

# SUPER-COR<sup>®</sup> MODULES

*Ultrafiltration and Microfiltration Multitube Modules for Juice Processing*

## PRODUCT DESCRIPTION

Membrane Material:	PVDF (HFM-180 and HFM-513) or polyethersulfone (MFK-617)
Membrane Type:	Ultrafiltration (HFM-180 and HFM-513) or microfiltration (MFK-617)
Configuration:	Nineteen (19) ½" diameter tubules in a polysulfone shell
Applications:	Juice processing
Regulatory Information:	Conforms with FDA regulations (CFR Title 21)
Options:	HFM-180 membrane for light juices HFM-513 for all juices MFK-617 for dark juices

## SPECIFICATIONS

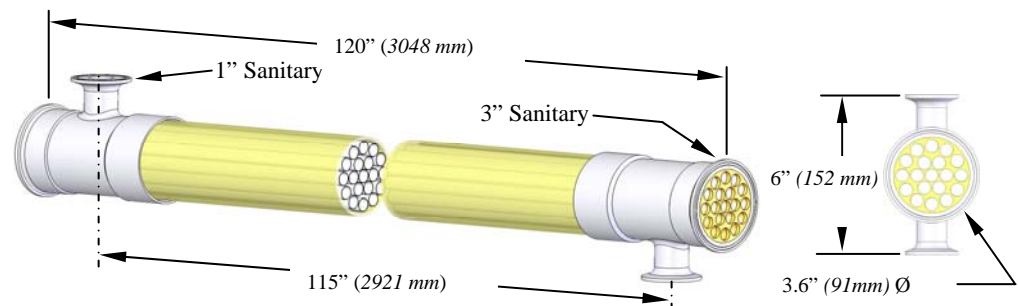
Part Numbers	Model	Membrane Area	
		ft <sup>2</sup>	(m <sup>2</sup> )
0712010	SUPER-COR <sup>®</sup> 3010-HFM-180	24	(2.2)
0712070	SUPER-COR <sup>®</sup> 3010-HFM-513	24	(2.2)
0712004	SUPER-COR <sup>®</sup> 3010-MFK-617	24	(2.2)

## OPERATING AND DESIGN INFORMATION\*

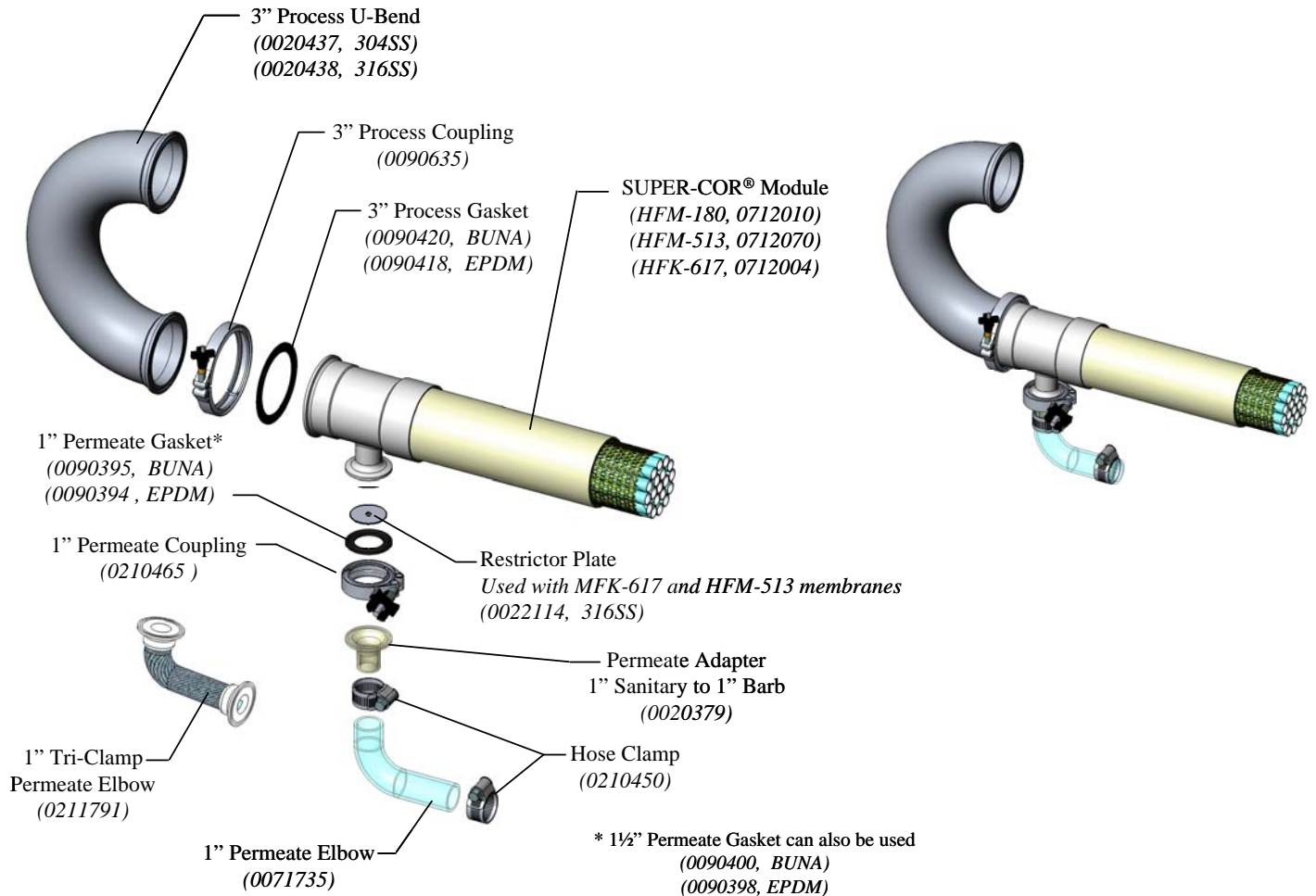
Maximum Operating Pressure:	90 psi @ 120°F (6.2 bar @ 49°C)
Minimum Outlet Pressure:	10 psi (0.7 bar)
Maximum Permeate Pressure:	3 psi (0.2 bar)
Typical Feed Side Pressure Drop Per Module:	4-5 psi (0.27-0.35 bar)
Maximum Feed Side Pressure Drop Per Module:	5 psi @ 120°F (0.35 bar @ 49°C)
Maximum Operating Temperature at pH 8:	Continuous 120°F (49°C) Short term 130°F (54°C)
Allowable pH Range at 120°F (49°C):	Continuous 2.0 – 10.0 Short term 1.5 – 10.5
Maximum Chlorine (cleaning):	200 ppm @ pH 10-10.5, 120°F (49°C)

\* Consult KMS Process Technology Group for specific applications.

## NOMINAL DIMENSIONS



**SUPER-COR® TUBULAR MODULE ASSEMBLY**



**Service and Ongoing Technical Support:**

Koch Membrane Systems (KMS) has an experienced staff of professionals available to assist end-users and OEM's for optimization of existing systems and support with the development of new applications. Along with the availability of supplemental technical bulletins, KMS also offers a complete line of KOCHKLEEN® membrane pretreatment, cleaning and maintenance chemicals.

**KMS Capability**

KMS is the leader in crossflow membrane technology, manufacturing reverse osmosis, nanofiltration, microfiltration, and ultrafiltration membranes and membrane systems. The industries we serve include food, dairy, beverage, automotive, water and wastewater, chemical, and general manufacturing. KMS adds value by providing top quality membrane products and by sharing our experience in the design and supply of thousands of crossflow membrane systems worldwide.

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

Corporate Headquarters: 850 Main Street, Wilmington, Massachusetts 01887-3388, USA, Tel. Toll Free: 1-888-677-5624, Telephone: 1-978-694-7000, Fax: 1-978-657-5208  
 European Headquarters: Koch Chemical Technology Group Ltd., The Granary, Telegraph Street, Stafford ST17 4AT, United Kingdom, Telephone: +44-178-527-2500, Fax: +44-178-522-3149

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