

3M[™] Liqui-Cel[™] EXF-10×28 Industrial Series Membrane Contactor

Typical Properties

Membrane Characteristics	
Cartridge Configuration	Industrial Use Extra-Flow with Centre Baffle
Liquid Flow Guidelines	10 – 48 m ³ /hr (44 – 210 gpm)
Membrane Type	X-IND Fibre
Membrane/Potting Material	Polypropylene / Epoxy
Priming Volume (approximate)	
Shellside	26.1 L (6.9 gal)
Lumenside	10.6 L (2.8 gal)

Pressure Guidelines*	
Maximum Shellside LIQUID Working Temperature/ Pressure	5-50°C, 4.1 barg (41-122°F, 60 psig)
If no vacuum is used, 1.0 barg (15 psig) can be added to pressures above.	
Maximum Applied Gas Pressure	4.1 barg at 25°C (60 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 Characteristics	
Material	Fibre Reinforced Plastic (FRP) for Industrial Use Exterior finish is grey
Flange Connections	
Shellside (Liquid Inlet/Outlet)	3 inch class 150 raised face flange per ANSI B16.5 80A at 10K flat face flange per JIS B2238
Lumenside	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	

A Mounting Kit with 2 cradles and 2 straps is available and sold separately. It will hold the contactor horizontally or vertically.

Material	Applications
EPDM	General Purpose
Weight (approximate)	
Dry	33 kg (73 lb)
Water-filled (shellside)	57 kg (125 lb)

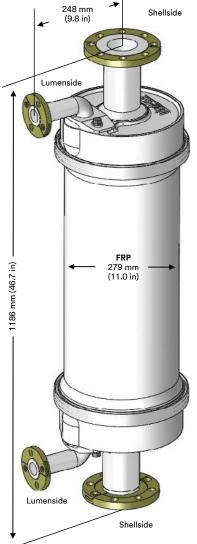
Regulatory

Cartridge only - dry

Seal Options

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

10 kg (23 lb)

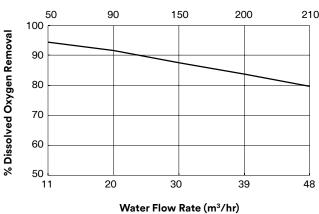


All dimensions are nominal values. See full housing drawing on 3M.ca/Liqui-Cel for additional details.

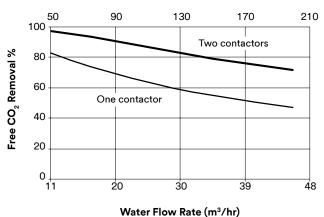
Not for consumer sale or use.

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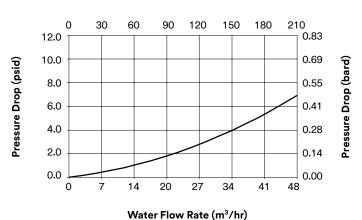
Water Flow Rate (US gpm)



Water Flow Rate (US gpm)



Water Flow Rate (US gpm)



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.

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3M Company 3M Separation and Purification Sciences Division 300 Tartan Drive London, Ontario N5V 4M9 Canada 1-800-443-1661