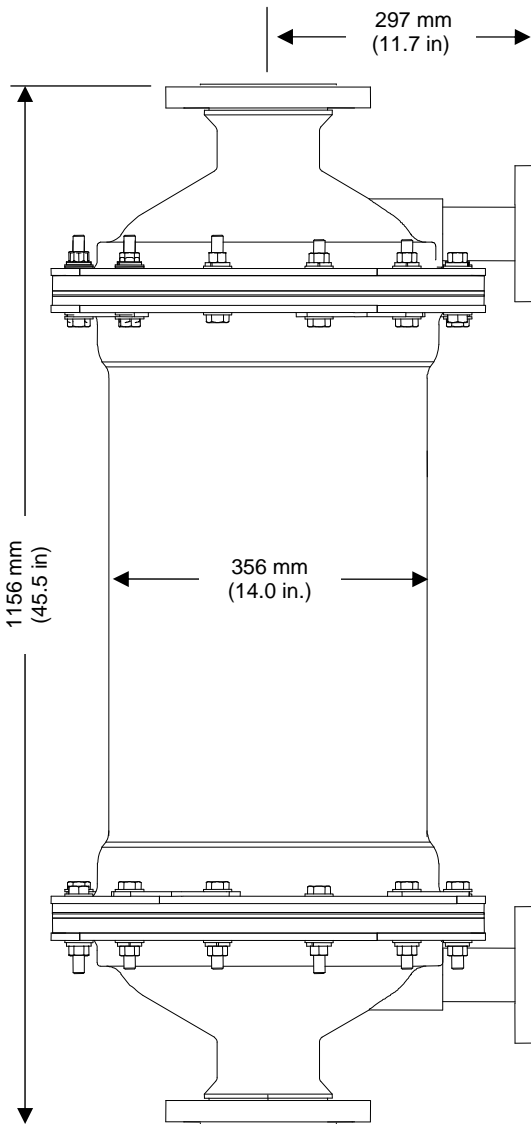


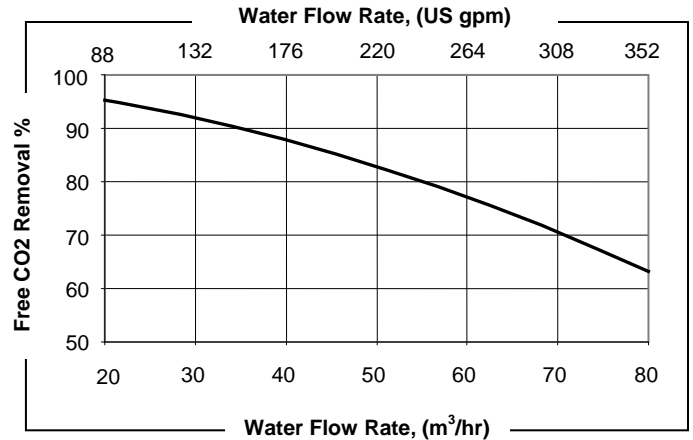
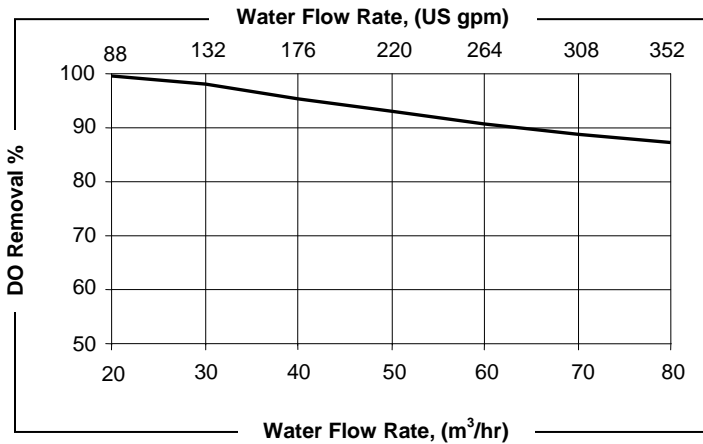
# 14 x 28 EXTRA-FLOW PRODUCT DATA SHEET



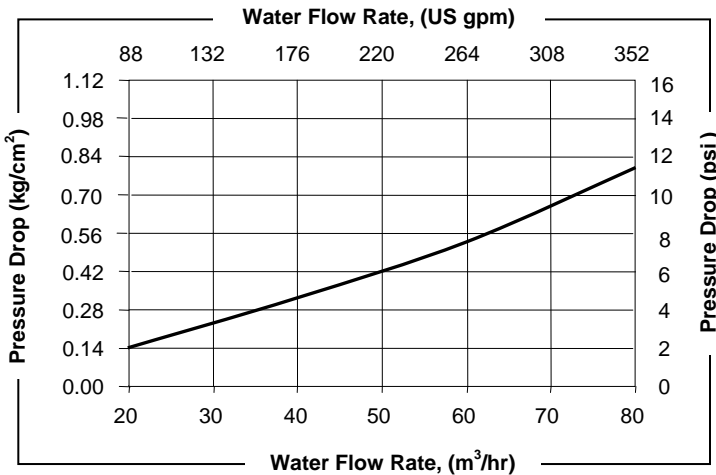
**NOTE:** All dimensions are nominal values

<b>Cartridge Characteristics</b>		
<b>Cartridge Configuration</b>	Extra-Flow with Center Baffle	
<b>Liquid Flow Guidelines</b>	16 – 90.8 m <sup>3</sup> /hr (70 – 400 gpm)	
<b>Membrane Type</b>	<b>X50 Fiber</b>	<b>X40 Fiber</b>
	Recommended for CO <sub>2</sub> removal from water	Recommended for all other gas transfer applications
<b>Porosity</b>	~40%	~25%
<b>OD / ID</b>	300 / 220 micron	300 / 200 micron
<b>Membrane/Potting Material</b>	Polypropylene / Epoxy	
<b>Typical Active Membrane Area</b>	2370 ft <sup>2</sup> (220m <sup>2</sup> )	
<b>Maximum Shellside Working Temperature/Pressure of fiber</b>	25°C, 7.4 kg/cm <sup>2</sup> or 7.2 bar 50°C, 2.1 kg/cm <sup>2</sup> or 2.1 bar (77°F, 105 psig) (122°F, 30 psig)	
	<i>[Using 50 mm vacuum on Lumenside. Add 1.05 kg/cm<sup>2</sup> (15 psig) when vacuum is not used.]</i> <i>Note: maximum shell to lumen pressure differential not to exceed 120psi.</i>	
<b>Priming Volume (approximate)</b>	<b>X50 Fiber</b>	<b>X40 Fiber</b>
Shellside	33.5 liters (8.84 gal.)	33.5 liters (8.84 gal.)
Lumenside	21.7 liters (5.73 gal.)	20.1 liters (5.31 gal.)
<b>Housing Options and Characteristics</b>		
<b>Housing Material</b>	PVC Vessel with Nylon End Caps	
<b>Flange Backing Rings</b>	SMC (Sheet Molded Compound)	
<b>Flange Connections</b>		
Shellside (Liquid Inlet/Outlet)	<ul style="list-style-type: none"> <li>SMC 4 inch class 150 raised face flange per ANSI B16.5</li> <li>SMC 100A at 10K raised face flange per JIS B2238</li> </ul>	
Lumenside	<ul style="list-style-type: none"> <li>SMC 2 inch class 150 raised face flange per ANSI B16.5</li> <li>SMC 50A at 10K flat face flange per JIS B2238</li> </ul>	
<b>Max. Allowable Working Pressure of Vessel</b>	<ul style="list-style-type: none"> <li>8.4 Kg/cm<sup>2</sup> (8.3 bar or 120 psi) Shellside (Liquid Only)</li> <li>4.2 Kg/cm<sup>2</sup> (4.1 bar or 60 psi) on gas or Lumenside</li> </ul> NOTE: Refer to Cartridge Characteristics for maximum operating conditions of each fiber type	
<b>Seal Options</b>		
<b>Material</b>	<b>Applications</b>	
EPDM (ANSI / NSF 61)	General Purpose	
<b>Mounting Kit</b>		
A Mounting Kit with 2 cradles and 2 straps is available and sold separately. It will hold the contactor horizontally or vertically.		
<b>Weight (approximate)</b>		
Dry	61.7 kg. (136 lbs.)	
Liquid full (shellside)	96.6 kg. (213 lbs.)	
Shipping Weight w/o Mounting kit	73.4 kg. (162 lbs.)	
Shipping Weight with Mounting kit	82.5 kg. (182 lbs.)	

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**Note:** Performance can be improved by adjusting the sweep rate.



**Note:** for X40 membrane.

Cartridge Specifications		
Characteristics	Test Conditions	Specifications
Performance O <sub>2</sub> Removal, minimum	Shellside water flow: 300 gpm, 20°C (68°F) Lumenside N <sub>2</sub> Flow: 3.5 ft <sup>3</sup> /min, 1.0 atm at 20°C	X50: 87% X40: 85%
Pressure Drop, psi maximum	Shellside water flow: 300 gpm, 20°C (68°F)	X50: 13.0 X40: 12.0

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

Test condition O<sub>2</sub> Removal: X40 membrane, N<sub>2</sub>-vacuum combo mode, Vacuum: 75 mm Hg, N<sub>2</sub>: 0.5 scfm.

Test condition CO<sub>2</sub> Removal: X50 membrane, Air vacuum combo mode, vacuum: 150mm Hg, air sweep 8scfm.

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 8585

**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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