



Specifications



GE Infrastructure Water & Process Technologies

Merlin™ Reverse Osmosis Systems

System Performance Specifications

Average Permeate Flow Rate → 0.75 Gallons/Minute (2.84 Liters/Minute)
or
1080 Gallons/Day (4,090 Liters/Day)

Average TDS Rejection → 95% NaCl

Based on 3.44 bar (50 psi), 25°C (77°F), 750 mg/L NaCl, 33% recovery

Minimum and Maximum Performance Specifications*

| Specification | Minimum | Maximum |
|----------------------|---|--|
| Permeate Flow Rate | 0.50 Gallons/Minute (1.90 Liters/Minute) | 1.0 Gallons/Minute (3.78 Liters/Minute) |
| TDS Rejection (NaCl) | 90% | 99% |
| Concentrate Flow | 1.0 Gallons/Minute (3.80 Liters/Minute) | 2.0 Gallons/Minute (7.56 Liters/Minute) |

Based on 3.44 bar (50 psi), 25°C (77°F), 750 mg/L NaCl, 33% recovery

System Dimensions

Height → 17.05 inch (43.3 cm)
Length → 20.34 inch (51.7 cm)
Depth → 9.68 inch (24.6 cm)

*Pending final product testing





Minimum and Maximum Operating Conditions

| Condition | Minimum | Maximum |
|-------------------|--------------------|-----------------------|
| Inlet Pressure | 40 psi (2.76 bar) | 80 psi (5.52 bar) |
| Inlet Temperature | 40° F (4.44° C) | 100° F (37.78° C) |
| Inlet TDS | 50 mg/L | 2,000 mg/L |
| Inlet Hardness | 0 mg/L - (0 grain) | 171 mg/L - (10 grain) |
| Inlet Chlorine | 0 mg/L | 1.0 mg/L |
| Inlet Iron | 0 mg/L | 0.3 mg/L |
| Inlet Manganese | 0 mg/L | 0.1 mg/L |

*System is designed for use on potable water sources only.

Tubing/Fitting Dimensions

| | | |
|-----------------------------|---|--|
| Inlet Tubing | → | 4 feet of 1/2" natural tubing (1.22 meters of 12.7 mm natural tubing) |
| Concentrate Tubing | → | 4 feet of 3/8" black tubing (1.22 meters of 9.53 mm black tubing) |
| Permeate Tubing | → | 4 feet of 3/8" blue tubing (1.22 meters of 9.53 mm blue tubing) |
| Drain Tubing | → | 3 feet of 1/2" red tubing (0.91 meters of 12.7 mm red tubing) |
| Drain Connection | → | 1/2" (12.7 mm) |
| Carbon Post Filter | → | 3/8" quick disconnect fittings (9.53 mm quick disconnect fittings) |
| Inlet Connection (Option 1) | → | 3/8" x 3/8" x 1/2" tee (9.53 mm x 9.53 mm x 12.7 mm tee) |
| Inlet Connection (Option 2) | → | 1/2" x 1/2" x 1/2" tee (12.7 mm x 12.7 mm x 12.7 mm tee) |





Filter/Membrane Performance Specifications

| FILTER TYPE | DIMENSIONS | | FLOW RATE | PRESSURE DROP | AVERAGE LIFE |
|-------------------|------------|----------|-------------------------|-----------------------|--------------|
| | Length | Diameter | | | |
| Carbon Prefilter | 17.0" | 2.9" | 3.75 GPM (14.2 LPM) | 3 psi | 6 months |
| RO Element | 18.75" | 3.16" | 0.375 GPM (1.42 LPM) | Pending Final Testing | 3 years |
| Carbon Postfilter | 10.5" | 2.6" | .750 GPM (2.8 LPM) | Pending Final Testing | 6 months |

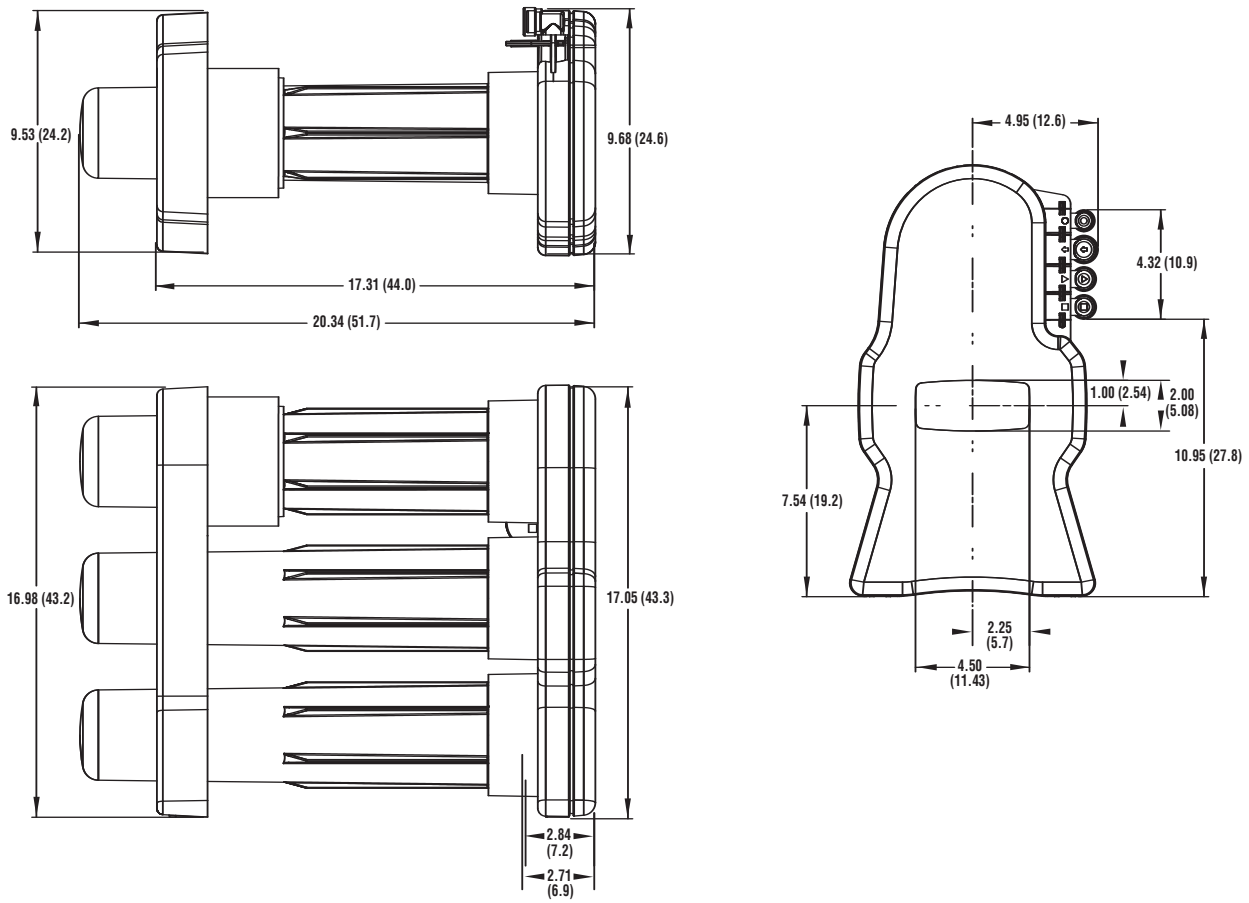
Based on:

50 psi (3.4 bar), 77° F (25° C), 750 mg/L NaCl, 33% Recovery, 1.0 mg/L inlet chlorine

Options

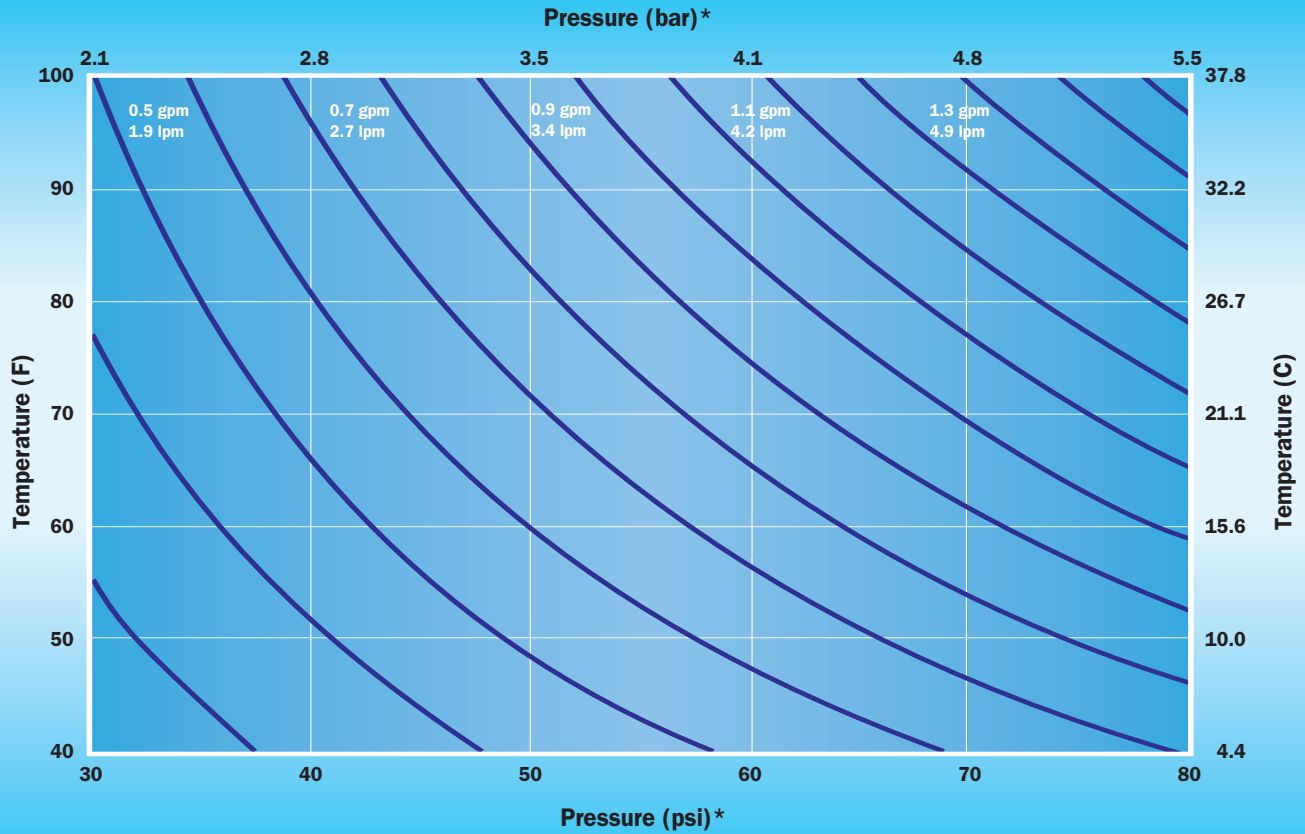
- Booster Pump → For low pressure applications
- Membrane Rinse System → Permeate flushing accumulator
- Ice Maker Installation Kit → Connections to 1/4" ice maker line

Outline Dimensions – Inches (cm)





Estimated System Flow Rate (GPM) Temperature vs. Pressure @750ppm NaCl/RO



*Pressure measured at membrane element inlet.

Flow Adjustment Based on TDS
Estimated Flow Change from
750ppm NaCl/RO = -0.0002 (TDS) + 0.15

For More Information:

Call **GE Infrastructure Water and Process Technologies; Household Water Group** at **(262) 238-4400** or **(800) 279-9404**, or visit **www.gewater.com**



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