



**eVOQUA**  
WATER TECHNOLOGIES



## **VANTAGE™ M43 REVERSE OSMOSIS UNITS**

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

Vantage™ Reverse Osmosis (RO) units are pre-engineered, pre-assembled units specifically 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 of units include the MicRO, M21, M41, M43, M83 and M84; each designed for a specific range of flow rates.

The Vantage M43 series RO units contain 4-inch membranes with flow rates of 10.5 to 23 gallons per minute (2.4 to 5.4 m<sup>3</sup>/hr). Many features of the Vantage M43 units allow for fast delivery and quick startup. The control system is an advanced microprocessor-based system that is very easy to use. High quality components ensure continuous and reliable operation.

Each M43 series unit is a single pass RO unit mounted on a polyurethane coated structural steel frame. The RO unit includes a high pressure feed pump, end entry pressure vessels, spiral wound thin film composite (TFC) membranes, PVC low pressure feed piping, stainless steel and brass high pressure piping, PVC reject and recycle piping, PVC product piping, and a microprocessor controller.

### **Vantage M43 Unit Benefits**

- TFC low energy membranes ensure optimum water quality
- Microprocessor-based controller provides user-friendly programmable controls
- Dial-up capability enables real-time remote monitoring
- Clean-in-place connections maximize system availability and serviceability
- Auxiliary equipment interface provides system-wide control
- Compact footprint saves valuable floor space

## SPECIFICATIONS

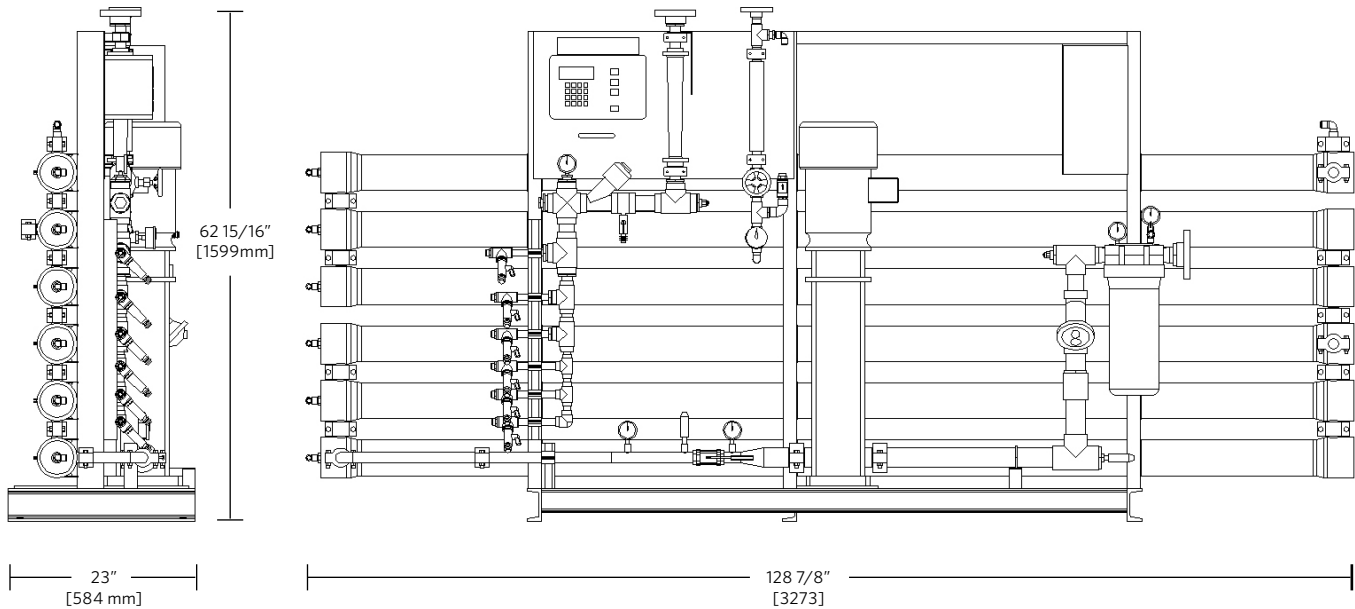
Model No*	Flow Rate Specifications GPM Nominal (m <sup>3</sup> /hr)			Vessel Staging	Membrane Quantity	Customer Connection Specifications			Utility Requirements***			Approximate Shipping Weight
	Product**	Feed	Reject			Feed	Product	Reject	High Voltage Service	High Voltage FLA	Pump HP	lb (kg)
M43R009	10.5 (2.4)	16.2 (3.7)	5.7 (1.3)	1:1:1	9	2"	1 1/2"	3/4" NPT	480 VAC	12	10	1110 (505)
M43R012	15 (3.4)	21.4 (4.9)	6.4 (1.5)	2:1:1	12	2"	1 1/2"	3/4" NPT	480 VAC	12	10	1250 (568)
M43R015	19 (4.3)	25.3 (5.7)	6.3 (1.4)	2:2:1	15	2"	1 1/2"	3/4" NPT	480 VAC	12	10	1400 (636)
M43R018	23 (5.2)	30.7 (6.9)	7.7 (1.7)	3:2:1	18	2"	1 1/2"	3/4" NPT	480 VAC	12	10	1550 (705)

\*The 4 designates 4" housing, the 3 designates three 40" elements in length and the R00X designates the number of membranes.

\*\*Product flow rates are based on equipment design parameters listed below. Product flow rates may not be appropriate for other feed waters.

\*\*\*Additional voltage options are available. Refer to equipment specifications.

## DIMENSIONS



## DESIGN PARAMETERS

Configuration	Multi-Stage, Single Pass
Feed Water Source	Well or Softened
Prefiltration Requirements	5 μ nominal
Feed Water Fouling Index	Silt Density Index (SDI) < 3
Design Feed Water Temperature	77°F (25°C)
Inlet Pressure Requirement	25 - 100 PSIG (172 - 689 KPA)
Product Pressure Available	25 PSIG (172 KPA)
System Recovery (Nominal)	75%
Performance Basis	A specific computer projection must be run for each individual application.

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



210 Sixth Avenue, Suite 3300, Pittsburgh, PA 15222

+1 (866) 926-8420 (toll-free) +1 (978) 614-7233 (toll) [www.evoqua.com](http://www.evoqua.com)

Vantage is a trademark of Evoqua, its subsidiaries or affiliates, in some countries.

All information presented herein is believed reliable and in accordance with accepted engineering practices. Evoqua makes no warranties as to the completeness of this information. Users are responsible for evaluating individual product suitability for specific applications. Evoqua assumes no liability whatsoever for any special, indirect or consequential damages arising from the sale, resale or misuse of its products.

© 2017 Evoqua Water Technologies LLC Subject to change without notice PWS-M43-DS-0717