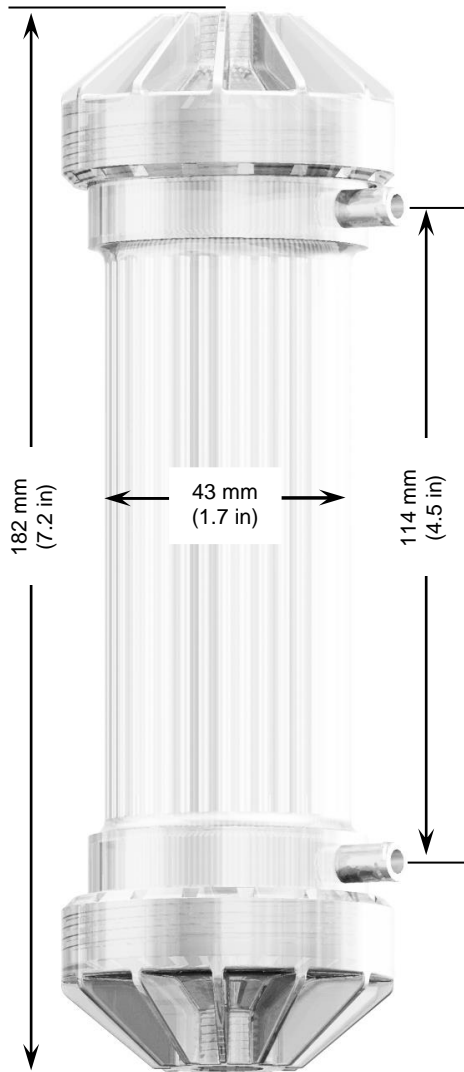


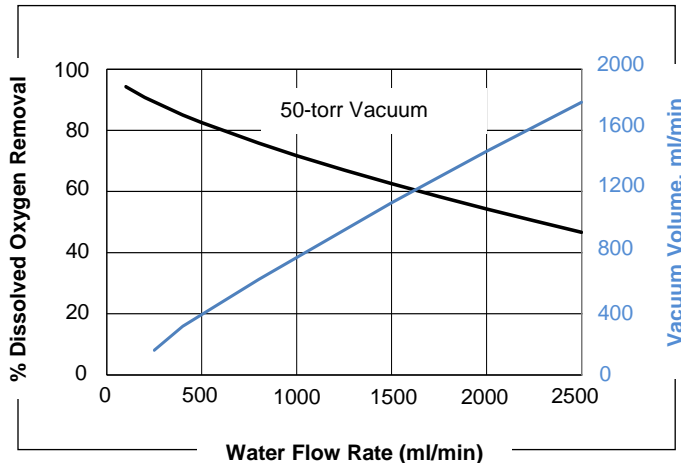
1.7 x 5.5 MiniModule™ PRODUCT DATA SHEET



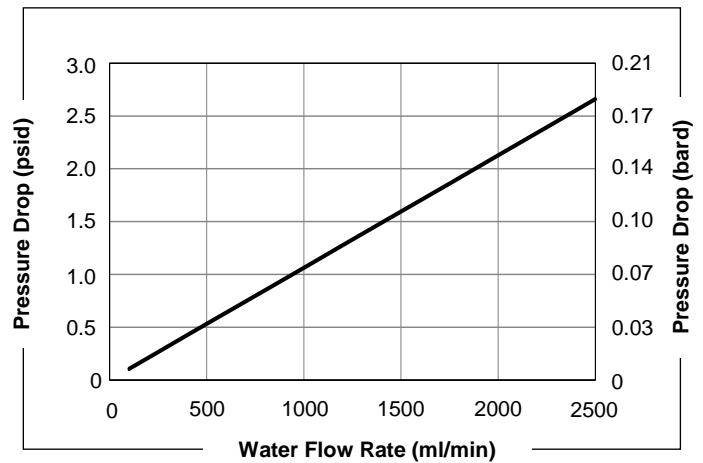
Membrane Characteristics	
Cartridge Configuration	Parallel Flow. Lumenside Liquid Flow.
Liquid Flow Guidelines	<2500 ml/min
Membrane Type	X50 Fiber
Membrane/Potting Material	Polypropylene/Polyurethane
Typical Membrane Surface Area	0.5 m ² Calculated based on inner diameter of hollow fiber
Priming Volume (approximate)	
Shellside	78 ml
Lumenside	53 ml
Pressure Guidelines*	
Maximum Lumenside <u>LIQUID</u> Working Temperature/ Pressure	5-20° C, 4.1 barg (41-68° F, 60 psig) 40° C, 2.1 barg (104° F, 30 psig)
* Note: Liquid pressure should always exceed gas pressure.	
Housing Options and Characteristics	
Material	Polycarbonate
Flange Connections	
Shellside (gas/vacuum)	Standard Female Luer Lock <i>Supplied with two ¼ inch Hosebarb adaptors which mate to ¼ inch ID tubing</i>
Lumenside (wetted surface)	1/4 inch FNPT
Seal Options	
Material	Applications
EPDM	All Purpose
Weight (approximate)	
Dry	142 grams
Shipping weight (max)	151 grams
Regulatory	
Complies with the limits as set by RoHS Directive 2011/65/EU Annex II; recasting 2002/95/EC. Constructed of FDA CFR title 21 compliant materials for wetted parts only at ambient temperatures.	

Note: All dimensions are nominal values. Refer to liqui-cel.com for detailed housing drawings.

1.7 x 5.5 MiniModule™ PRODUCT DATA SHEET



— DO removal — Vacuum volume (estimated)



Curves represent nominal values, generated using water on the Lumenside at 20° C with 50 torr of vacuum drawn on both Shellside ports. We have plotted an estimated vacuum volume guideline that is based on a flow rate at 20° C, 50 Torr. Characteristics may change under different operating conditions.

Technical Information: The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.

Product Use: Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application.

Warranty, Limited Remedy, and Disclaimer: Unless an additional warranty is specifically stated on the applicable 3M product packaging or product literature, 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. If the 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

Limitation of Liability: Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.

3M, Membrana, Liqui-Cel and MiniModule are trademarks of 3M Company. All other trademarks are the property of their respective owners.
© 2015 3M Company. All rights reserved (D86 rev 15)



**Industrial Business Group
Membranes Business Unit**
13840 South Lakes Drive
Charlotte, North Carolina 28273
USA

Phone: +1 704 587 8888
Fax: +1 704 587 8610

**3M Deutschland GmbH
Membranes Business Unit**
Öhder Straße 28
42289 Wuppertal
Germany

Phone: +49 202 6099 - 658
Fax: +49 202 6099 - 750

**3M Japan Ltd.
Membranes Business Unit**
6-7-29, Kita-Shinagawa,
Shinagawa-ku, Tokyo | 141-8684
Japan

Phone: +81 3 6409 5732
Fax: +81 3 6409 5827

MEMBRANA
Now proudly part of 3M

www.liqui-cel.com

