



**eVOQUA**  
WATER TECHNOLOGIES

## **VANTAGE® M41 SELECT (RS) SERIES REVERSE OSMOSIS UNITS**

### **THE CLEAR ADVANTAGE IN MEMBRANE SYSTEMS**

Vantage® Reverse Osmosis (RO) units are pre-engineered and pre-assembled units designed for a variety of industrial and commercial applications. Vantage RO units offer you the greatest flexibility possible from a standard unit. Product lines within the Vantage single-pass RO family include the MicRO-Flex, M21, M41GP, M43, M83, M84 and M86; each designed for a specific range of flow rates.

Each M41 RS series RO unit consists of a vertical centrifugal high pressure feed pump with Optional Variable Frequency Drive (VFD), your choice of fiberglass reinforced plastic (FRP) or stainless steel (SST) pressure vessels, full-fit spiral wound thin-film composite (TFC) membranes, PVC/PEX low pressure feed, reject, recycle and product piping, stainless steel high pressure piping/rubber hose and a microprocessor controller.

#### **Vantage M41 RS Unit Benefits**

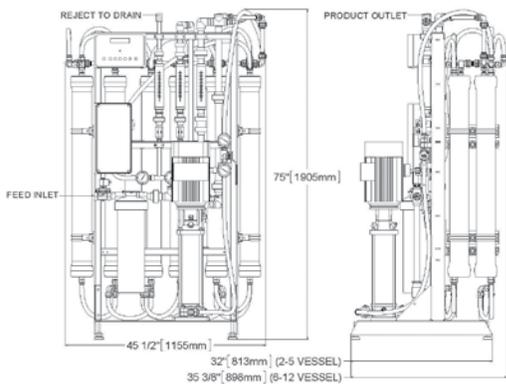
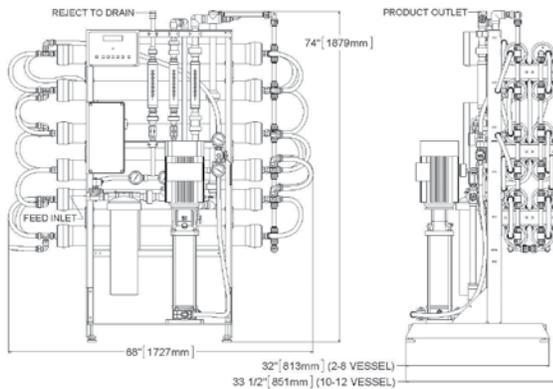
- Low energy TFC full fit membranes ensure optimum water quality
- Optional SST or FRP pressure vessels
- Microprocessor-based controller provides user-friendly programmable controls
- Optional VFD Controlled Feed Pump
- Auxiliary equipment interface provides system-wide control
- Reject recycle maximizes water recovery and minimizes waste
- Compact footprint saves valuable floor space
- Configurable in horizontal or vertical RO housing orientation to either maximize membrane serviceability or minimize footprint
- Easily expandable between 2 to 12 membrane units to provide increased flow demand to meet customer requirements and future needs (see equipment specifications for available expansion options)
- All M41RS (Select) units come standard with an RSVP (validation package) including NIST traceable calibrated certifications, certificates of conformance, and an installation/operational qualification (IOQ) protocol document



M41RS 12 MEMBRANE VERTICAL UNIT

MODEL NO	Flow Rate Specifications GPM Nominal (m <sup>3</sup> /hr)								Vessel Staging	Membrane Quantity	Customer Connection Specifications (FNPT)			Approximate Shipping Weight			
	Product		Feed		Reject		Reject/Recycle				Feed	Product	Reject	Horizontal Orientation		Vertical Orientation	
	gpm	m <sup>3</sup> /hr	gpm	m <sup>3</sup> /hr	gpm	m <sup>3</sup> /hr	gpm	m <sup>3</sup> /hr						lb	kg	lb	kg
M41RS002	2.8	0.6	3.7	0.8	0.9	0.2	5.0	1.1	1:1	2	1"	3/4"	1/2"	380	172	380	172
M41RS003	4.0	0.9	5.3	1.2	1.3	0.3	4.0	0.9	1:1:1	3	1"	3/4"	1/2"	412	187	412	187
M41RS004	5.2	1.2	6.9	1.6	1.7	0.4	3.0	0.7	1:1:1:1	4	1"	3/4"	1/2"	443	201	443	201
M41RS005	6.3	1.4	8.4	1.9	2.1	0.5	3.0	0.7	1:1:1:1:1	5	1"	3/4"	1/2"	475	215	475	215
M41RS006	7.5	1.7	10.0	2.3	2.5	0.6	2.0	0.5	1:1:1:1:1:1	6	1"	3/4"	1/2"	510	231	511	232
M41RS008	10.0	2.3	13.3	3.0	3.3	0.7	4.0	0.9	2:2:1:1:1:1	8	1"	1"	1/2"	540	245	558	253
M41RS010	12.5	2.8	16.7	3.8	4.2	1.0	6.0	1.4	3:2:2:1:1:1	10	1"	1"	1/2"	608	276	623	283
M41RS012	15.0	3.4	20.0	4.5	5.0	1.1	5.0	1.1	3:3:2:2:1:1	12	1"	1"	1/2"	640	290	688	312

## DIMENSIONS



## NOMINAL DESIGN PARAMETERS

Configuration	Multi-Stage, Single Pass
Feed Water Source	Well or Softened
Prefiltration Requirements	5 μ nominal (included)
Feed Water Fouling Index	Silt Density Index (SDI) < 3
Feed Water Temperature	65°F (18.3°C)*
Inlet Pressure Requirement	25 - 50 PSIG (172 - 345 KPA)
Product Pressure Available	15 PSIG (103 KPA)
System Recover (Nominal)	75%
Performance Basis	A specific computer projection must be run for each individual application.

\* Lower temperature may require larger booster pump.

If any of the feed water parameters are not within the limits given, contact Evoqua Water Technologies Technical Support.



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