

WMC110 dNF80 Short

Nanofiltration membrane module for water and wastewater applications



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Product description

The WMC110 dNF80 Short 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 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 ¹ 800 Dalton

Min. MgSO4 rejection ² 76%

Membrane charge Negative @ pH=7

Membrane fiber inner diameter 0.7 mm

Typical operating ranges

Max. system pressure ³	
Max. transmembrane pressure ³	bar bar
Max. backwash pressure ³	bar bar
Max. temperature during operation & cleaning 4	40°C
pH range during operation 2	2-12
pH range during cleaning 1	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 $0.1 - 2.0 \text{ m/s} (0.66 - 12.7 \text{ m}^3/\text{h per module})$

Feed water specifications

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

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.

² Test conditions: 5.0 mMol/L MgSO4, 3.0 bar, 25°C, v=0.5 m/s

³ Maximum pressures at 20°C.



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Module specifications

Membrane Surface Area 5.6 m²

Module Dimensions

L1 670 mm D1 110 mm
L2 131 mm D2 1.0" BSPP
L3 66 mm D3 5.0" BSPP
L4 802 mm D4 110 mm
D5 163 mm

Materials of construction

Housing PVC-U Cream

Internals PE

Material Epoxy resin

Assembly components

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

D3 D4 5 (4) 3(2) 1 D1 D1 D1

Product certifications





KTW

K100616

K100658

K100659





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Release WMC110 dNF80 short-TDS 20200611 (replaces WMC110 dNF80 short-TDS 2009)

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