



**filtration**

**Technical  
datasheet**

# **WMC110 dNF40**

Nanofiltration membrane module for water and  
wastewater applications

## WMC110 dNF40

Nanofiltration membrane module for water and wastewater applications

### Product description

The WMC110 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, 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 and used for small flow rates and pilots
- 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>	10 bar
Max. transmembrane pressure <sup>3</sup>	6 bar
Max. backwash pressure <sup>3</sup>	6 bar
Max. temperature during operation & cleaning	40°C
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	0.1 – 2.0 m/s (0.66 – 12.7 m <sup>3</sup> /h per module)

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

### 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** 14.5 m<sup>2</sup>

#### Module Dimensions

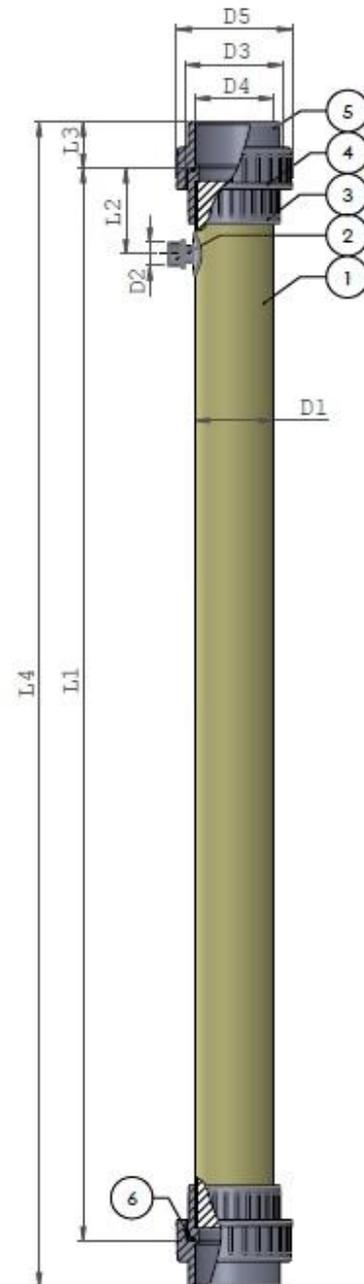
L1	1546 mm	D1	110 mm
L2	131 mm	D2	1.0" BSPP
L3	66 mm	D3	5.0" BSPP
L4	1678 mm	D4	110 mm
		D5	163 mm

### Materials of construction

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

### Assembly components

1. Module
2. Permeate connection
3. Union bush
4. Nut
5. Union end
6. O-ring



### Product certifications



K100616



K100658



K100659

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