



# ROMIPRO 5" HOLLOW FIBER CARTRIDGES

*5" Diameter Hollow Fiber Ultrafiltration Cartridges for Pharmaceutical Applications*

## PRODUCT DESCRIPTION

Membrane Polymer: Polysulfone  
 Housing Construction: Polysulfone  
 Seal/Potting Material: Proprietary Epoxy Compound  
 Storage Solution: Glycerin  
 Options:  
 Lumen size: 20 mil (0.5 mm) or 43 mil (1.1 mm)  
 Membrane Type: PM10, PM100, or PM500

### Regulatory and Quality Information:

All cartridge components in contact with the process fluid have passed USP Class VI test guidelines. Certificate of quality is included with each cartridge. Change control notification procedures apply.

## PRODUCT SPECIFICATIONS

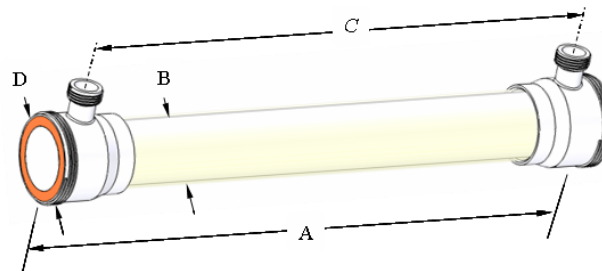
Koch Part Number	Model	Membrane Type	MWCO (Daltons)	Membrane Area [ft <sup>2</sup> (m <sup>2</sup> )]	Fiber Diameter [mil (mm)]
0721074	5043-132-20-PM10	PM10	10,000	132 (12.3)	20 (0.5)
0721163	5043-66-43-PM10	PM10	10,000	66 (6.1)	43 (1.1)
0721164	5043-66-43-PM100	PM100	100,000	66 (6.1)	43 (1.1)
0721195	5043-66-43-PM500	PM500	500,000	66 (6.1)	43 (1.1)

## OPERATING AND DESIGN INFORMATION\*

Maximum Inlet Pressure: 40 psi (2.8 bar)  
 Maximum Transmembrane Pressure: 35 psi (2.4 bar)  
 Maximum Operating Temperature (at pH 6.0): 140°F (60°C)  
 Maximum Permeate Side Back Pressure: 20 psi (1.4 bar)  
 Maximum Differential Pressure Feed Side: 30 psi (2.1 bar)  
 Allowable pH: 1.5 – 13.0 @ 130°F (54°C)  
 Maximum Total Chlorine (During Cleaning): 200 ppm @ pH 10-10.5, 130°F (54°C), 0 ppm @ pH < 9.5

\* Consult KMS Process Technology Group for specific applications.

## NOMINAL DIMENSIONS



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

## ROMIPRO 5" HOLLOW FIBER CARTRIDGES

### Membrane Characteristics

ROMIPRO cartridges should be selected for filtration of pharmaceutical water and intermediates when the required separation is in the range of 10,000 to 500,000 daltons. The ROMIPRO cartridges provide stable productivity, ease of cleaning and reliable operation.

ROMIPRO 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 Oxidants

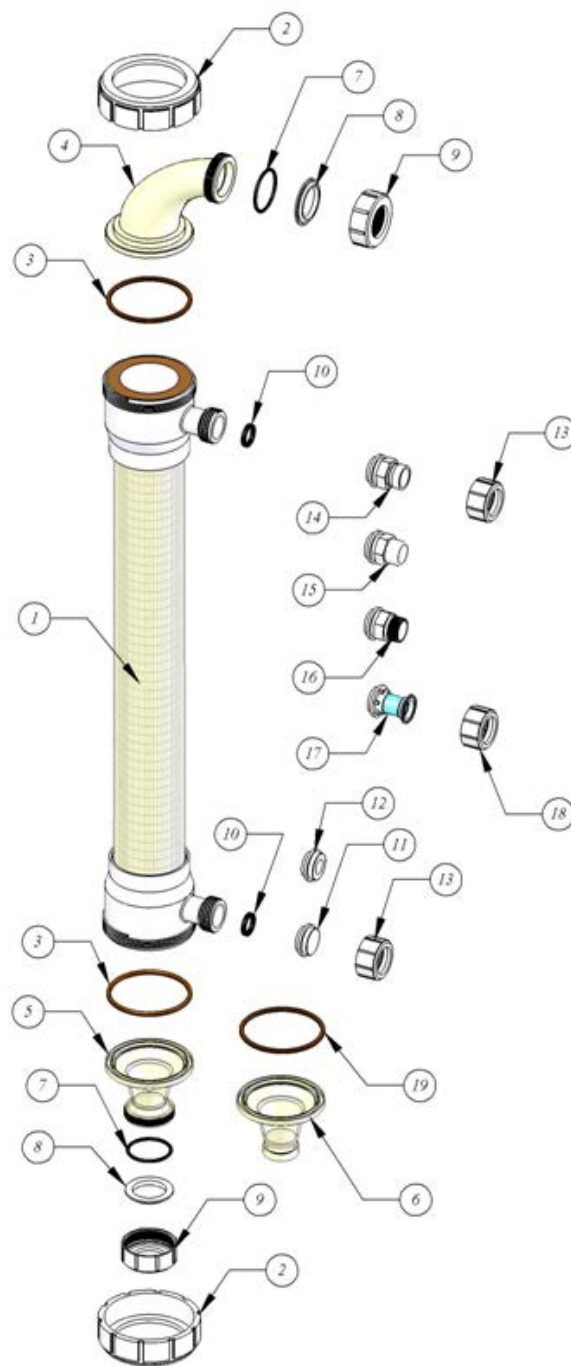
- While not recommended for use on a daily basis, exposure to oxidants for thorough cleaning and sanitization may prove necessary and useful.
- Potassium metabisulfite (without catalyst such as cobalt) is the preferred chemical to eliminate residual chlorine or similar oxidizers prior to processing process 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		072XXXX
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.

*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.*

Koch Membrane Systems, Inc., [www.kochmembrane.com](http://www.kochmembrane.com)

Corporate Headquarters: 850 Main Street, Wilmington, Massachusetts 01887-3388 USA. Tel.: 1-888-677-KOCH.

For related trademark information, visit [www.kochmembrane.com/legal](http://www.kochmembrane.com/legal)  
Koch Membrane Systems, Inc. is a Koch Chemical Technology Group, LLC company.

© 2016 Koch Membrane Systems, Inc. All rights reserved worldwide.

03/16 Rev 16-1