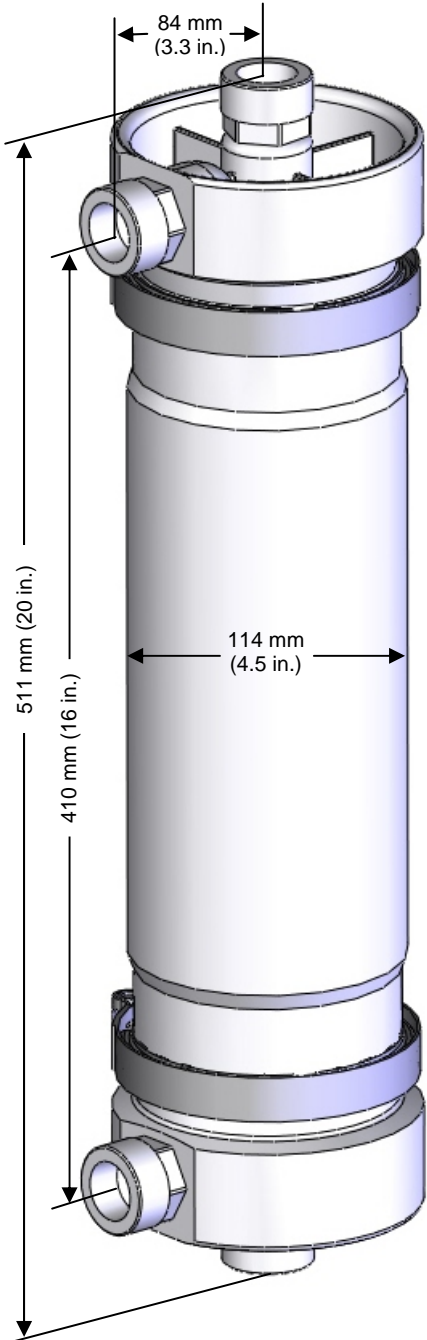


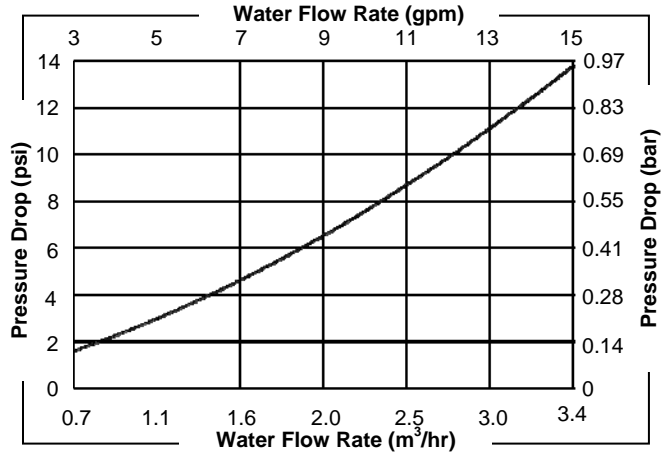
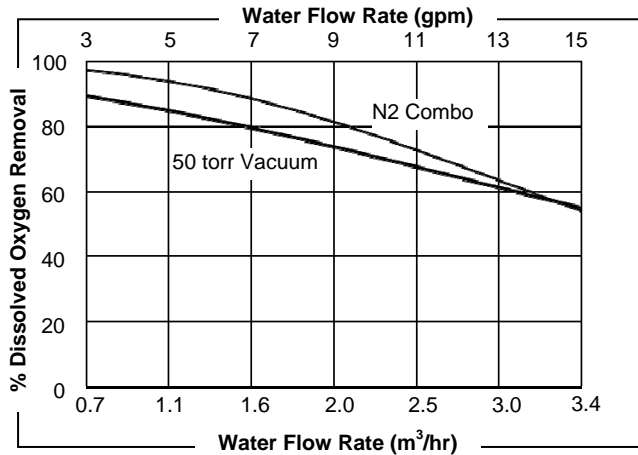
## 4 x 13 SuperPhobic® PRODUCT DATA SHEET



<b>Cartridge Characteristics</b>	
<b>Cartridge Configuration</b>	Extra-Flow with Center Baffle
<b>Liquid Flow Guidelines</b> (one cartridge)	0.2 – 3.4 m <sup>3</sup> /hr (1-15 gpm) Liquid must flow on the shellside
<b>Membrane/Potting Material</b>	Polyolefin / Polyethylene
<b>Typical Membrane Surface Area</b>	7.0 m <sup>2</sup> (75.3 ft <sup>2</sup> )
<b>Priming Volume</b> (approximate)	
Shellside	1.4 liters (0.37 gal.)
Lumenside	0.5 liters (0.14 gal.)
<b>Pressure Guidelines</b>	
<b>Maximum Shellside <u>LIQUID</u> Working Temperature/Pressure</b> (Using 50 mm vacuum on lumenside)	30°C, 7.3 bar (86°F, 105 psig) 40°C, 4.8 bar (104°F, 70 psig)
Note: Liquid pressure should always exceed gas pressure.	
<b>Housing Options and Characteristics</b>	
<b>Material</b>	Polypropylene
<b>Flange Connections</b>	
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>
<b>Seal Options</b>	
<b>Material</b>	<b>Applications</b>
Viton	General Purpose
K-UPW	Ultra Pure Water
<b>Weight</b>	
Dry	2.5 kg. (5.6 lbs.)
Liquid full (shellside)	3.9 kg. (8.6 lbs.)
Shipping weight	3.2 kg. (7.1 lbs.)
<b>Regulatory</b>	
Meets RoHS threshold limits. 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.	

NOTE: All dimensions are nominal values

## 4 x 13 SUPERPHOBIC<sup>®</sup> PRODUCT DATA SHEET



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)	10

Curves represent nominal values, generated using water at 20°C.

Test condition O<sub>2</sub> Removal: Vacuum mode, vacuum: 50 torr. N<sub>2</sub>-Combo, vacuum: 50 torr, N<sub>2</sub> sweep: 0.07 scfm.

Characteristics may change under different operating conditions.

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**Membrana - Charlotte**  
A Division of Celgard, LLC  
13800 South Lakes Drive  
Charlotte, North Carolina 28273  
USA  
Phone: (704) 587 8888  
Fax: (704) 587 8610

**Membrana GmbH**  
Oehder Strasse 28  
42289 Wuppertal  
Germany  
Phone: +49 202 6099 - 658  
Phone: +49 6126 2260 - 41  
Fax: +49 202 6099 - 750

**Japan Office**  
Shinjuku Mitsui Building, 27F  
1-1, Nishishinjuku 2-chome  
Shinjuku-ku, Tokyo 163-0427  
Japan  
Phone: 81 3 5324 3361  
Fax: 81 3 5324 3369

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