Compact LOW2

Low energy, very high rejection – brackish water RO elements

The Oltremare COMPACT ELEMENT MODULE features the same outstanding performance of the original LOW® (Energy Saving) element combined with a plug and play unique design.

MEMBRANE CHARACTERISTICS	
Membrane	RO
Membrane Type	Polyamide
Stabilized Salt Rejection (%)	99.4[(b1)] - 99.5[(b2)] - 99.65[(c1)]
Minimum Salt Rejection (%)	99.0[(b1)] – 99.3[(b2)] - 99.4[(c1)]

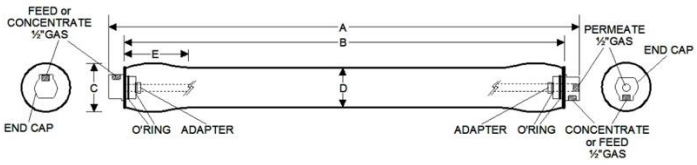
DESIGN INFORMATION	Permeate Flow m^3/day (gpd)[(a)]	Maximum Feed Flow m^3/h (gpm)	Membrane Area m^2 (ft^2)	Feed Spacer Thickness (mil)
Oltremare Compact LOW2 – 2514	0.5 (120)	1.38 (6)	0.6 (6)	28
Oltremare Compact LOW2 - 2521	1.1 (280)	1.38 (6)	1.1 (12)	28
Oltremare Compact LOW2 - 2540	2.1 (550)	1.38 (6)	2.6 (28)	28
Oltremare Compact LOW2 - 4014	1.4 (370)	2.72 (12)	1.8 (19)	28
Oltremare Compact LOW2 - 4021	3.29 (870)	2.72 (12)	3.2 (35)	28
Oltremare Compact LOW2 - 4040	7.9 (2100)	3.6 (16)	7.9 (85)	28
Oltremare Compact LOW2 – HR - 4040	7.9 (2100)	3.6 (16)	7.9 (85)	28

OPERATING PARAMETERS	
Maximum Operating Pressure	180 psi (12.4 bar)
Maximum Operating Temperature	45 °C (113 °F)
Cleaning pH Range[(c)]	1.0 – 12.0
Chlorine Tolerance[(d)]	< 0.1 ppm
Maximum Pressure Drop	0.7 bar (10 psi) per element; 4 bar (60 psi) per housing
Maximum SDI_{15}	5.0
Maximum Turbidity	1 NTU

a. Test conditions: 1,500 ppm NaCl, 10.3 bar (150 psi), 25°C (77°F), 10% recovery, pH 6.5 - 7, 30 minutes operation. Flow rates will be no more than 15% below the values shown. Product specifications may change without notice as design revisions occur.
b. Minimum and stabilized salt rejection for LOW2 modules: b1 for modules from 2514 to 4021; b2 for 4040 ; c1 for low2-HR 4040 modules
c. Refer to temperature and pH limits in Membrane Cleaning Guide - Water Application Elements (TSG-C-001).
d. Pretreatment is recommended for the removal of free chlorine and other oxidizing agents to prevent damage to membranes. Oxidizing agents, such as free chlorine, in contact with polyamide membranes may result in shortened operating life or membrane failure. Such oxidation damage is excluded from warranty. Refer to Membrane Operating Guide - Recommendations for Water Purification (TSG-O-012).

PHYSICAL DIMENSIONS	Element Weight lb (kg)	Dim. A mm (inches)	Dim. B mm (inches)	Dim. C mm (inches)	Dim. D mm (inches)	Dim. E mm (inches)
Oltremare Compact LOW2 – 2514	4.7 (2.1)	417 (16.4)	337 (13.25)	80.5 (3.17)	65 (2.56)	130 (5.1)
Oltremare Compact LOW2 - 2521	6.6 (3)	604 (22.8)	534 (21)	80.5 (3.1)	65 (2.56)	152 (6.0)
Oltremare Compact LOW2 - 2540	13.2 (3)	1080 (42.5)	1010 (39.8)	80.5 (3.17)	65 (2.56)	130 (5.1)
Oltremare Compact LOW2 - 4014	11 (5)	442 (17.40)	361 (14.21)	118 (4.65)	104 (4.1)	152 (6)
Oltremare Compact LOW2 - 4021	14 (6.4)	624 (24.57)	543 (21.38)	118 (4.65)	104 (4.1)	165 (6.5)
Oltremare Compact LOW2 - 4040	25 (11.3)	1110 (43.7)	1029 (40.51)	118 (4.65)	104 (4.1)	180 (7.1)
Oltremare Compact LOW2HR - 4040	25 (11.3)	1110 (43.7)	1029 (40.51)	118 (4.65)	104 (4.1)	180 (7.1)

The size must be considered in a range of ±3% except for the lengths (A and B) ±3‰. The modules are sealed with small screws (to be removed when used).



Customizable specialty elements

MANN+HUMMEL offers a full range of membranes and element designs for challenging water and process applications. Technologies include low-fouling RO, submerged UF, continuous high temperature, ultra-high pressure, unique sanitary designs and more. Contact us to customize a product that satisfies your specific requirements.

IMPORTANT INFORMATION

Start-up: We recommend flushing elements for 30 minutes at low pressure and discarding permeate during the flush prior to operation. For further information, please see Element Start-Up Guide – System Start-Up (TSG-O-005).

Cleaning: Oltremare membrane elements must be cleaned periodically to ensure proper operation and to prevent membrane damage. Please see Membrane Cleaning Guide – Water Application Elements (TSG-C-001).

Storage: Oltremare membrane elements must be stored appropriately to ensure proper operation and to prevent membrane damage. Please see Element Storage Guides (TSG-O-009 & TSG-O-010).

Contact

Americas
USA: +1 805 964 8003
customerservicemnus@mann-hummel.com

Asia
APAC: +65 658 68181
info.wfs@mann-hummel.com
China: +86 512 88931188
waterchina@mann-hummel.com

Europe
Germany: +49 611 7118 7480
Italy: +39 0721 1796201
info.wfs@mann-hummel.com

MANN+HUMMEL