Commercial Nanofiltration Systems
Capacity: 11,700 to 28,800 GPD

NF-300 SERIES

Pure Aqua's nanofiltration is a membrane filtration process used most often with low total dissolved solids water such as surface water and fresh groundwater, with the purpose of softening (polyvalent cation removal) and removal of disinfection by-product precursors such as natural organic matter and synthetic organic matter. Nanofiltration is also becoming more widely used in food processing applications such as dairy, for simultaneous concentration and partial (monovalent ion) demineralization.

NF-28K-7340

Pure Aqua supplies a full line of standard and fully customizable nanofiltration systems, all of which are engineered using advanced 3D computer modeling and process design software for accurate and customized solutions.

Standard Features

- Powder coated carbon steel frame
- 4" TFC spiral wound membranes
- Stainless steel multi-stage pump with TEFC motor
- FRP membrane housings
- 5 micron cartridge prefilter
- 460V/3ph/60Hz power requirement
- Microprocessor based control panel
- Programmable time delay and set points
- LCD screen
- Motor starter
- NEMA 12 enclosure
- Low pressure switch
- High pressure switch
- Liquid filled pressure gauges
- Permeate conductivity monitor
- Permeate & concentrate flow meters

Available Options

- Feed water conductivity monitor
- Membrane cleaning skid
- Automatic hourly flush
- Feed/permeate blending
- 220V or 380-415V/3ph/50 or 60Hz
- Product tank level switch
- Feed or product pH monitor with sensor
- Feed ORP monitor with sensor
- Flow totalizer
- Chemical dosing systems
- Media prefiltration systems
- UV sterilization systems
- Water softeners
- Post RO systems
- Skid mounted with pre or post treatment
- Containerized NF systems
- Export crating

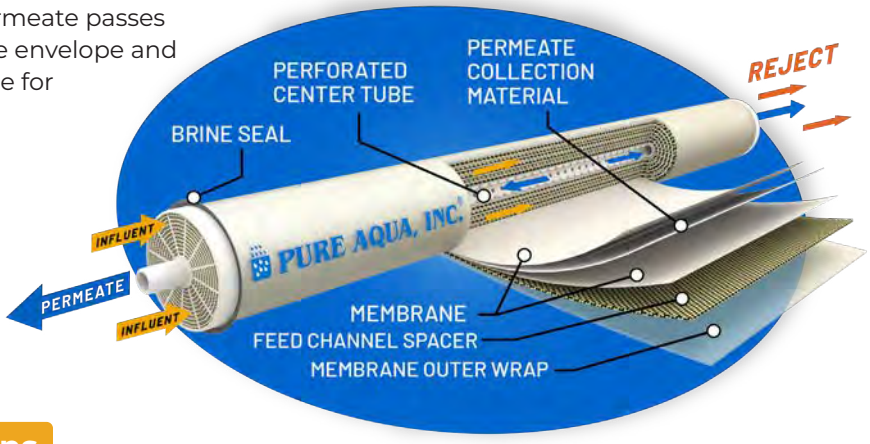
PURE AQUA, INC.®

Commercial Nanofiltration Systems
Capacity: 11,700 to 28,800 GPD

NF-300 SERIES

The spiral membrane is constructed from one or more membrane envelopes wound around a perforated central tube. The permeate passes through the membrane into the envelope and spirals inward to the central tube for collection.

The layers of the membrane envelope are detailed in the diagram to the right.



Operation Specifications

- Max. feed water temperature: 42°C
- Feed water pressure: 20 to 50 psi
- Operating pressure: 80 to 150 psi
- H_2S must be removed
- Turbidity should be removed
- Max. iron content: 0.05 ppm
- Feed water TDS: 0-1,000 ppm
- Equipment upgrade for higher TDS
- Hardness over 1 GPG requires antiscalant dosing
- pH tolerance range: 3-11
- Max. Silica Tolerance: 60 ppm @ 60% recovery
- Operate at higher TDS by lowering recovery

Model #	Permeate Flow Rate		Quantity of 4" Membranes	Motor Rating at 1,000 ppm 60Hz (hp)	Approx. Weight (lbs)	Dimensions L"xW"xH"
	GPD	M^3/D				
NF-11K-3340	11,700	44	9	3	750	141x35x66
NF-13K-5240	13,500	51	10	3	850	109x35x66
NF-16K-4340	16,200	61	12	3	875	151x35x66
NF-19K-5340	19,800	75	15	3	900	142x35x66
NF-21K-8240	21,600	82	16	3	950	113x35x71
NF-24K-6340	24,300	92	18	3	990	152x35x66
NF-28K-7340	28,800	109	21	5	1,025	144x35x64

Note: The above information to be confirmed after providing detailed water analysis. Nanofiltration systems are the same as RO systems, must have a good pretreatment and antiscalant dosing systems.

Pure Aqua also supplies: Custom Engineered Solutions, Multimedia Pretreatment, Activated Carbon Pretreatment, Water Conditioning, Chemical Dosing Systems, Ultraviolet (UV) Sterilizers and Ozonation Systems.

PURE AQUA, INC.®
Water Treatment and Reverse Osmosis Systems
sales@pureaqua.com
www.pureaqua.com
+1 (714)432-9996
+1 (844)309-7501

ISO 9001:2015 MEMBER · AWWA MEMBER · Water Quality Association

Authorized Dealer: