



Technical
datasheet

filtration

WMC200 dNF40

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, 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 ¹ | 400 Dalton |
| Min. MgSO ₄ rejection ² | 91% |
| 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 | 6 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 (2 - 38m 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 |

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Module specifications

Membrane Surface Area 43 m²

Module Dimensions

| | | | |
|----|---------|----|--------|
| L1 | 1537 mm | D1 | 200 mm |
| L2 | 184 mm | D2 | 2 ½" |
| L3 | 107 mm | D3 | 1 ¼" |
| L4 | 157 mm | D4 | 315 mm |
| L5 | 1892 mm | D5 | 342 mm |
| L6 | 1637 mm | | |
| L7 | 148 mm | | |
| L8 | 198 mm | | |
| L9 | 184 mm | | |

Materials of construction

| | |
|------------------|-------------|
| Housing | PVC-U Cream |
| Internals | ABS/PP/PE |
| Material | 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

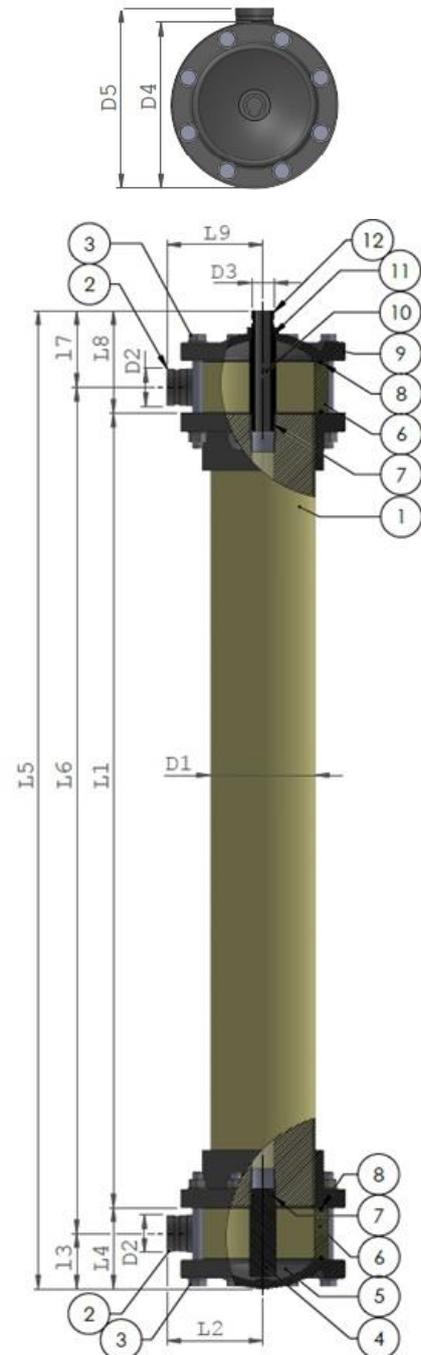
Product certifications



K100616

K100658

K100659



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