



**filtration**

**HYDROFLUX**  
epco

# WMC200 dNF40

**Technical  
Datasheet**

Nanofiltration membrane module for water and  
wastewater applications

## WMC200 dNF40

Nanofiltration membrane module for water and wastewater applications

### Product description

The WMC200 dNF40 nanofiltration modules have the following features:

- Use for treatment of ground and surface water; reuse of industrial and municipal wastewater effluents
- Excellent removal of color, turbidity, divalent ions and dissolved organics, including micropollutants
- Inside-out operation in a cross-flow filtration mode, backwashable
- Limited pretreatment required, no coagulation and no sludge production
- Vertical mounting in a skid
- Excellent pH and chlorine tolerance

### Membrane specifications

Membrane material	Modified PES
MWCO <sup>1</sup>	400 Dalton
Min. MgSO <sub>4</sub> rejection <sup>2</sup>	91%
Membrane charge	Negative @ pH=7
Membrane fiber inner diameter	0.7 mm

<sup>1</sup> 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.

<sup>2</sup> Test conditions: 5.0 mMol/L MgSO<sub>4</sub>, 3.0 bar, 25°C, v=0.5 m/s

### Typical operating ranges

Max. system pressure <sup>3</sup>	6 bar (90 psi)
Max. transmembrane pressure <sup>3</sup>	6 bar (90 psi)
Max. backwash pressure <sup>3</sup>	6 bar (90 psi)
Max. temperature during operation & cleaning	40°C (104°F)
pH range during operation	2-12
pH range during cleaning	1-13
Max. active chlorine concentration	500 ppm @ pH>10
Max. cumulative active chlorine exposure	250,000 ppm-hours @ pH>10
Cross-flow velocity range <sup>4</sup>	0.1 – 1.0 m/s (2 – 20 m <sup>3</sup> /h per module) 0.33 – 3.3 ft/s (8.8 – 88 gpm per module)

<sup>3</sup> Maximum pressures at 20°C.

<sup>4</sup> Recommended velocity depends on feed water quality.

### Feed water specifications

Max. TSS	300 ppm
Max. turbidity	150 NTU
Max. particle size	150 µm

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### Module specifications

**Membrane Surface Area** 43 m<sup>2</sup> (463 ft<sup>2</sup>)

#### Module Dimensions

L1	1537 mm (60.51")	D1	200 mm (7.87")
L2	184 mm (7.24")	D2	2 ½"
L3	107 mm (4.21")	D3	1 ¼"
L4	157 mm (6.18")	D4	315 mm (12.40")
L5	1892 mm (74.50")	D5	342 mm (13.46")
L6	1637 mm (64.45")		
L7	148 mm (5.83")		
L8	198 mm (7.80")		
L9	184 mm (7.24")		

### Materials of construction

<b>Housing</b>	PVC-U Cream
<b>Internals</b>	ABS/PP/PE
<b>Material</b>	Epoxy resin

### Assembly components

1. Module
2. Feed/concentrate connection
3. Nut & bolt
4. Permeate interconnector (closed; bottom side)
5. Flange (bottom side)
6. Intermediate flange
7. O-ring (permeate side)
8. Flange O-ring
9. Flange (top side)
10. Permeate interconnector (open; top side)
11. O-ring (feed side)
12. Permeate connection

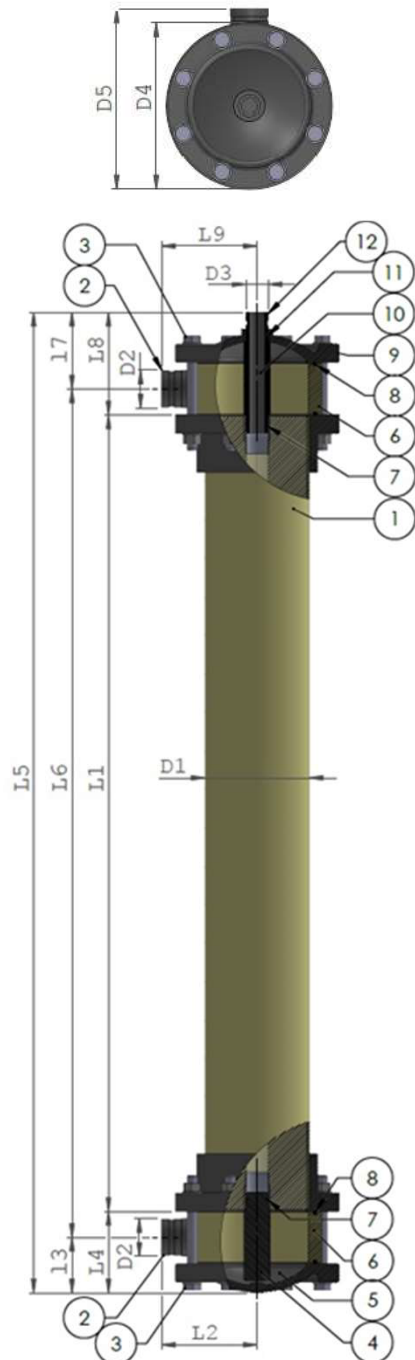
### Product certifications



K100616

K100658

K100659



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### Weight information

- Module (without accessories): 35 kg (81.5 lbs);
- Module with all accessories<sup>6</sup>: 54 kg (119.0 lbs);
- Module full of water and all accessories: 90 kg (198 lbs);

<sup>6</sup>accessories: endcaps, bolts, connectors, excl. feed and concentrate grooved couplings

### Storage instructions

- 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 0 and 40°C (32 and 104°F);
- Ex-factory storage solution: 79% water, 20% glycerin and 1% sodium bisulfite;

### 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;
- For large shipments, modules are loaded in a wooden crate with a max. of 8 modules per crate. Crate dimensions: 102 x 126 x 174 cm; 40 x 50 x 68 in (L x W x H);
- Shipping weight per module: 37 kg (81 lbs.);
- Shipping weight per endcap set: 10 kg (22 lbs.);
- Shipping weight per crate (8 modules), excl. endcap sets: 343 kg (756 lbs.);

Release WMC200F PVC-U dNF40-TDS 20210316  
(replaces WMC200F PVC-U dNF40-TDS 20200611)

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