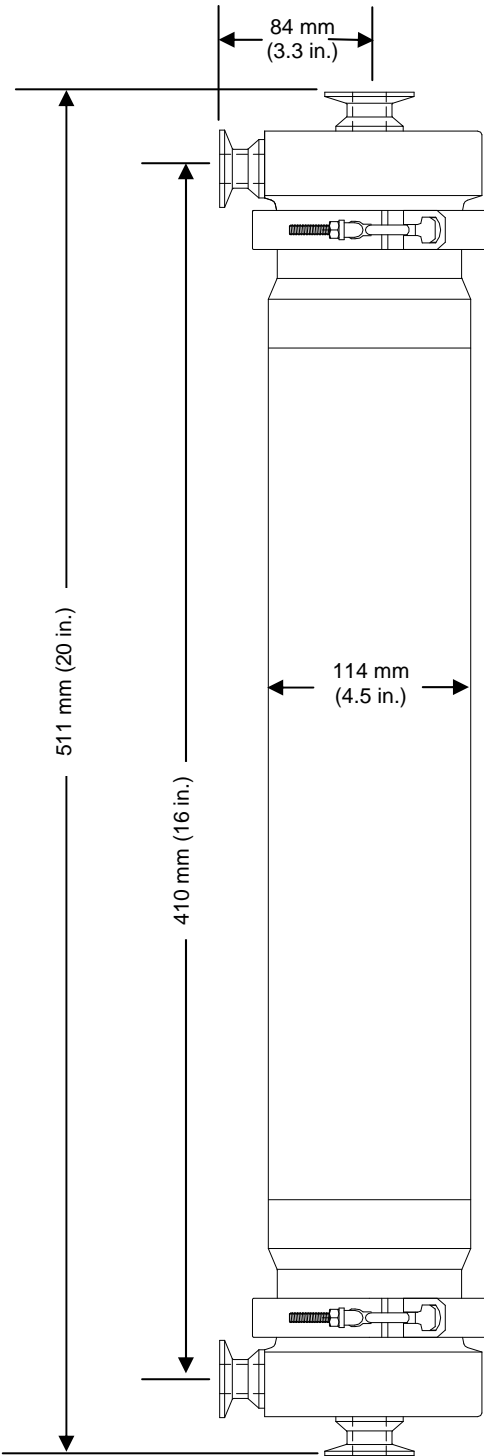


## 4 x 13 SuperPhobic® PRODUCT DATA SHEET

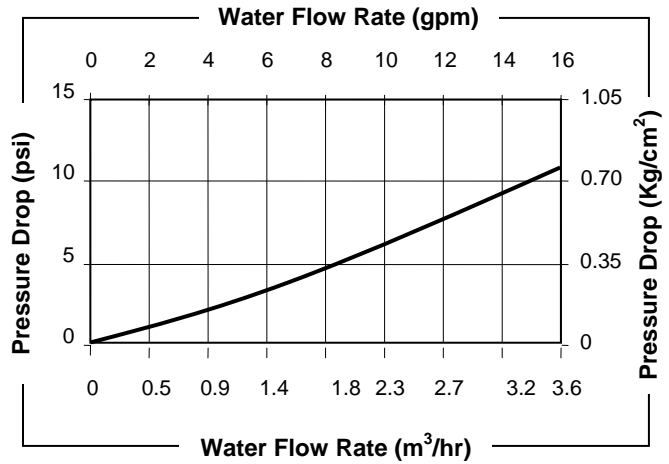
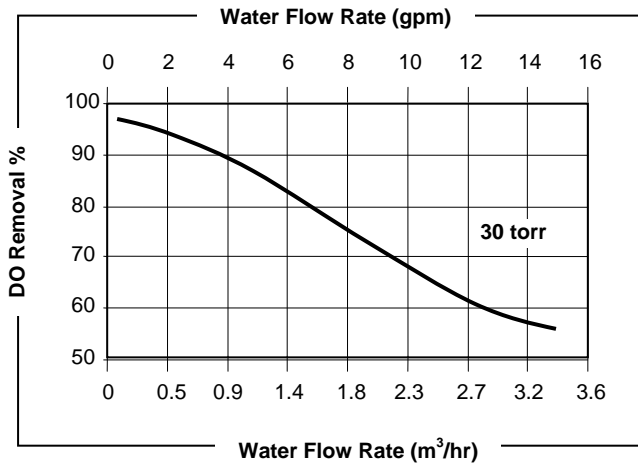


NOTE: All dimensions are nominal values

Cartridge Characteristics	
Cartridge Configuration	Extra-Flow with Center Baffle
Liquid Flow Guidelines (one cartridge)	0.7 – 3.41 m <sup>3</sup> /hr (3-15 gpm) Liquid must flow on the shellside
Membrane/Potting Material	Polyolefin / Polyethylene
Typical Membrane Surface Area	8.0 m <sup>2</sup> (86.1 ft <sup>2</sup> )
Maximum Working Temperature/Pressure (Using 50 mm vacuum on lumenside)	25°C, 4.2 kg/cm <sup>2</sup> (4.1 bar) 50°C, 1.1 kg/cm <sup>2</sup> (1.0 bar) (77°F, 60 psig) (122°F, 15 psig)
Priming Volume	Shellside 1.3 liters (0.34 gal.) Lumenside 0.46 liters (0.12 gal.)
Housing Characteristics	
Material	Polypropylene
Flange Connections	
Shellside (Wetted surface)	<ul style="list-style-type: none"> <li>1 inch Sanitary</li> <li>¾ inch NPT Female</li> <li>1 inch George Fisher</li> <li>Rc ¾ per JIS B0203</li> </ul>
Lumenside	<ul style="list-style-type: none"> <li>1 inch 90° Sanitary</li> <li>¾ inch 90° NPT Female</li> <li>Rc ¾ per JIS B0203</li> </ul>
Maximum Shellside Working Temperature/Pressure	30°C, 7.4 kg/cm <sup>2</sup> (7.3 bar) 40°C, 4.9 kg/cm <sup>2</sup> (4.8 bar) (86°F, 105 psig) (104°F, 70 psig)
Seal Options	
Material	Applications
Viton	General Purpose
K-UPW	Ultra Pure Water
Weight	
Dry	2.6 kg. (5.8 lbs.)
Liquid full (shellside)	3.7 kg. (8.2 lbs.)
Shipping weight	3.3 kg. (7.3 lbs.)

All components of the SuperPhobic® Membrane Contactor, when used in accordance with recommendations given in our product literature at and below ambient temperatures, are in compliance with all relevant FDA regulations as specified in Title 21 of the Code of Federal Regulations.

## 4 x 13 SUPERPHOBIC® PRODUCT DATA SHEET



Curves represent nominal values generated using water at 25° C with vacuum pulled from both lumen ports. Characteristics may change under different operating

### Cartridge Specifications

Characteristics	Test Conditions	Specifications
Performance O <sub>2</sub> Removal	Shellside water flow: 12 gpm, 20°C (68°F) Lumenside N <sub>2</sub> Flow: 1.0 scfm	61% minimum
Pressure Drop, psi maximum	Shellside water flow: 12 gpm, 20°C (68°F)	8.5

This product is to be used only by persons familiar with its use. It must be maintained within the stated limitations. All sales are subject to Seller's terms and conditions. Purchaser assumes all responsibility for the suitability and fitness for use as well as for the protection of the environment and for health and safety involving this product. Seller reserves the right to modify this document without prior notice. Check with your representative to verify the latest update. To the best of our knowledge the information contained herein is accurate. However, neither Seller nor any of its affiliates assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of the suitability of any material and whether there is any infringement of patents, trademarks, or copyrights is the sole responsibility of the user. Users of any substance should satisfy themselves by independent investigation that the material can be used safely. We may have described certain hazards, but we cannot guarantee that these are the only hazards that exist.

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