3M | Liqui-Cel™ Membrane Contactors

Deionx www.deionx.com

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

Typical Properties

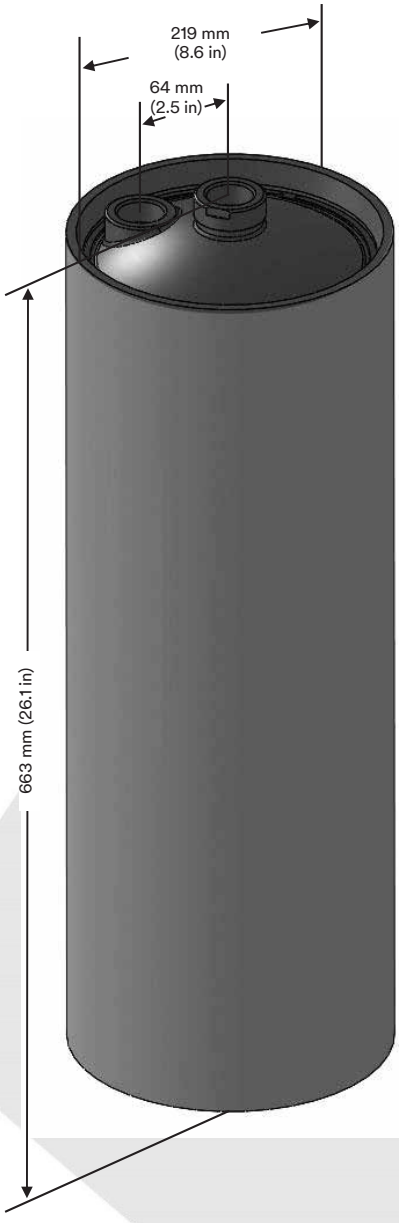
Membrane Characteristics	
Cartridge Configuration	Extra-Flow with Center Baffle
Liquid Flow Guidelines	1 – 11 m^3/hr (5 – 50 gpm)
Membrane Type	XIND Fiber
	Recommended for CO_2 removal from liquid and other gas transfer applications
Membrane/Potting Material	Polypropylene / Epoxy
Priming Volume (approximate)	
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 RoHS Directive 2011/65/EU Annex II; recasting 2002/95/EC.



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

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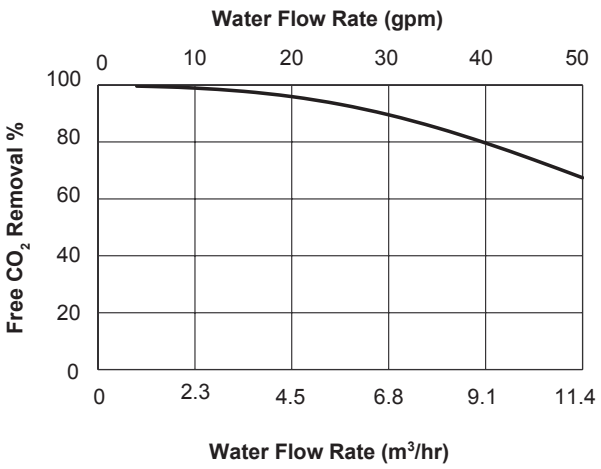

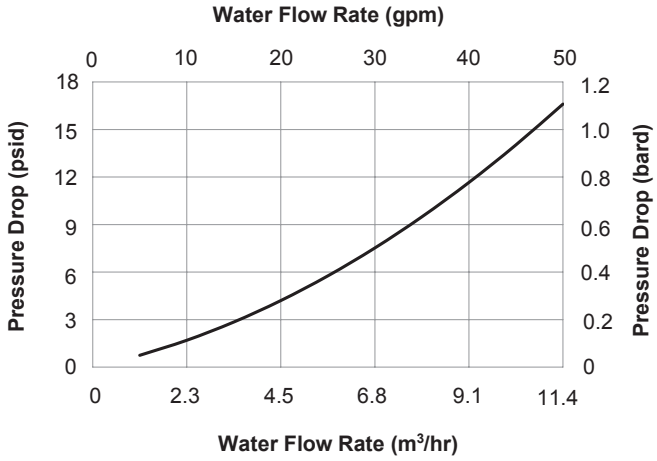

Curves represent nominal values using water at 25° C. Characteristics may change under different operating conditions.

Test conditions:
CO_2 Removal: Air sweep mode at 5 scfm.

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