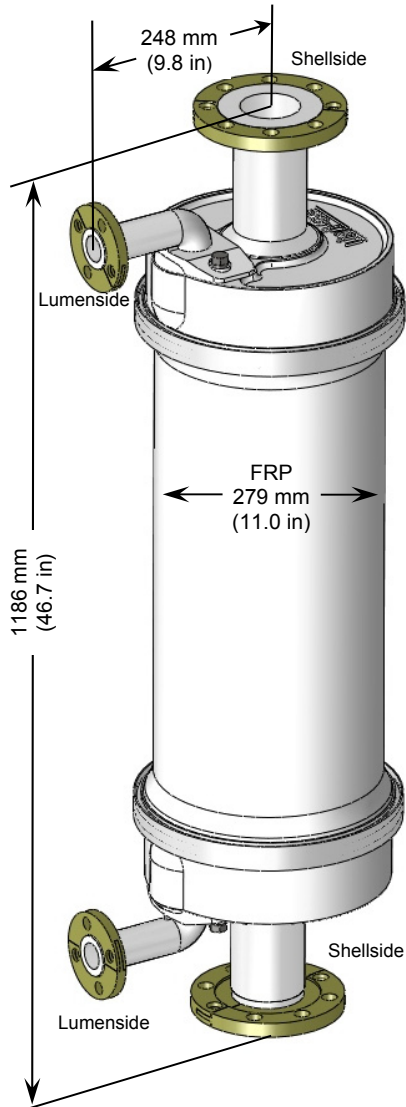


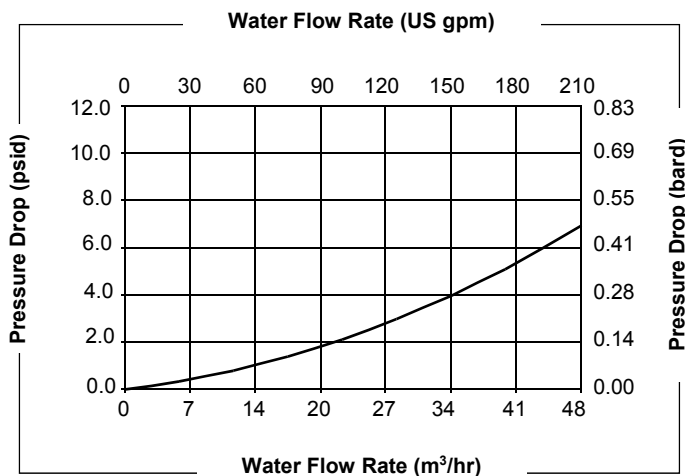
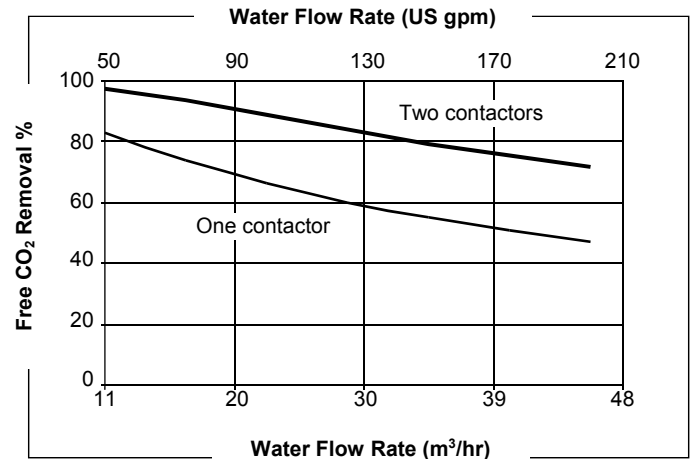
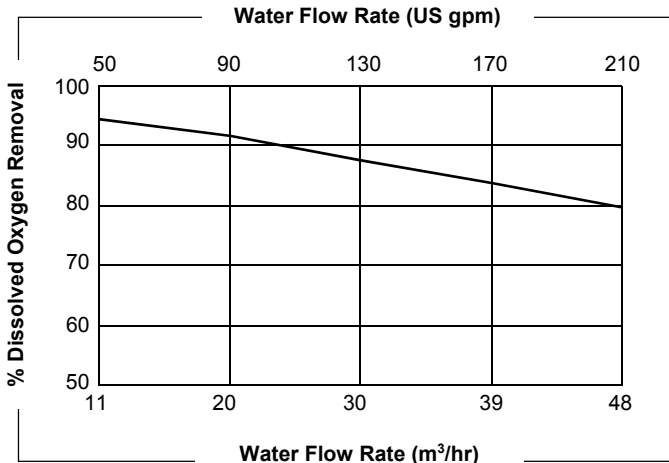
10 x 28 INDUSTRIAL PRODUCT DATA SHEET

INDUSTRIAL



Membrane Characteristics	
Cartridge Configuration	Industrial Use Extra-Flow with Center Baffle
Liquid Flow Guidelines	10 – 48 m ³ /hr (44 – 210 gpm)
Membrane Type	X-IND Fiber
Membrane/Potting Material	Polypropylene / Epoxy
Typical Membrane Surface Area	131 m ² (1410 ft ²)
Priming Volume	
Shellside	26.1 L (6.9 gal)
Lumenside	10.6 L (2.8 gal)
Pressure Guidelines*	
Maximum Shellside <u>LIQUID</u> Working Temperature/Pressure	5-50° C, 4.1 barg (41-122° F, 60 psig)
If no vacuum is used, 1 barg (15 psig) can be added to pressures above.	
Maximum Applied Gas Pressure	4.1 barg at 25° C (60 psig at 77° F)
Max applied gas pressure is for integrity testing at ambient temperatures. Normal operating pressures are typically lower.	
*See Operating Guide for complete temp/pressure limits for housings and membrane. Note: Liquid pressure should always exceed gas pressure.	
Housing Options and Characteristics	
Material	Fiber Reinforced Plastic (FRP) for Industrial Use Exterior finish is gray
Flange Connections	
Shellside (Liquid Inlet/Outlet)	<ul style="list-style-type: none"> • 3 inch class 150 raised face flange per ANSI B16.5 • 80A at 10K flat face flange per JIS B2238
Lumenside	<ul style="list-style-type: none"> • 1 inch class 150 raised face flange per ANSI B16.5 • 50A at 10K flat face flange per JIS B2238
Mounting Kit	
A Mounting Kit with 2 cradles and 2 straps is available and sold separately. It will hold the contactor horizontally or vertically.	
Seal Options	
Material	Applications
EPDM	General Purpose
Weight (approximate)	
Dry	33 kg (73 lbs)
Liquid full (shellside)	57 kg (125 lbs)
Cartridge only – dry	10 kg (23 lbs)
Shipping weight	44 kg (98 lbs)
Regulatory	
Complies with the limits as set by RoHS Directive 2011/65/EU Annex II; recasting 2002/95/EC.	

10 x 28 INDUSTRIAL PRODUCT DATA SHEET



Curves represent nominal values, generated using water at 20°C. Characteristics may change under different operating conditions.

Test condition O₂ Removal: N₂-vacuum combo mode, vacuum: 50 mm Hg N₂ sweep: 0.25 scfm at 20°C.

Test condition CO₂ Removal: Air vacuum combo mode, vacuum: 75 mm Hg, air sweep, 1 scfm at 25°C.

Technical Information: The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.

Product Use: Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application.

Warranty, Limited Remedy, and Disclaimer: Unless an additional warranty is specifically stated on the applicable 3M product packaging or product literature, 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. If the 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

Limitation of Liability: Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.

© 2016 3M Company. All rights reserved. (D81 rev 15). 3M, Membrana, and Liqui-Cel are trademarks of 3M Company. All other trademarks are the property of their respective owners.



**Industrial Business Group
Membranes Business Unit**
13840 South Lakes Drive
Charlotte, North Carolina 28273
USA

Phone: +1 704 587 8888
Fax: +1 704 587 8610

**3M Deutschland GmbH
Membranes Business Unit**
Ohder Straße 28
42289 Wuppertal
Germany

Phone: +49 202 6099 - 658
Fax: +49 202 6099 - 750

**3M Japan Ltd.
Membranes Business Unit**
6-7-29, Kita-Shinagawa,
Shinagawa-ku, Tokyo | 141-8684
Japan

Phone: +81 3 6409 5732
Fax: +81 3 6409 5827

MEMBRANA
Now proudly part of 3M

www.liqui-cel.com