Industrial filtration

Liqui-Cel SP 4×28 membrane contactors

Thermo Scientific™ Liqui-Cel™ Membrane Contactors provide high-performance dissolved gas control in a compact design. Utilizing hollow fiber membrane technology, Thermo Scientific membrane contactors remove dissolved gases from or add gases to compatible liquid streams in-line and without chemicals to help facilities around the world improve operating efficiency and protect product quality in many industrial processes.

Typical properties

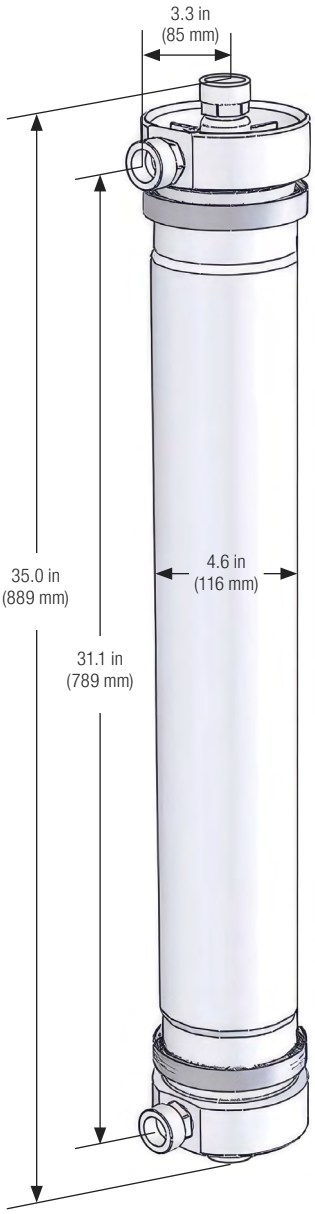
Membrane characteristics		
Cartridge configuration	Extra-flow with center baffle	
Liquid flow guidelines	5 - 30 gpm (1.1 - 6.8 m^3/hr) (liquid must flow on the shell side)	
Membrane/potting material	Polyolefin/polyethylene	
Membrane type	UP I	
	Recommended for low surface tension liquids	
Priming volume (approximate)	Polypropylene	316L SS
Shell side	0.8 gal (2.9 L)	0.8 gal (2.9 L)
Lumen side	0.2 gal (0.9 L)	0.2 gal (0.7 L)
Operating parameters		
Pressure guidelines*	Polypropylene	316L SS
Maximum shell side LIQUID operating temperature/pressure		
41 - 77°F (5 - 25°C)	75 psig (5.2 barg)	75 psig (5.2 barg)
104°F (40°C)	30 psig (2.1 barg)	
122°F (50°C)		30 psig (2.1 barg)
Maximum lumen side GAS operating temperature/pressure		
77°F (25°C)	60 psig (4.1 barg)	60 psig (4.1 barg)

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

Housing characteristics		
Material	Polypropylene	316L SS vessel and end caps < 0.8µm SI (32 RA)
Port connections		
	Polypropylene	316L SS
Shell side (liquid inlet/outlet)	• 1-inch sanitary • 0.75-inch NPT female • Rc 0.75 per JIS B0203	• 1-inch sanitary
Lumen side (inlet/outlet)	• 1-inch 90° sanitary • 0.75-inch 90° NPT female • Rc 0.75 per JIS B0203	• 1-inch sanitary
Seal material options for shell side wetted parts		
FKM		
FFKM (K-UPW)	Only available in PP housing with NPT connections	
Weight (approximate)		
Dry	9 lbs (4 kg)	16 lbs (7 kg)
Water-filled (shell side)	16 lbs (7 kg)	22 lbs (10 kg)

Regulatory

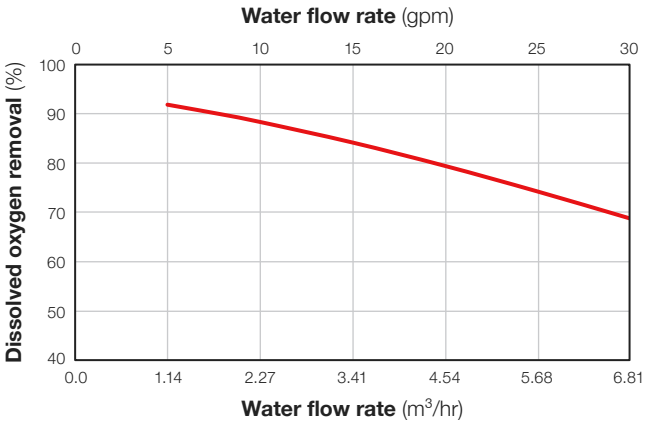
Certain Thermo Scientific™ Liqui-Cel™ SP 4×28 Membrane Contactor products with FKM seals are compliant with US FDA 21 CFR, EU Food Contact Regulation (EC) 1935/2004, EU Regulation 10/2011, Japan MHLW – Food Sanitization Act, and other food contact regulations. Liqui-Cel SP 4×28 membrane contactor products with FFKM (K-UPW) seals are not for use in food contact applications. Contact your Thermo Fisher Scientific representative for detailed declaration of compliance information for food contact applications.

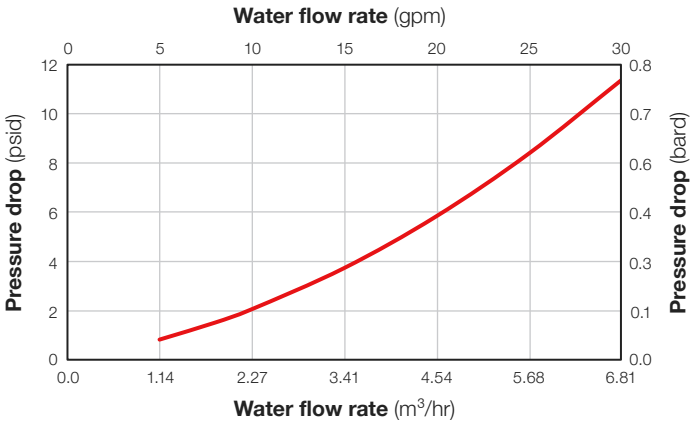


Note: All dimensions are nominal values for contactors with polypropylene housing and NPT connections. See housing drawings for additional dimensional details by housing and connection type.

Not for consumer sale or use.

Typical properties





Notes

- Curves represent nominal values using water at 77°F (25°C). Characteristics may change under different operating conditions.
- Test condition O_2 removal with UP I membrane: Vacuum mode: 50 torr absolute vacuum.
- These charts should not be used to design systems.

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 membrane contactors 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.

Certain Liqui-Cel membrane contactors are compliant for use in Food and Beverage applications. For specific details regarding use or limitations for food contact applications please refer to the Liqui-Cel product's data sheet or contact your Thermo Fisher Scientific Inc. representative for more information.

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

Restrictions on Use: Thermo Fisher Scientific Inc. advises against the use of these Thermo Scientific products in any application other than the stated intended use(s) since other applications have not been evaluated by Thermo Fisher and may result in an unsafe or unintended condition. Do not use in any manner whereby the Thermo Scientific product, or any extractable or leachable from the Thermo Scientific product, may become part of or remain in a medical device, drug, cosmetic, supplement, infant formula; or in applications involving life-sustaining medical applications or prolonged contact with internal bodily fluids or tissues.

Technical Information: The technical information, guidance, and other statements contained in this document or otherwise provided by Thermo Fisher are based upon records, tests, or experience that Thermo Fisher believes to be reliable, but the accuracy, completeness, and representative nature of such information is not guaranteed. Such information is intended for people with sufficient knowledge and technical skills to assess and apply their own informed judgment to the information. No license under any Thermo Fisher or third-party intellectual property rights is granted or implied with this information.

Product Selection and Use: Many factors beyond Thermo Fisher's control and uniquely within user's knowledge and control can affect the use and performance of a Thermo Scientific product in a particular application. As a result, customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's application. Failure to properly evaluate, select, and use a Thermo Scientific product and appropriate safety products, or to meet all applicable safety regulations, may result in injury, sickness, death, and/or harm to property.

For more information contact your Thermo Fisher Scientific sales representative or visit **thermofisher.com/industrialfiltration**

thermo scientific

© 2026 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified. **DTAS-15108816 GBL 0926**