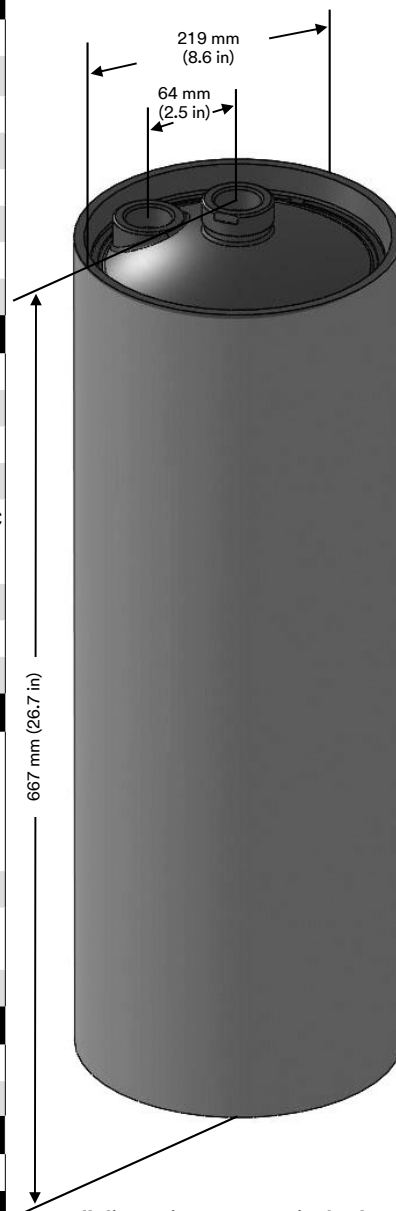


3M™ Liqui-Cel™ EXF-8×20 Industrial Series Membrane Contactor

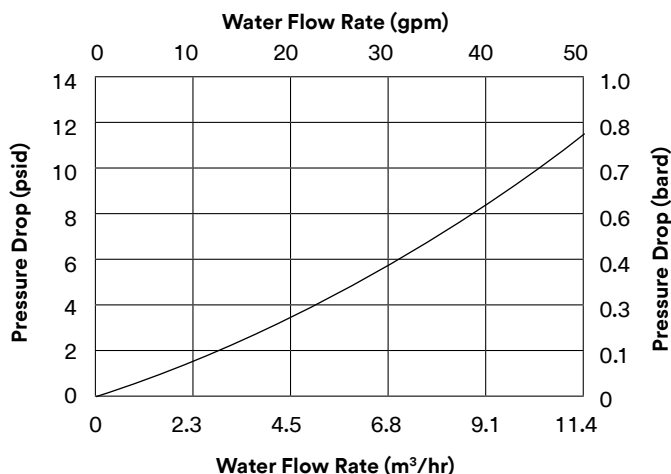
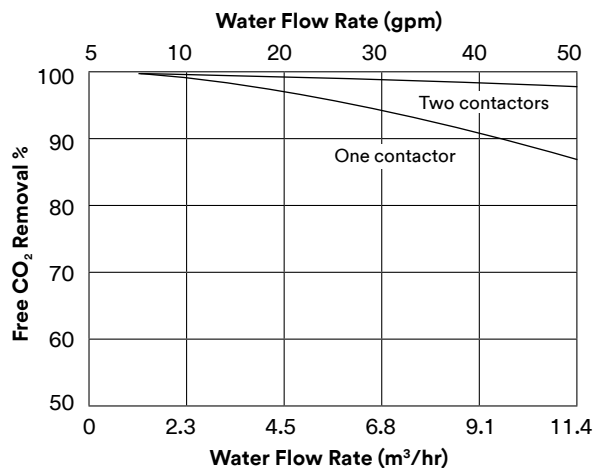
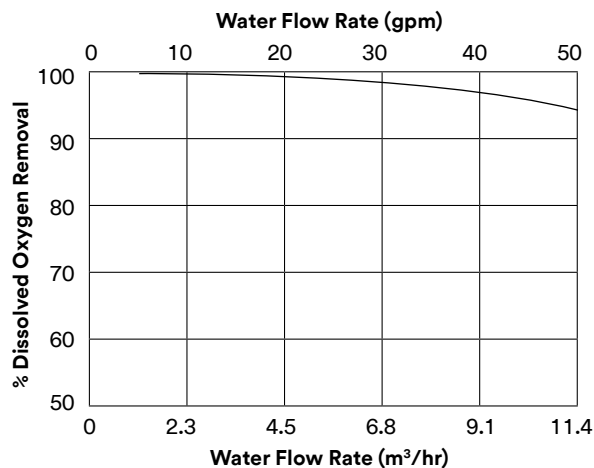
Typical properties

Membrane characteristics	
Cartridge configuration	Extra-Flow with Center Baffle
Liquid Flow guidelines	1-11 m3/hr (5-50 gpm)
Membrane type	X50
	X40
	Recommended for CO2 removal
	Recommended for O2 removal
Membrane/potting material	Polypropylene/Epoxy
Priming volume (approximate)	X50 Fiber
	X40 Fiber
Shell side	6.6 L (1.7 gal)
Lumen side	5.6 L (1.5 gal)
	5.2 L (1.4 gal)
Pressure guidelines*	
	X50 or X40 Fiber
Maximum shell side LIQUID operating temperature/pressure	
25°C (77°F)	6.2 barg (90 psig)
50°C (122°F)	3.1 barg (45 psig)
If the membrane contactor is used with air sweep, then the liquid and air temperature should not exceed 35°C (95°F) as this will reduce contactor life. For membrane contactors used with vacuum only this statement does not apply.	
Maximum lumen side GAS operating temperature/pressure	
25°C (77°F)	2.1 barg (30 psig)
* Note: Liquid pressure should always exceed gas pressure in operation.	
Housing characteristics	
Material	PVC housing Note: 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. Engineered thermoplastic end caps
Port connections	
Shell side (Liquid inlet/outlet)	Each shell side port on the end caps has a dual connection with 1.5 inch OD grooved pipe fitting and 1 inch female NPT.
Lumen side (inlet/outlet)	1 inch female NPT
Seal material options for shell side wetted parts	
EPDM	Only available in membrane contactor with X40 fiber
FKM	Only available in membrane contactor with X50 fiber
Mounting kit	
Contains 2 cradles and 2 straps sold separately and will hold the contactor horizontally or vertically. 12 kg. (27 lbs.)	
Weight (approximate)	
Dry	13 kg (29 lbs)
Water-filled (shell side)	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.



Gas removal curves represent nominal values using water. Characteristics may change under different operating conditions. These charts should not be used to design systems.

Test condition O₂ Removal with X40 membrane at 20°C (68°F): N₂-vacuum combo mode, Vacuum 50 mm Hg, N₂ sweep flow 0.4 Nm³/hr (0.25 scfm)

Test conditions CO₂ Removal with X50 membrane at 25°C (77°F): Air-Sweep mode, Air sweep flow 8 Nm³/hr (5 scfm), 50 ppm free CO₂ inlet concentration.

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