



# Submerged MBR Modules for Wastewater Treatment

### **HIGH EFFLUENT QUALITY**

Submerged MBR modules are state-of-the-art technology and MANN+HUMMEL Water & Fluid Soltuions developed BIO-CEL® to meet the needs of biological wastewater treatment plants around the world.

The increasing acceptance of MBR technology worldwide not only results in growth of the MBR market but also in an increase in large-scale projects with more than 10,000 m $^3$ /d inflow to the MBR plant. In order to address these demands, MANN+HUMMEL Water & Fluid Soltuions developed the BIO-CEL® XL-2 module. With this module, there is only one connection point for permeate and air for the total membrane area (1,920 m $^2$ ), this roughly equates to > 1,000 m $^3$ /d of wastewater to be treated.

For customers with large-scale applications, the BIO-CEL XL-2 modules could be the perfect fit.



### MATERIAL DATA®

Membrane area	1920 m² (20667 ft²)	Connection permeate	Lapped flange DN125, PN10, PVC
Recommended air scour rate	360 Nm³/h (212 SCFM)	Dry Weight	750 kg (1653 lb)
Length	3200 mm (10.5 ft)	Membrane	PES
Width	2750 mm (9.0 ft)	Housing	Stainless Steel
Height	2750 mm (9.0 ft)	Drainage	Polyester
Connection aeration	Lapped flange DN125, PN10, PP	Diffusor	Membrane hose: PUR / SI Support tube: PP

Note: (1) nominal values

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