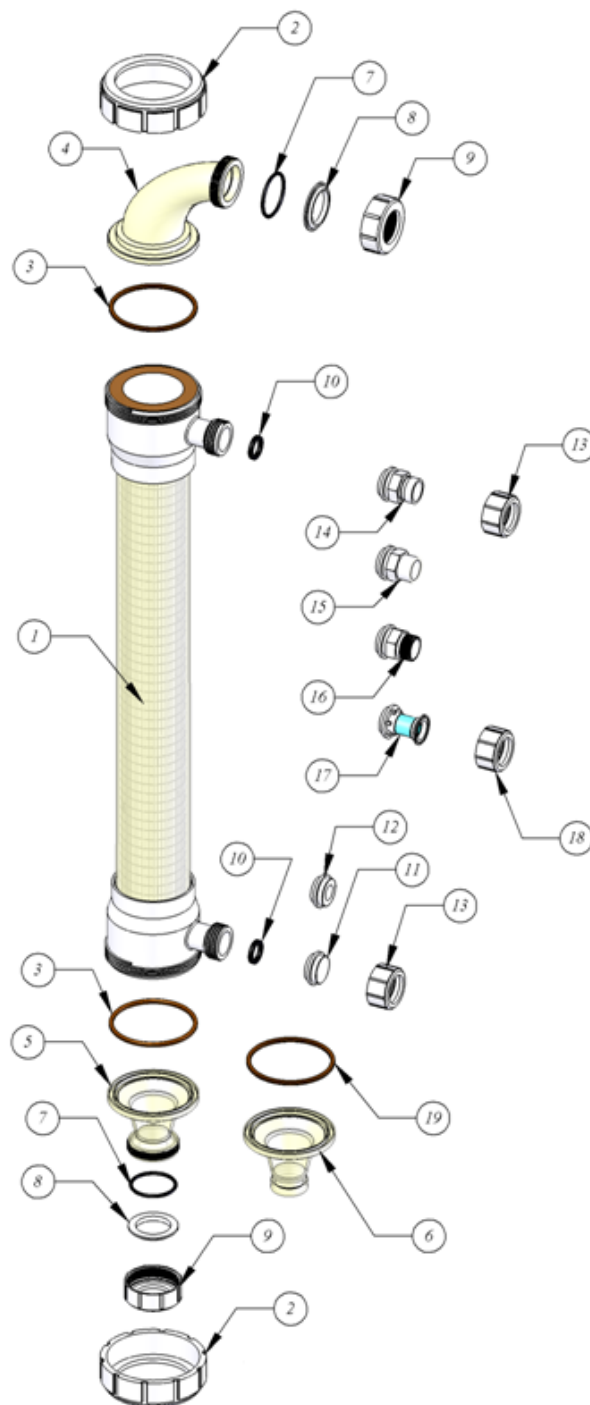
For cartridge installation, use only water or glycerin to lubricate seals. The use of petroleum or vegetable-based oils or solvents may damage the cartridge and will void the warranty.

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

Koch Membrane Systems, Inc. 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, Koch Membrane Systems, Inc. also offers a complete line of KOCHKLEEN™ cleaning chemicals.



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