



WATERITE TECHNOLOGIES, INC.

3-75 Meridian Drive

Winnipeg, MB

Canada R2R 2V9

PHONE: (204) 786-1604

FAX: (204) 783-1599

Email: waterite@waterite.com

Website: www.waterite.com

**WATERITE TECHNOLOGIES, INC.
PRODUCT SPECIFICATION SHEET
RO-SYS-005**

**VECTAMAXX™ RSR COMMERCIAL
REVERSE OSMOSIS SYSTEMS**

A. GENERAL SPECIFICATIONS

TYPE: Extra Low pressure RO, spiral wound membrane, recirculation loop

VOLTAGE: 120VAC/60hz

SERVICE AMPS:	120VAC
RSR1200	15
RSR2400	15

FEED WATER PRESSURE: 40 psi minimum, 65 psi maximum

FEED WATER TEMP: 40° C maximum

B. MATERIAL SPECIFICATIONS:

FRAME COLOUR: White powder coat

FRAME MATERIAL: Mild steel square tubular, c/w leveling feet

FRAME DIMENSIONS:

Height **RSR1200:** 34.5" (88 cm)

RSR2400: 52" (132cm)

Width 19" (48 cm)

Depth 19.5" (49.5 cm)

OPERATING PRESSURE: 130 psi (9.1 bar)



SPEC RO-SYS-005 R2

May 2016

MEMBRANE:	RSR1200: <u>BLACK MAX®</u>, spiral wound TFC, BME-4021SXL, 1200 USGPD permeate @ 500 mg/l NaCl, 100 psi, 25°C feed RSR2400: <u>BLACK MAX®</u>, spiral wound TFC, BME-4040SXL, 2400 USGPD permeate @ 500 mg/l NaCl, 100 psi, 25°C feed
UNIT DRY WEIGHT:	RSR1200: 94 lbs. (42.6 kg) RSR2400: 100 lbs. (45.3 kg)
INLET SOLENOID:	120VAC/60Hz, normally closed, 1/2" FNPT, 0 differential, SS
LOW PRESSURE SWITCH:	115VAC/60Hz, cut-out @ 15 psi
DRIVE PUMP AND MOTOR:	115VAC/60hz, ¾HP Horizontal multistage centrifugal pump, non self-priming, co-axial pump/motor design. All parts in contact with liquid are stainless steel. RSR1200: 6.5 USGPM @ 80 psi RSR2400: 6.5 USGPM @ 80 psi <i>(Based on 0 psi inlet pressure)</i>
CONCENTRATE ORIFICE (DLFC):	High-impact resin fitting insert, factory installed
RECIRCULATION VALVE:	SS needle valve, metal seated, o-ring packing
SYSTEM FITTINGS:	Stainless Steel
LOW PRESSURE FITTINGS:	Jaco standard pressure compression or DMT push-on
LOW PRESSURE TUBING:	Higher pressure 1/2" LDPE, clear
PRE-FILTRATION HOUSING:	Polypropylene, 4"x10", 100 psi rated, o-ring seated with threaded cap, pressure release, 1" inlet/outlet, full flow, 10 USGPM maximum
FILTER CARTRIDGE:	Melt-blown polypropylene, 5-micron



MEMBRANE HOUSING: 304 SS body, Noryl caps, band clamp closure, ¾" FNPT concentrate ports, ½" permeate port, 250 psi rating

PRESSURE GAUGES: Glycerin filled, stainless body, 1 1/2". 0-150 psi feed water pressure, system pressure

FLOW METERS: King-style panel mounted, 0.2-2.0 USGPM

C. PERFORMANCE SPECIFICATIONS

PERMEATE PRODUCTION

RATE:	RSR1200	0.8 USGPM (3.0 LPM)
	RSR2400	1.6 USGPM (6.0 LPM)

Calculated production rate @ feed water of 500 mg/l NaCl, 25°C, average system pressure @ 130psi, 60 % recovery, inlet pressure of 60 psi.

WASTE PRODUCTION RATE:

Recovery Rate @ 60%

Feed Water 1000 TDS	RSR1200	0.53 USGPM (2.0 LPM)
	RSR2400	1.06 USGPM (4.0 LPM)

MEMBRANE CROSSFLOW:	RSR1200:	(1) 6.5 USGPM (25 LPM)
<i>Shows crossflow by element in series order. Pressure drop 15 psi per element.</i>	RSR2400:	(1) 6.5 USGPM (25 LPM)

D. RECOMMENDED FEED WATER PRETREATMENT SPECIFICATIONS:

TDS:	< 1500 TDS
HARDNESS:	< 6 gpg (103 mg/l)
TOTAL IRON:	< .05 ppm
TANNIN:	< .5 ppm
CHLORINE:	< 0.1 ppm
pH:	5.5 – 9.5

ORGANIC/MICROBIOLOGICAL ACTIVITY:	0
MANGANESE:	<.05 ppm
HYDROGEN SULPHIDE:	0
TURBIDITY:	SDI < 5.0



E. FEED WATER REQUIREMENTS:

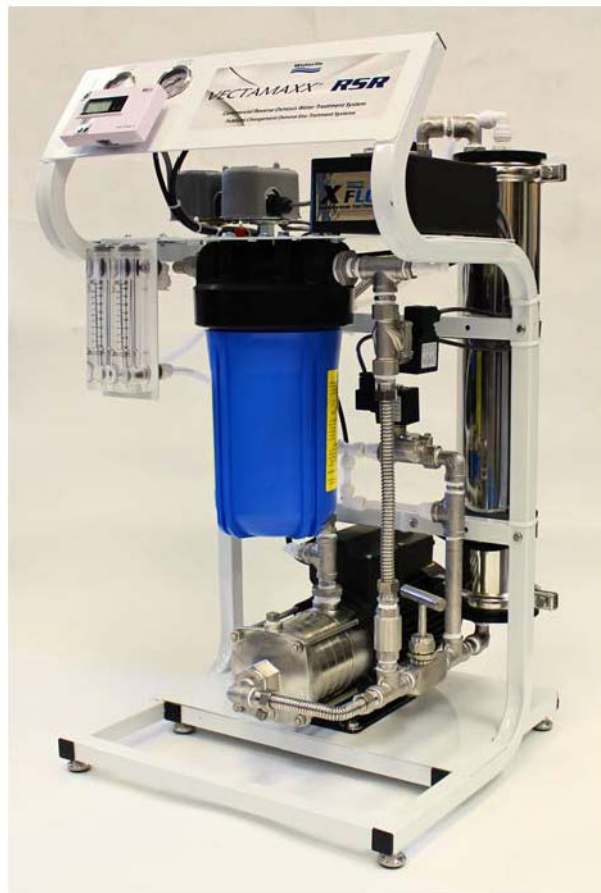
RSR1200: 2.2 USGPM minimum*
RSR2400: 4.4 USGPM minimum*

*includes 10% safety factor
on feed water exceeding 1000 TDS.
at recommended feed pressure

F. OPTIONAL EQUIPMENT

Auto flush solenoid and timer
Panel mount permeate/raw water TDS monitor
Permeate Pressure Switch

All materials and components used to fabricate RSR Series systems meet or exceed requirements specified by NSF Standard 61.



VECTAMAXX RSR1200

