



Technical
datasheet

filtration

WMC110 dNF80

Nanofiltration membrane module for water and
wastewater applications

WMC110 dNF80

Nanofiltration membrane module for water and wastewater applications

Product description

The WMC110 dNF80 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. MgSO ₄ rejection ²	76%
Membrane charge	Negative @ pH=7
Membrane fiber inner diameter	0.7 mm

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

Typical operating ranges

Max. system pressure ³	10 bar
Max. transmembrane pressure ³	6 bar
Max. backwash pressure ³	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 ³ /h per module)

³ Maximum pressures at 20°C.

Feed water specifications

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

WMC110 dNF80

Nanofiltration membrane module for water and wastewater applications

Module specifications

Membrane Surface Area 14.5 m²

Module Dimensions

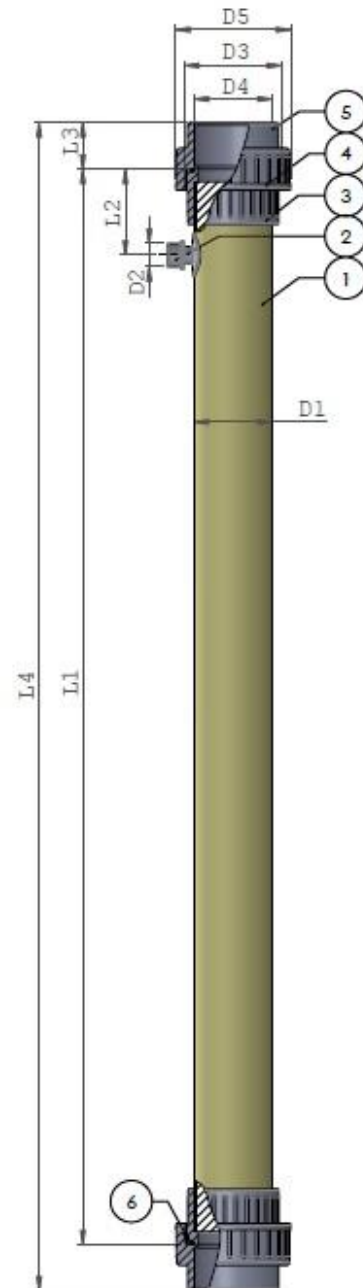
L1	1546 mm	D1	110 mm
L2	131 mm	D2	1.0" BSPP
L3	66 mm	D3	5.0" BSPP
L4	1678 mm	D4	110 mm
		D5	163 mm

Materials of construction

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



Product certifications



K100616



K100658



K100659

WMC110 dNF80

Nanofiltration membrane module for water and wastewater applications

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

Institutenweg 35
7521 PH Enschede
The Netherlands

+31 (0)850 479 900
info@nxfiltration.com
www.nxfiltration.com

The statements, technical information and recommendations contained herein are believed to be accurate at the date of publication. Since the conditions and methods of use of the product and/or the information referred to herein are beyond our control, NX Filtration B.V. expressly disclaims any and all liability as to any results obtained from or arising out of any use of the product and/or reliance on such information. NO WARRANTIES OR GUARANTEES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OF TITLE, OF NONINFRINGEMENT OF THIRD PARTY RIGHTS OR ANY OTHER WARRANTY ARE MADE CONCERNING THE PRODUCTS DESCRIBED AND/OR THE INFORMATION PROVIDED HEREIN.