MUNI RO HR series

Water Technologies & Solutions
fact sheet

reverse osmosis high rejection membrane elements for municipal drinking water plants

Engineered to treat municipal potable water with high total dissolved solids, the MUNI RO HR series enables drinking water processes to achieve an enhanced salt rejection.

MUNI RO HR series membrane elements are the solution for purification of drinking water that provides the benefits of both high rejection and high flux.

MUNI RO HR elements feature an FRP outer wrap and female end connections and are tested and certified by NSF international against NSF/ANSI Standard 61 for material requirements only.

Table 1: Element Specification

Membrane	Thin-film membrane (TFM*)

Model	Average permeate flow gpd (m3/day)[1,2]	Average NaCl rejection [1,2]	Minimum NaCl rejection [1,2]
MUNI-RO-400-HR	11,000 (41.6)	99.8	99.3
MUNI-RO-430-HR	12,000 (45.4)	99.8	99.3

[1] Average salt rejection after 24 hours of operation.
Individual flow rate may vary ±20%.
[2] Testing conditions: 2,000ppm NaCl solution at 225psi (1,550kPa) operating pressure, 77°F (25°C), pH7 and 15% recovery.

Model	Active area ft² (m²)	Outer wrap	Part number
MUNI-RO-400-HR	400 (37.2)	Fiberglass	3051521
MUNI-RO-430-HR	440 (40.9)	Fiberglass	3051522

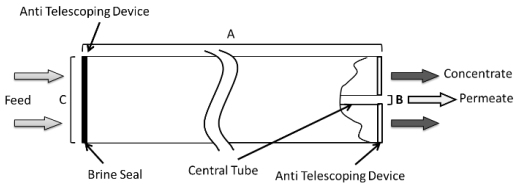


Figure 1 : Element Dimensions Diagram

Table 2: Dimensions and Weight

Model	Type	Dimensions, inches (cm)			Boxed
		A	B	C	Weight lbs (kg)
MUNI-RO-***-HR	Female	40.0 (101.6)	1.125 (2.86)	7.9 (20.1)	35 (16)

Table 3: Operating and CIP parameters

Typical Operating Pressure	200psi (1,379kPa)
Typical Operating Flux	10-20GFD (15-35 LMH)
Maximum Operating Pressure	600psi (4,137kPa)
Maximum Temperature	Continuous operation: 122°F (50°C), Clean In Place (CIP): 122°F (50°C)
Minimum Crossflow	30gpm (6.8m³/hr)
pH Range	Continuous operation: 4.0-11.0, Clean In Place (CIP): 1.0-13.0 [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.