

NanoPro™ A-3012

Acid Stable Membrane Data Sheet

Product description

Membrane Chemistry:	Proprietary Composite Nanofiltration Membrane
Membrane Type:	Acid Stable Nanofiltration Membrane 8040 Spiral Wound Element
Construction*:	Feed Spacer: 31 mil, 46 mil Permeate Tube: Noryl; Polysulfone

*For special requests, please contact AMS

Specifications

Model	Rejection %			Flux LMH (GFD)	Membrane Area m ² (ft ²)	Feed Spacer mil
	Glucose	NaCl	MgSO ₄			
A-3012-8040-31N	96	40	96	90 (53)	31 (333)	31
A-3012-8040-31P						
A-3012-8040-46N					24 (264)	46
A-3012-8040-46P						

Test Conditions: 40 bar (580 psi), 30°C (86°F), Flux measured with RO water, Feed solutions for rejection tests are 3% glucose /3.2% NaCl/ 0.2% MgSO₄ in RO water. Permeate flux may vary for individual element but it will no more than 25% below the above value.

Operating Information(*)

Maximum Operating Pressure:	70 bar (1015 psi)
Maximum Operating Temperature:	80°C (176°F)
Maximum Cleaning Temperature:	80°C (176°F)
Allowable pH – Continuous Operation:	0-12
Allowable pH – Clean in Place (CIP):	0-13
Maximum Pressure Drop per Element:	0.5 bar (7.2 psi)
Recirculation Flow Rate	8040: Minimum 90 L/min (24 gpm), Maximum 280 L/min (74 gpm)

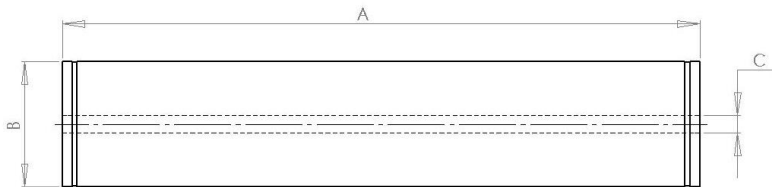
(*) Consult AMS Technologies for specific information

Recommended cleaning materials

- Depending on the nature of the feed material, a choice can be made from the following cleaning agents:
 - Sodium hydroxide at pH 10-12, 40°C (104°F)
 - Nitric or hydrochloric acid at pH 1-2, 40°C (104°F)
 - 0.2-1% w/w Na-EDTA, pH 10.5-11, 35°C (91°F)
 - 0.5% anionic surfactant (such as SDS), pH 10.5-11, 35°C (91°F)
- Water quality for cleaning:
 - Maximum turbidity is 1 NTU

Nominal Product Dimensions

For 8040:



Size	A		B		C	
	(Inches)	(mm)	(Inches)	(mm)	(Inches)	(mm)
8040	40	1016	7.9	200	1.122	28.5

Lubricants:

For element installation, use only water or glycerin to lubricate seals. The use of petroleum or vegetable-based oils or solvents may damage the element and void any warranty.

Preservation

- Short Term (up to two weeks): 0.25% w/w sodium metabisulfite.

Storage

- The membrane should not be allowed to dry. It should be stored in a sealed bag, at 4°-30°C (39-86°F).

Acid Stability:

Typical solutions include:

20% H₂SO₄ 20% HCl 4% HNO₃
30% H₃PO₄ 15% Acetic acid

Our membranes run at high and stable fluxes in very acidic environment for 12 months and more.

Other

- Do not expose the membrane to chlorine or other oxidants.