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

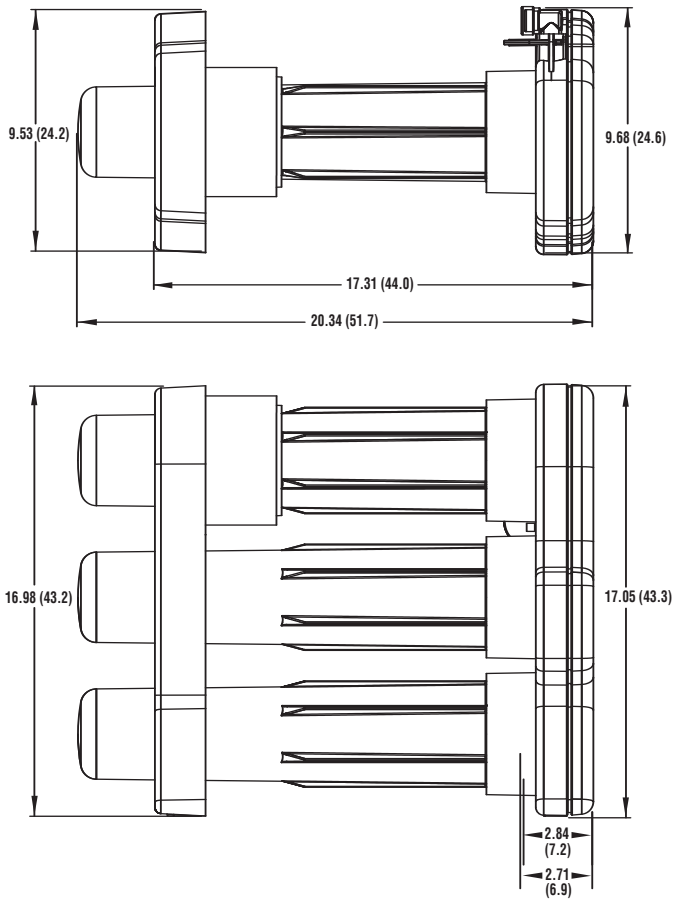
FILTER TYPE	DIMENSIONS Length	Diameter	FLOW RATE	PRESSURE DROP	AVERAGE LIFE
Carbon Prefilter	17.0"	2.9"	3.75 GPM (14.2 LPM)	3 psi	6 months
RO Element	18.75"	3.16"	0.375 GPM (1.42 LPM)	Pending Final Testing	3 years
Carbon Postfilter	10.5"	2.6"	.750 GPM (2.8 LPM)	Pending Final Testing	6 months

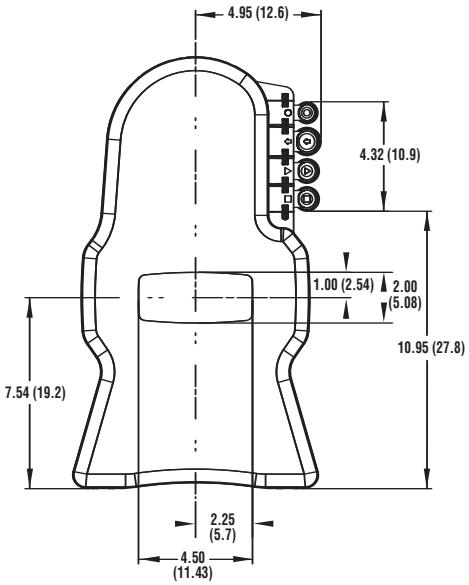
Based on:
50 psi (3.4 bar), 77° F (25° C), 750 mg/L NaCl, 33% Recovery, 1.0 mg/L inlet chlorine

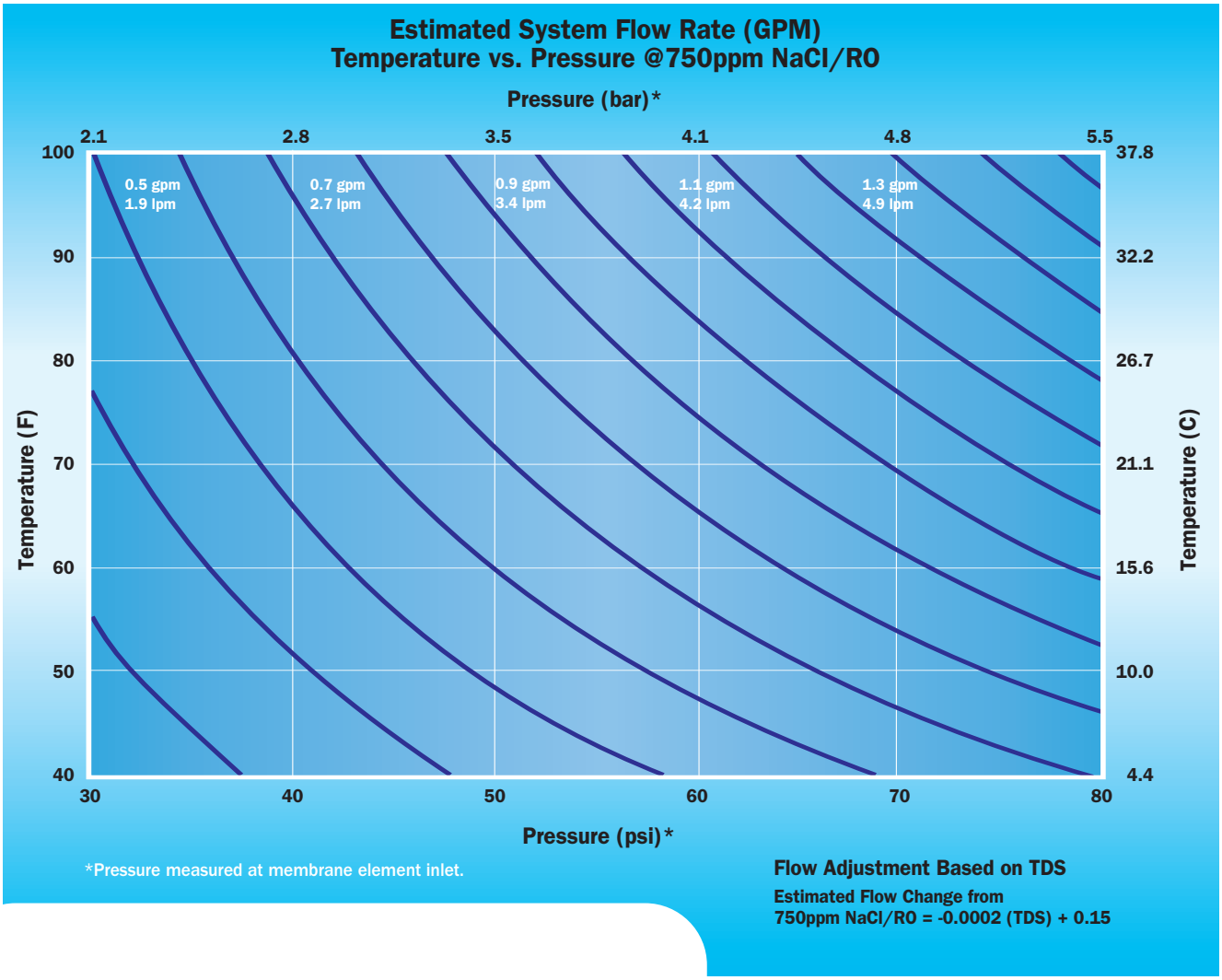
Options

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)







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**

North American Sales
5730 N. Glen Park Road
Milwaukee, WI
53209-4403
USA
(262) 238-4400 Phone
(262) 238-4402 Fax

Euro/Africa Operations
230 rue Robert Schuman
ZA des Uselles
F-77350 Le Mée sur Seine
FRANCE
+33 1 64 10 2000 Phone
+33 1 64 10 3747 Fax

Asia/Pacific Operations
1044/8 SOI 44/2
Sukhumvit Road Parkanog
Bangkok 10110
THAILAND
+66 2 38 14213 Phone
+66 2 39 18183 Fax

Corporate Headquarters: 5951 Clearwater Drive, Minnetonka, MN 55343-8995 • (952) 933-2277 Phone

© Copyright 2004 GE Infrastructure Water & Process Technologies

Printed in USA, P/N 1243156 Rev.A