Water Technologies & Solutions

fact sheet

MUNI RO HR LE Series

reverse osmosis high rejection low energy membrane elements for municipal drinking water plants

Engineered to treat municipal potable water at lower pressures, the MUNI RO HR LE series enables drinking water processes to achieve reduced operating costs while maintaining a high level of salt rejection.

MUNI RO HR LE series membrane elements are the solution for purification of drinking water that provide the benefits of both high rejection and low energy consumption.

MUNI RO HR LE elements feature a 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-LE	11,000 (41.6)	99.5%	99.0%
MUNI-RO-430-HR-LE	12,000 (45.4)	99.5%	99.0%

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

[2] Testing conditions: 500ppm NaCl solution at 115psi (862kPa) operating pressure, 77°F (25°C), pH7.5 and 15% recovery.

Model	Active area ft² (m²)	Outer wrap	Part number
MUNI-RO-400-HR-LE	400 (37.2)	Fiberglass	3051113
MUNI-RO-430-HR-LE	430 (40.1)	Fiberglass	3051114

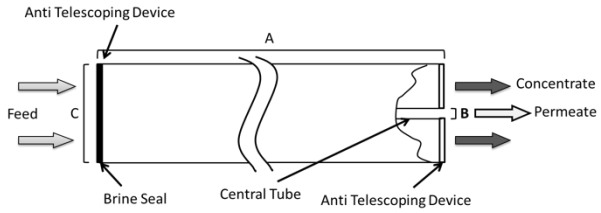


Figure 1 : Element Dimensions Diagram – Female

Table 2: Dimensions and Weight

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

Table 3: Operating and CIP parameters

Typical Operating Pressure	120 psi (830 kPa)
Typical Operating Flux	10-20GFD (15-35LMH)
Maximum Operating Pressure	400 psi (2,758 kPa)
Maximum Temperature	Continuous operation: 122°F (50°C) Clean-In-Place (CIP): 122°F (50°C)
pH Range	Optimum rejection pH: 7.0-7.5, Continuous operation: 4.0-11.0, Clean-In-Place (CIP): 1.0-13.0 [1]
Maximum Pressure Drop	Over an element: 12 psi (83 kPa) Per housing: 50 psi (345 kPa)
Chlorine Tolerance	1,000+ ppm-hours, dechlorination recommended
Feedwater [2]	NTU < 1 SDI < 5

[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 GE representative.