nx filtration

HYDROFLUX epco

WMC110 dNF80

Technical Datasheet

Nanofiltration membrane module for water and wastewater applications

nx filtration

Technical datasheet

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, turbidity and dissolved organics, including some 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

[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 bar (45 psi), 25^{0}C (77°F), v=0.5 m/s (1.62 ft/s)

Typical operating ranges

Max. system pressure [3]	10 bar (145 psi)
Max. transmembrane pressure [3]	6 bar (90 psi)
Max. backwash pressure [3]	6 bar (90 psi)
Max. temperature during operation & cleaning	40^{0}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[4]	0.1 – 1.0 m/s (0.66 – 6.6 m3/h per module) 0.3 – 3.3 ft/s (2.90 – 29 gpm per module)

[3] Maximum pressures at 20°C.
[4] Recommended velocity depends on feed water quality.

Feed water specifications

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

nx filtration

Technical datasheet

WMC110 dNF80

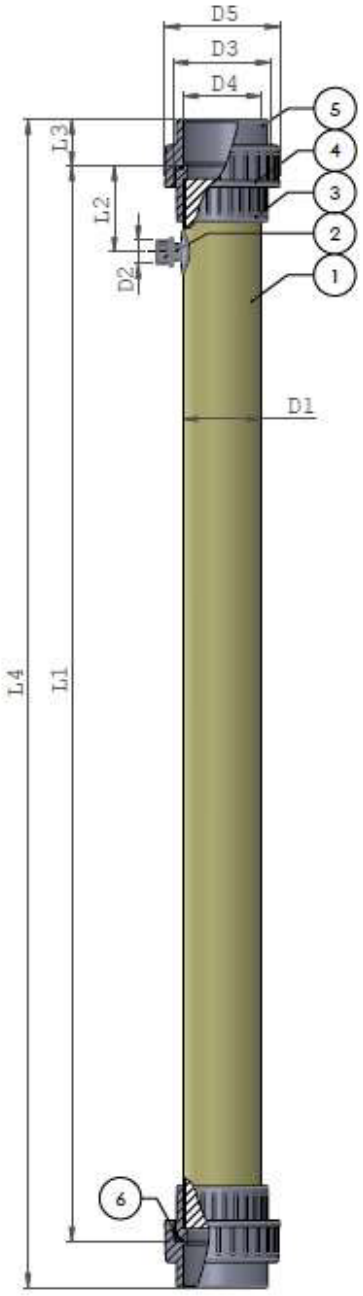
Nanofiltration membrane module for water and wastewater applications

Module specifications

Membrane Surface Area 14.7 m^2 (154 ft^2)

Module Dimensions

L1	1546 mm (60.86”)	D1	110 mm (4.33”)
L2	131 mm (5.16”)	D2	1.0” BSPP
L3	66 mm (2.60”)	D3	5.0” BSPP
L4	1678 mm (66.06’)	D4	110 mm (4.33”)
		D5	163 mm (6.42”)



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

kiwa NSF/ANSI 61 K100616

kiwa K100658

KTW K100659

Technical datasheet

WMC110 dNF80

Nanofiltration membrane module for water and wastewater applications

Weight information

- Module (without accessories): 11.5 kg (25.5 lbs);
- Module with all accessories (2 union ends): 12.5 kg (27.5 lbs);
- Module full of water and all accessories: 20 kg (44 lbs);

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;
- Modules and endcaps are shipped in the same cardboard box. Box dimensions: 180 x 21 x 21 cm; 70 x 8.3 x 8.3 in (L x W x H);
- Shipping weight per box: 13.5 kg (30 lbs.);

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

+61 2 9089 8833
info@hydrofluxepco.au
www.hydrofluxepco.au/