

## Product Data Sheet

# MembraConnect™ 16<sup>12</sup>

## Compact Ultrafiltration System for Wastewater and Drinking Water

<b>PRODUCT DESCRIPTION</b>	MembraConnect™ is an innovative, universally applicable ultrafiltration unit for raw water and drinking water treatment. MembraConnect™ contains the PFAS-free, patented C-MEM™ membrane for the removal of particulate turbidity, bacteria and viruses. It can be connected directly to tap water, wells, springs or other suitable raw water sources. <b>It is equipped with fully automated water backwash, air scouring, sludge draining, and membrane integrity test.</b> Typical applications are holiday homes, tiny houses, disaster relief, etc.	
<b>C-MEM™ MEMBRANE</b>	Material:	HD-PE (High Density-Polyethylene)
	Medium pore size:	20 nm (0.02 µm)
	Dimensions:	Ø: 0.4 / 0.2 mm (AD / ID)
	Bundle:	1400 fibres
	Filter area per bundle:	1.5 m <sup>2</sup>
<b>C-MEM™ CARTRIDGE</b>	Quantity of bundles:	8
	Filter area:	12 m <sup>2</sup>
	Dimensions:	H: 410 mm x Ø: 165 mm
	Connections:	1 ¼" External thread (air scouring, optional) 1 ¼" External thread (clean water)
<b>PRODUCT SPECIFICATIONS</b>	Quantity of cartridges:	16 (filter area: 192 m <sup>2</sup> )
	Tank / Piping material:	Stainless Steel 304/304L
	Dimension:	1,200 x 800 x 1,950 + 2x 1,200 x 800 x 1,450 mm
	Weight:	approx. 820 kg
	Connections:	Raw water and clean water: DN50 Backwash water: DN50 Drain: DN50
<b>FEED REQUIREMENTS</b>	Temperature range:	4 – 40°C / 39 - 104°F
	Solids Content:	< 10 mg/l
	Dissolved substances:	< 1,000 mg/l
<b>OPERATION INFORMATION</b>	Flow*:	26 m <sup>3</sup> /h (at 2 bar) * dependent on degree of contamination and temperature
	Pressure:	1.0 – 6.0 bar
	Max. transmembrane pressure:	3.0 bar
	Max. backwash pressure:	1.0 bar
	Power supply:	400V/50Hz (3-phase)
	Power demand:	< 10 / 150 W / m <sup>3</sup> (without /with booster pump)
	Max. free chlorine (25°C / 77°F):	5000 ppm (9.5 pH)
	Max. total chlorine contact:	1.0 Mio ppm (hrs cumulative)

## PRODUCT HIGHLIGHTS

- Removal of particulate turbidity, bacteria and viruses up to 99.9999% (log 6 / log 5)
- EN ISO 9308 removal-tests based on Escherichia coli (ATCC 8739), Enterococcus Faecium (ATCC 19433), Brevundimonas diminuta (ATCC 19146) and Pseudomonas Phage Phi 6 (ATCC 59135)
- Membrane and other materials are in accordance with European Regulation EU No. 10/2011 and No. 1935/2004 for the use with drinking water
- Leak test of the unit in accordance with ASTM D 6908:2006; 'Standard Practice for Integrity Testing of Water Filtration Membrane Systems' passed
- No regular filter replacement needed. Service life of up to 10 years
- Automatic backwash of the membrane with treated water and air for sustainable high flux
- Automatic integrity test of membranes
- Fully automatic control of complete system (HMI PanelView 7 Plus Standard, Allen Bradley CompactLogix) incl. remote control
- Modular system pre-assembled and mounted on rack ready for connection (each module only L x W x H: 1,200 x 800 x 1,950 mm)
- Designed and made in Europe

## OPTIONAL PACKAGES

- Automatic in-situ chemical cleaning
- Pressure booster pump (for feed and backwash)
- System integration into the building management system



*The information contained in this document is deemed to be accurate and reliable. Nevertheless, it should not be construed as conferring any warranty or guarantee of performance. Dimensions and membrane geometry are subject to modification due to production and process enhancements. No responsibility, obligation, or liability is assumed for any outcomes or damages resulting from the utilization of the unit.*