

MUNI NF series

membrane elements for municipal drinking water plants

The SUEZ MUNI NF series is engineered to provide a low pressure and cost effective nanofiltration alternative to standard RO treatment. The resulting product is virtually free of any harmful biological matter. Performance is characterized by hardness reduction, color removal, and organic pollutants reduction (such as the precursors to THM).

The MUNI NF membrane element is tested and certified by NSF international against NSF/ANSI Standard 61 for material requirements only.

The MUNI NF membrane is an element following a 100% Wet Test Quality Assurance.

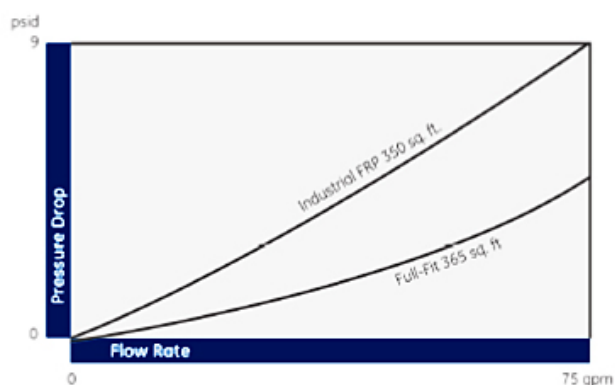


Figure 1: High Flow Rate at Low Pressure Drop

Table 1: Element Specification

Membrane	Thin-Film Membrane (TFM*)		
Model	Average permeate flow gpd (m ³ /day) ^{1,2}	Average MgSO ₄ rejection ^{1,2}	
MUNI-NF-400	12,000 [45.4]	98.0%	

¹ Average salt rejection after 24 hours of operation.
Individual flow rate may vary ±20%.

² Testing conditions: 2,000ppm MgSO₄ solution at 110psi (760kPa) operating pressure, 77 °F, pH 7.5 and 15% recovery.

Model	Active area ft ² (m ²)	Outer wrap	Part number
MUNI-NF-400	400 [37.2]	Fiberglass	1242400

Water Technologies & Solutions fact sheet

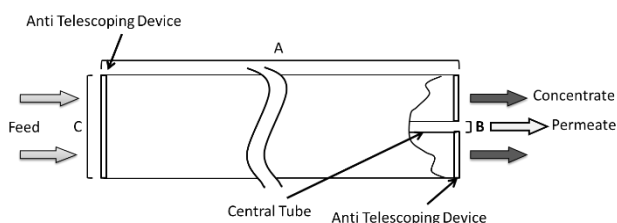


Figure 2 : Element Dimensions Diagram – Female

Table 2: Dimensions and Weight

Model	Type	Dimensions, inches (cm)			Boxed
		A	B	C	Weight lbs. (kg)
MUNI-NF-400	Female	40.0 [101.6]	1.125 [2.86]	7.9 [20.1]	32 [14.5]

Table 3: Operating and CIP parameters

Typical Operating Pressure	70-300psi (483 – 2,069kPa)
Typical Operating Flux	10-20GFD (15-35 LMH)
Maximum Operating Pressure	600psi (4,137kPa)
Maximum Temperature	Continuous Operation: 113°F (45°C) Clean-In-Place (CIP): 104°F (40°C)
Minimum Crossflow	30gpm (6.8m ³ /h)
pH Range	Continuous Operation: 3.0-9.0, Clean-In-Place (CIP): 2.0-11.0 ¹
Maximum Pressure Drop	Over an element: 12psi (83kPa) Per housing: 50psi (345kPa)
Chlorine Tolerance	1,000+ ppm-hours, dechlorination recommended
Feedwater ²	NTU < 1 SDI < 5
Recommended single element recovery	< 15 %

¹ Please refer to Cleaning Guidelines Technical Bulletin TB1194.

² SDI is measured on a non-linear scale using a 0.45-micron filter paper. Additionally, finer colloids, particulates and microorganisms that pass through the filter paper and not measured in the SDI test, will potentially foul the RO element. For performance consistency and project warranty, please use Winflows* projection software and consult your SUEZ representative.