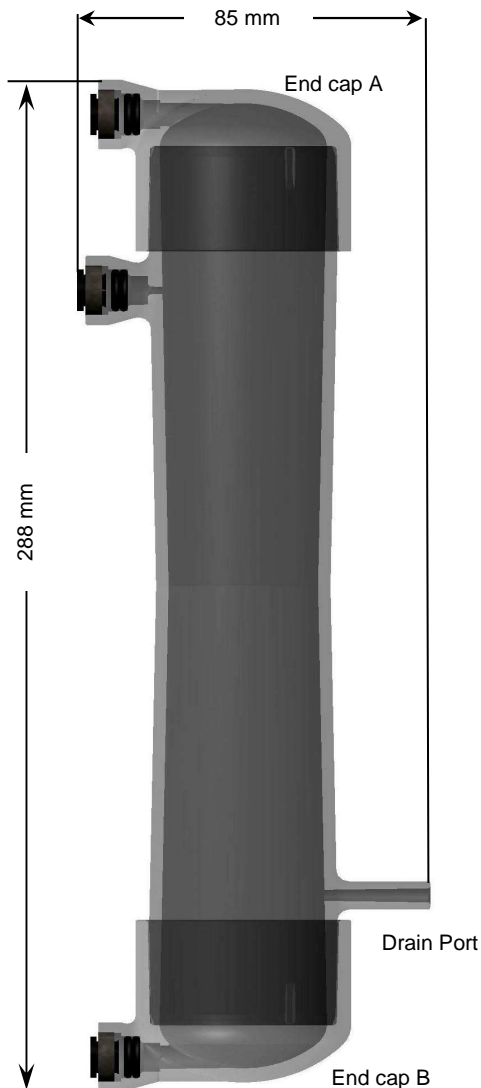


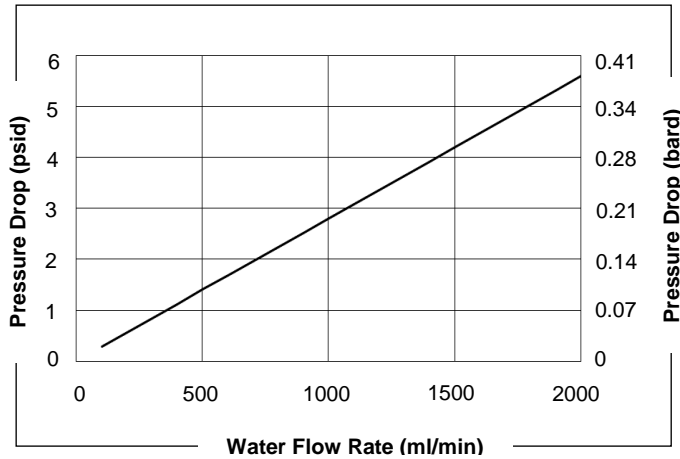
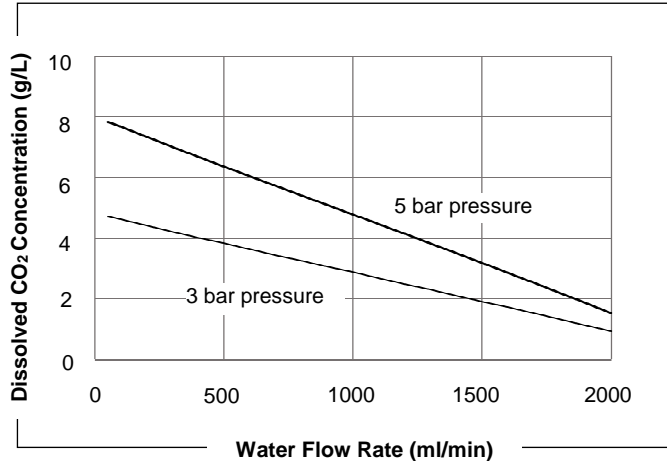
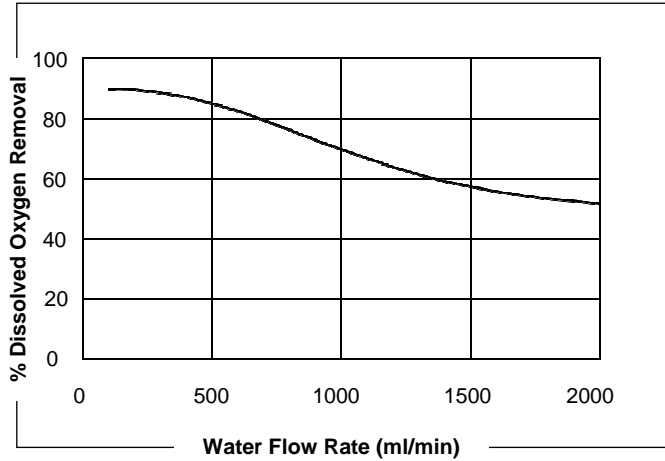
1.7 x 10 MiniModule™ PRODUCT DATA SHEET



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

| Membrane Characteristics | |
|---|--|
| Cartridge Configuration | Lumen side liquid flow |
| Liquid Flow Guidelines | <2000 ml/min |
| Membrane Type | X40 Fiber |
| | Recommended for carbonation, nitrogenation and other gasification applications. Can also be used for degassing applications. |
| Membrane/Potting Material | Polypropylene/Epoxy |
| Typical Membrane Surface Area | 0.8 m ² Calculated based on inner diameter of hollow fiber |
| Priming Volume (approximate) | |
| Shell side | 161 ml |
| Lumen side | 70 ml |
| Pressure Guidelines* | |
| Maximum Lumen side LIQUID Working Temperature/ Pressure | 5-20° C, 8 barg |
| Maximum Applied Shell side Gas Temperature/ Pressure | 20° C, 6 barg |
| * Note: Liquid pressure (lumen side) should always exceed gas pressure (shell side). | |
| Housing Options and Characteristics | |
| Material | PVC |
| Flange Connections | |
| Shell side (gas/vacuum) | 5/16-inch John Guest® Straight tube drain port |
| Lumen side (wetted surface) | 5/16-inch John Guest® |
| Additional end cap rotation options: 20 degree rotation of end cap A or 180 degree rotation of end cap B. | |
| Weight (approximate) | |
| Dry | 281 g |
| Regulatory | |
| Complies with the limits as set by RoHS Directive 2011/65/EU Annex II; recasting 2002/95/EC. CFR Title 21 compliant. FDA compliant for wetted parts only at ambient temperatures. | |

1.7 x 10 MiniModule™ PRODUCT DATA SHEET



Curves represent nominal values using X40 membrane with water on the lumen side. Characteristics may change under different operating conditions.

Test conditions O₂ removal: Vacuum 50 torr at 20° C.

Test conditions for carbonation: Water at 5° C containing 0 g/L CO₂ at inlet.

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

**Industrial Business Group
Membranes Business Unit**
Oehder Strasse 28
42289 Wuppertal
Germany

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



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

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

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

www.liqui-cel.com