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Industrial Filtration
Product data sheet

3M™ Liqui-Cel™ EXF-14×28 Series Membrane Contactor

Typical properties

Membrane characteristics		
Cartridge configuration	Extra-flow with center baffle	
Liquid flow guidelines	70 - 400 gpm (16 - 97 m^3)	
Membrane/potting material	Polypropylene/epoxy	
Membrane type	**X50 fiber**	**X40 fiber**
	Recommended for CO_2 removal from microelectronics, power & steam and other industrial applications	Recommended for O_2 removal from microelectronics, power & steam and other industrial applications
Priming volume (approximate)	**X50**	**X40**
Shell side	9.6 gal (36.5 L)	9.5 gal (36.1 L)
Lumen side	6.7 gal (25.5 L)	6.8 gal (25.7 L)

Operating parameters		
Pressure guidelines*	**X50 fiber**	**X40 fiber**
Maximum shell side LIQUID working temperature/pressure limit		
41 - 77°F (5 - 25°C)	120 psig (8.3 barg)	120 psig (8.3 barg)
122°F (50°C)	45 psig (3.1 barg)	45 psig (3.1 barg)
Maximum lumen side GAS operating temperature/pressure limit		
77°F (25°C)	46.4 psig (3.2 barg)	46.4 psig (3.2 barg)

*Note: Liquid pressure should always exceed gas pressure in operation.

Housing characteristics	
Material	PVC vessel with engineered thermoplastic end caps

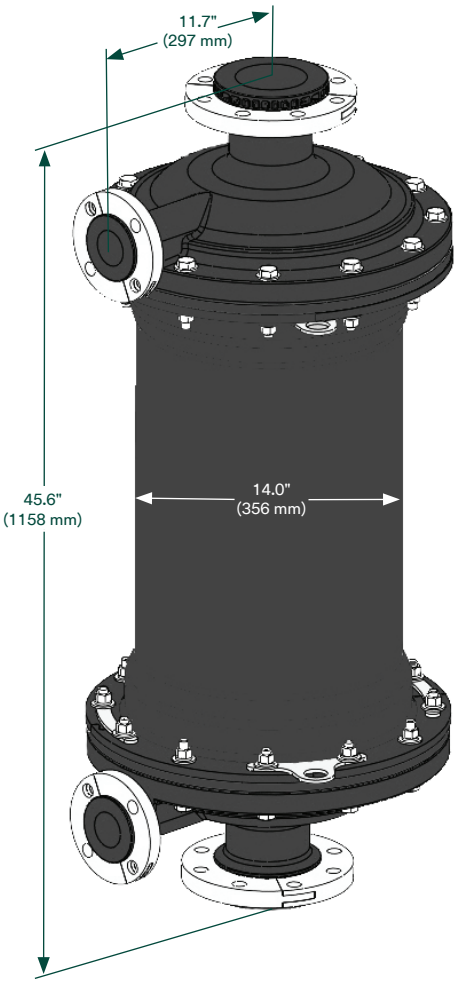
Flange connections	
Shell side (liquid inlet/outlet)	• 4 inch class 150 raised face flange per ANSI B16.5 • 100A 10K raised face flange per JIS B2238
Lumen side (inlet/outlet)	• 2 inch class 150 raised face flange per ANSI B16.5 • 50A 10K flat face flange per JIS B2238
Flange backing rings	SMC (Sheet molded compound)

Seal material options for shell side wetted parts
EPDM
FKM**
**3M™ Liqui-Cel™ EXF-14×28 Membrane Contactors with FKM seals are NOT tested and certified by WQA against NSF/ANSI/CAN 61.

Mounting kit
Contains 2 cradles and 2 straps sold separately and will hold the contactor horizontally or vertically.

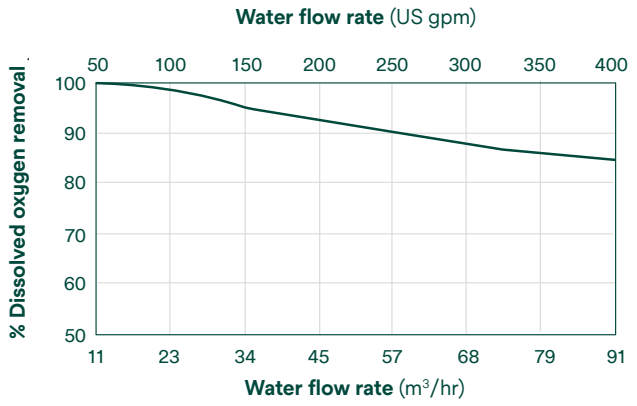
Weight (approximate)	
Dry	129 lbs (59 kg)
Water-filled (Shell side)	209 lbs (95 kg)

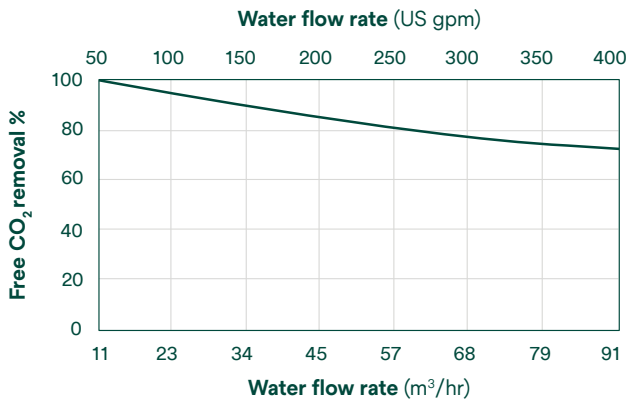
Not for consumer sale or use.

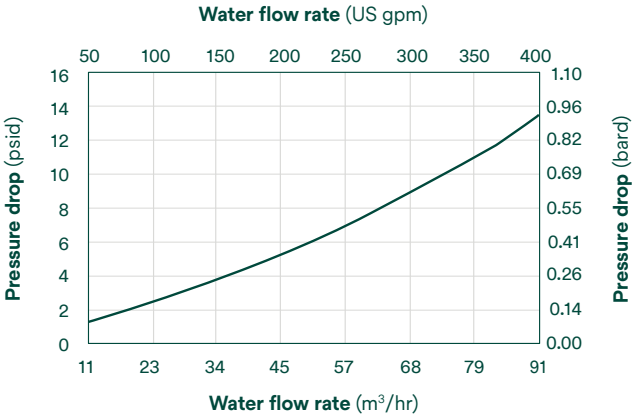


Note: All dimensions are nominal values for contactors with PVC housing with engineered thermoplastic end caps. See housing drawings for additional dimensional details.

Typical properties







Note: Performance can be improved by adjusting the sweep rate.

Curves represent nominal values using water at 20°C. Characteristics may change under different operating conditions.

Test condition O_2 removal with X40 membrane: N_2-vacuum combo mode: 75 mm Hg vacuum, N_2 sweep 0.25 SCFM.

Test condition CO_2 removal with X50 membrane: Air-vacuum combo mode: 150 mm Hg vacuum, air sweep 8 SCFM.

These charts should not be used to design systems.

Certain Liqui-Cel™ EXF-14×28 Series Membrane Contactors with EPDM seals are certified by WQA to meet NSF/ANSI/CAN 61. For full product listing please visit www.wqa.org.

For more information contact your Solventum sales representative.

Intended Use: Liqui-Cel™ Membrane Contactors are intended to remove dissolved gases and bubbles from liquids or to add gases to a liquid stream. Liqui-Cel™ products are for use in industrial separation applications of industrial fluids only, in accordance with the applicable product instructions, specifications, and where materials of construction are compatible. Liqui-Cel™ Membrane Contactors may further be used in the production of water for various pharmaceutical products upstream of the final water sterilization step.

Since there are many factors that can affect a product's use, the customer and user remain responsible for determining whether the Solventum product is suitable and appropriate for the user's specific application, including user conducting an appropriate risk assessment and evaluating the Solventum product in user's application.

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Liqui-Cel EXF-14×28 Series products are not for use in food contact applications.

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