

3M™ Liqui-Cel™ EXF-8×20 Industrial Series Membrane Contactor

Typical Properties

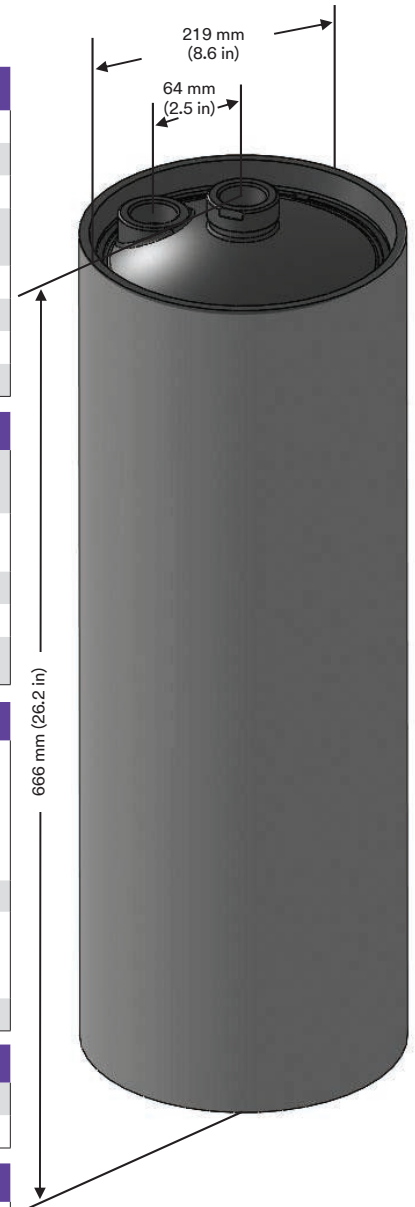
Membrane Characteristics	
Cartridge Configuration	Extra-Flow with Center Baffle
Liquid Flow Guidelines	1 – 11 m ³ /hr (5 – 50 gpm)
Membrane Type	XIND Fiber
	Recommended for CO ₂ removal from liquid and other gas transfer applications
Membrane/Potting Material	Polypropylene / Epoxy
Priming Volume (approximate)	
Shellside	6.7 L (1.8 gal)
Lumenside	5.2 L (1.4 gal)

Pressure Guidelines*	
Maximum Shellside LIQUID Working Temperature/ Pressure	25°C, 4.8 barg (77°F, 70 psig) 40°C, 2.1 barg (104°F, 30 psig)
If no vacuum is used, 1.0 barg (15 psig) can be added to pressures above. If operating using air sweep, the liquid or air temperature should not exceed 30°C for any length of time. Exceeding 30°C will reduce contactor life.	
Maximum Applied Gas Pressure	2.1 barg at 25°C (30 psig at 77°F)
Maximum 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	PVC housing Due to the nature of the material, scratches, blemishes and other marks may be visible on the housing surface. These do not impact contactor function. Engineering thermoplastic end caps
Port Connections	
Shellside (Liquid Inlet/Outlet)	1 Inch Female NPT 1.5 Inch Grooved pipe fitting Note: both options are standard on 1 end cap
Lumenside	1 Inch Female NPT

Weight (approximate)	
Dry	13 kg (28 lbs)
Water-filled (shellside)	19 kg (43 lbs)

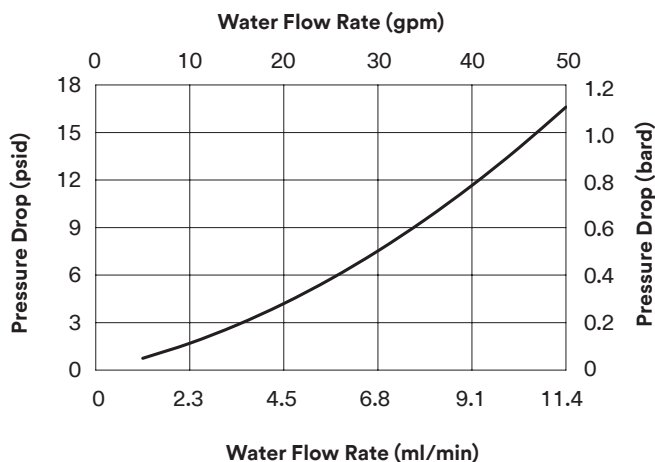
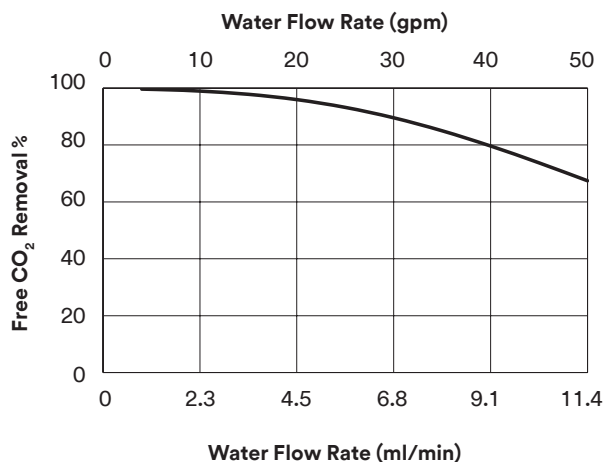
Regulatory	
Complies with the limits as set by (EU) 2015/863 amending Annex II to the Restriction on Hazardous Substances (RoHS) Directive (2011/65/EU).	



All dimensions are nominal values.
See 3M.com/Liqui-Cel for all housing drawings.

Not for consumer sale or use.

3M™ Liqui-Cel™ EXF-8×20 Industrial Series Membrane Contactor



Curves represent nominal values using water at 25°C. Characteristics may change under different operating conditions.

Test conditions:
CO₂ Removal: Air sweep mode at 5 scfm.

Technical Information: The technical information, guidance, and other statements contained in this document or otherwise provided by 3M are based upon records, tests, or experience that 3M believes to be reliable, but the accuracy, completeness, and representative nature of such information is not guaranteed. Such information is intended for people with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information. No license under any 3M or third party intellectual property rights is granted or implied with this information.

Product Selection and 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. As a result, customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's application, including conducting a workplace hazard assessment and reviewing all applicable regulations and standards (e.g., OSHA, ANSI, etc.). Failure to properly evaluate, select, and use a 3M product and appropriate safety products, or to meet all applicable safety regulations, may result in injury, sickness, death, and/or harm to property.

Warranty, Limited Remedy, and Disclaimer: Unless a different warranty is specifically stated on the applicable 3M product packaging or product literature (in which case such warranty governs), 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, FITNESS FOR A PARTICULAR PURPOSE, OR ARISING OUT OF A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE. If a 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 for the limited remedy stated above, and except to the extent prohibited by law, 3M will not be liable for any loss or damage arising from or related to the 3M product, whether direct, indirect, special, incidental, or consequential (including, but not limited to, lost profits or business opportunity), regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability.

3M and Liqui-Cel are trademarks of 3M Company. All other trademarks are the property of their respective owners. © 2021 3M Company. All rights reserved.



3M Company
3M Separation and
Purification Sciences Division
13840 South Lakes Drive
Charlotte, North Carolina
28273 USA
Phone: +1 980 859 5400

3M Deutschland GmbH
3M Separation and
Purification Sciences Division
Öhder Straße 28
42289 Wuppertal Germany
Phone: +49 202 6099 - 0

LC-1034
70-2016-0202-9

Rev. 02/2021

3M.com/Liqui-Cel