



Liqui-Cel™
Membrane Contactors

LENNTECH
WATER TREATMENT SOLUTIONS

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

Typical Properties

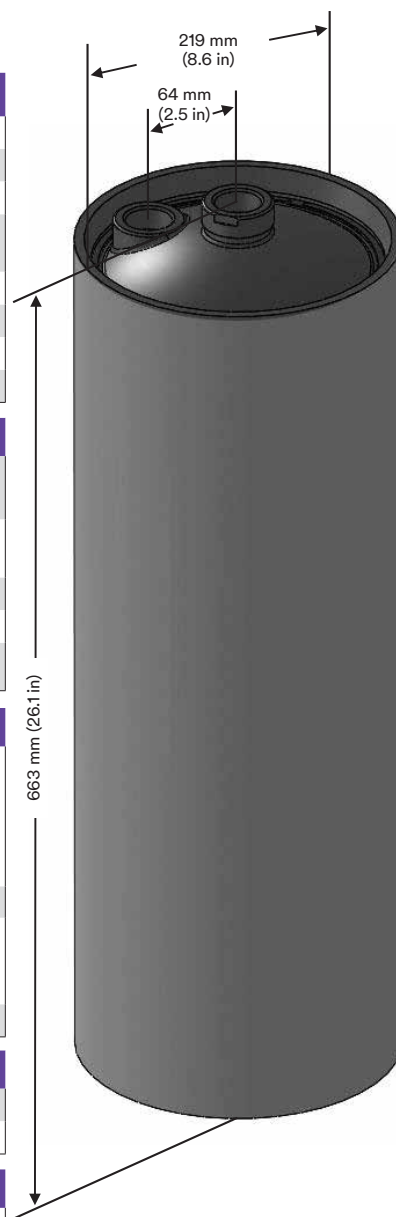
Membrane Characteristics	
Cartridge Configuration	Extra-Flow with Center Baffle
Liquid Flow Guidelines	1 – 11 m ³ /hr (5 – 50 gpm)
Membrane Type	XIND Fiber
	Recommended for CO ₂ removal from liquid and other gas transfer applications
Membrane/Potting Material	Polypropylene / Epoxy
Priming Volume (approximate)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

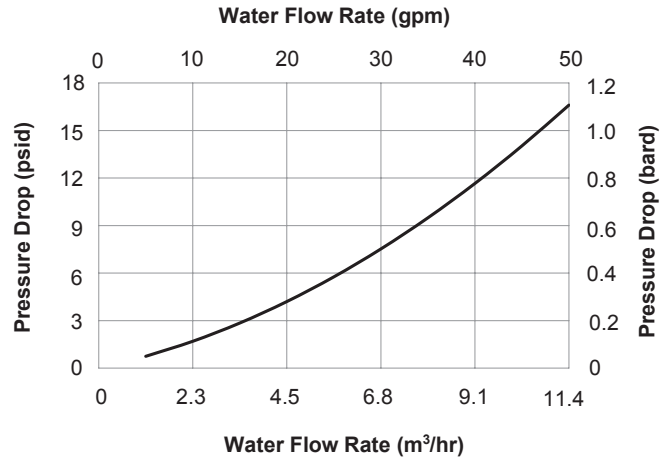
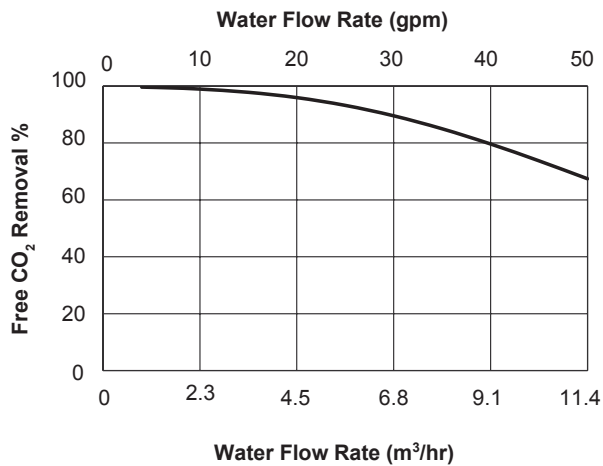
Weight (approximate)	
Dry	13 kg (28 lbs)
Water-filled (shellside)	19 kg (43 lbs)

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:
CO₂ Removal: Air sweep mode at 5 scfm.

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LENNTECH

info@lennotech.com Tel. +31-152-610-900
www.lennotech.com Fax. +31-152-616-289

LC-1034
Rev. 01/2017