



Hollow fiber ultrafiltration module for water and wastewater applications



General Information

The WMC200 UF010 is a tight ultrafiltration module, used for potable water production, RO pretreatment, municipal and industrial wastewater treatment. These modules excel in removing colloidal silica, turbidity, suspended solids, and virus and bacteria while offering outstanding pH and chlorine resistance and excellent mechanical strength of the fibers. The WMC200 UF010 modules can be used as final polishing step – for example to remove colloidal silica from boiler feed water or in the soft drink industry.

Membrane characteristics

Membrane material	Modified PES
Membrane fiber inner diameter	0.7 mm (0.028")
MWCO ¹	10 kDa
Filtration mode	Inside-Out; Vertical
Operation mode	Dead-end or cross-flow

Operating Conditions ²		
Typical flux	50 – 100 l/m²/h (30 – 60 gfd)	
Backwash flux	100 – 250 l/m²/h (60 - 150 gfd)	
Max. system pressure ³	5 bar (72 psi)	
Max. transmembrane pressure ³	5 bar (72 psi)	
Max. backwash pressure ³	4 bar (58 psi)	
Max. active chlorine concentration	500 ppm @ pH>10	
Max. cumulative active chlorine exposure	250,000 ppm-hours @ pH>10	
Max. particle size	150 μm	
Max. TSS	300 ppm	
Max. turbidity	150 NTU	
Max. Temperature during operation & cleaning	40°C (104°F)	
pH range during operation	2-12	
pH range during cleaning	1-13	

¹ Molecular Weight Cut Off (MWCO) is an estimation as it depends on size, shape, charge and polarity of the compound being tested, as well as test conditions. Testing was done with PEG.

² The limitations shown here are for general use. The values may be more conservative for specific projects to ensure the best performance and longest life.

³ Maximum pressures at 20°C (68°F).



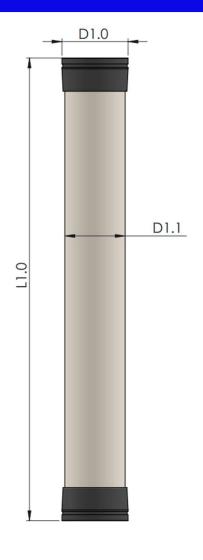
Module Specification

Materials of Construction

Housing	PVC-U
Internals	ABS/PP/Noryl
Potting	Epoxy resin

Dimensions

Membrane Surface Area	43 m²
L1.0	1537 mm (60.51")
D1.0	Victaulic OGS-groove 8"
D1.1	200 mm (7.87")



Available Module type

WMC200 UF010

Product-Code	ELEUF0021
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Storage Information

New modules in original packaging can be stored for max. 1 year from shipping date in a dry place, protected from sunlight or any heat source, at temperatures between 1 and 40°C (33 and 104°F);

Ex-factory storage solution: 84wt% water, 15wt% glycerin and 1wt% sodium metabisulfite;



Connection Configuration – Groove

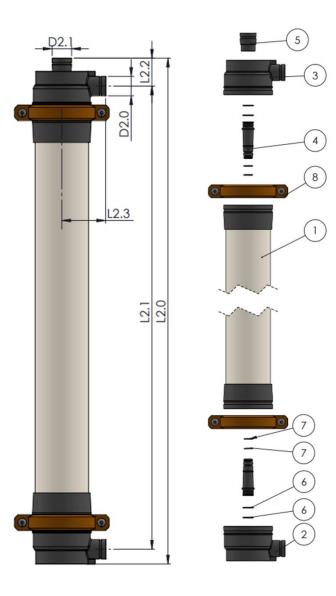
The WMC200 is a stand-alone filtration module designed for vertical skids. Its flexible and expandable concept allows for easy integration with individual connections for feed, concentrate, and permeate. It seamlessly adapts to customer-built skids, providing efficient and reliable filtration in a compact, open-platform design.

Dimensions

L2.0	1900 mm (74.80")	
L2.1	1739 mm (68.48")	
L2.2	105 mm (4.13")	
L2.3	165 mm (6.50")	
D2.0	2.5" Victaulic OGS groove	
D2.1	2.5" Victaulic OGS groove	

Assembly Components

(1)	WMC200 UF Module
(2)	End Cap Groove 8" Blank
(3)	End Cap Groove 8" Open
(4)	WMC200 groove permeate port
(5)	Permeate endcap connector
(6)	O-ring EPDM Ø40.8x4.6 mm
(7)	O-ring EPDM Ø34x4 mm
(8)	Victaulic Coupling Style 75 8" Gasket E



Available Set (Components 1-8)

WMC200 UF010 Groove Set

Set-Code	SETUF0021
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Weight Information	
Weight	WMC200 UF010 Groove Set
Dry weight Module (without assembly components)	28 kg (62 lbs)
Dry weight Module including assembly components	38 kg (84 lbs)
Filled Module including assembly components	78.5 kg (173 lbs)

Shipping Information

Each module is individually packed in a vacuum sealed plastic bag. For small quantities, modules and endcaps are shipped in separate cardboard boxes:

- Shipping weight per module: 35 kg (77 lbs.);
- Shipping weight per endcap assembly (2 end caps + grooved couplings): 11 kg (24 lbs.);

For large shipments, modules are loaded in a wooden crate with a max. of 20 modules per crate:

- Crate dimensions: 100 x 126 x 173 cm; 40 x 50 x 68 in (L x W x H);
- Shipping weight per crate (20 modules), excl. assembly components: 640 kg (1411 lbs.)

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