

VANTAGE™

Reverse Osmosis Systems

V SERIES



THE RIGHT SOLUTIONS,
FLEXIBLE AND ECONOMICAL

*Custom solutions through
advanced standardization*

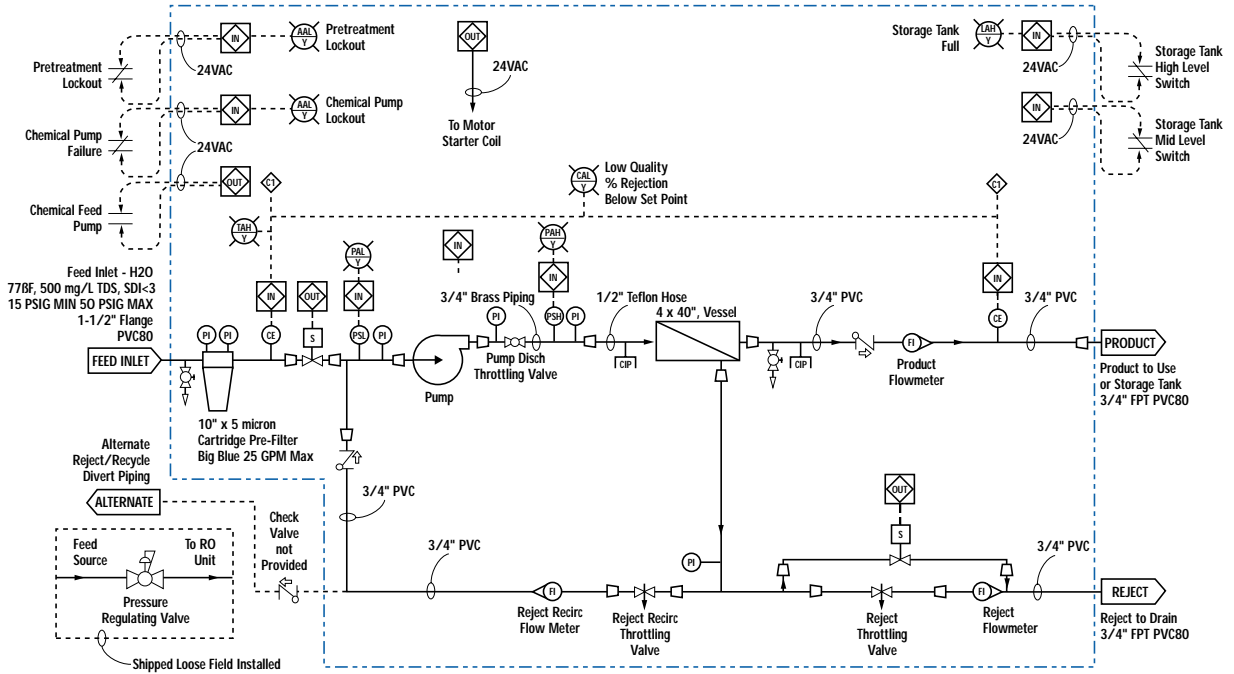
Vantage™ Reverse Osmosis units are pre-engineered systems specifically designed for a variety of industrial applications. Vantage systems offer you the greatest flexibility possible from a standard system. The control system is an advanced microprocessor based system that is very easy to use. The W, L, V and H Series families range in product flow from 0.1 to 23 gpm. With the many pre-packaged options available, we'll find the right solution for you.

Capabilities

- ◆ TFC RO Membranes ensure optimum water quality
- ◆ Microprocessor-based controller provides user-friendly programmable controls
- ◆ Small footprint minimizes required space
- ◆ High quality components ensure continuous, reliable operation
- ◆ Low energy membranes reduce the cost of ownership
- ◆ Reject recycle maximizes water recovery and minimizes waste
- ◆ Pre-engineered systems mean easy installation
- ◆ Clean-in-place connections maximize system availability
- ◆ Dial-up capability enables real-time remote monitoring
- ◆ Auxiliary equipment interface provides system wide control

USFilter
Taking care of the world's water.

VS/VC Process Flow Diagram



DESIGN PARAMETERS

Configuration	Multi-Stage, Single Pass
Inlet Pressure Requirements	25 PSIG
Feed Water Temperature	77°F
Feed Water Source	Well or Softened
Prefiltration Requirements	5 μ nominal
Feed Water Fouling Index	Silt Density Index (SDI) < 3
System Recovery (Nominal)	75% (50% for VS/VC 01, 02 & 03)
Product Pressure Available	25 PSIG
Membrane Salt Rejection	99% nominal (based on 2000 ppm NaCl @ 225 PSI, 77°F, pH 8, and 15% recovery)
Performance Basis	A specific computer projection must be run for each individual application

Common Specifications

Configuration	Multi-Stage, Single Pass
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GENERAL SPECIFICATIONS

Pressure vessels	Stainless steel
Conductivity sensor	Epoxy coated 3/4" MNPT
Flow Indicator	Rotameter, PVC/acrylic construction, 3/4" FPT connections
Flow Indicator (reject)	Rotameter, PVC/acrylic construction, 3/4" FPT connections
Flow indicator (recycle)	Rotameter, PVC/acrylic construction, 3/4" FPT connections
Control System	Microprocessor, NEMA 4X enclosure

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Control System	Microprocessor, NEMA 4X enclosure

OPERATING LIMITS

Maximum Feed Temperature	113°F
Minimum Feed Temperature*	50°F
Maximum Feed Pressure	50 PSIG
Minimum Feed Pressure	15 PSIG
*Lower temperature may require larger booster pump	

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Minimum Feed Temperature*	50°F
Maximum Feed Pressure	50 PSIG
Minimum Feed Pressure	15 PSIG

FEED WATER REQUIREMENTS

Maximum SDI Rating	3
Maximum Turbidity	1 NTU
Maximum Free Chlorine and/or chloramine	<0.02 PPM
Maximum pH (continuous)	11
Minimum pH (continuous)	4
Maximum pH (cleaning -30 min.)	12
Minimum pH (cleaning -30 min.)	1

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Maximum Turbidity	1 NTU
Maximum Free Chlorine and/or chloramine	<0.02 PPM
Maximum pH (continuous)	11
Minimum pH (continuous)	4
Maximum pH (cleaning -30 min.)	12
Minimum pH (cleaning -30 min.)	1

SYSTEM SPECIFICATIONS

Model Number with submersible pump	VS01	VS02	VS03	VS04	VS05	VS06	VS08
with centrifugal pump	VC01	VC02	VC03	VC04	VC05	VC06	VC08
Product Flow* (gpm)	1.4	2.8	4.0	5.2	6.3	7.5	10
Feed Flow (gpm)	2.8	5.6	8.0	8.0	8.3	10.0	13.3
Reject Flow (gpm)	1.4	2.8	4.0	2.8	2.0	2.5	3.3
Reject Recycle (gpm)	6.8	4.0	9.3	9.0	9.0	7.3	4.0
Cleaning Flow (gpm) at 60 PSIG max.	10	10	10	10	10	20	20
Connection							
Feed Inlet	1½" NPT	1½" NPT	1½" NPT	1½" NPT	1½" NPT	1½" NPT	1½" NPT
Product Outlet	¾" NPT	¾" NPT	¾" NPT	¾" NPT	¾" NPT	¾" NPT	¾" NPT
Reject to Drain Outlet	¾" NPT	¾" NPT	¾" NPT	¾" NPT	¾" NPT	¾" NPT	¾" NPT
Membranes							
Membrane/Vessel	1	1	1	1	1	1	1
Membrane Quantity	1	2	3	4	5	6	8
Membrane Type	TW30LE-4040	TW30LE-4040	TW30LE-4040	TW30LE-4040	TW30LE-4040	TW30LE-4040	TW30LE-4040
Vessels							
Vessel Array	1	1:1	1:1:1	1:1:1:1	1:1:1:1:1	2:1:1:1:1	2:2:1:1:1:1
Vessel Quantity	1	2	3	4	5	6	8
Pumps							
VS Model	Submersible Multistage	Submersible Multistage	Submersible Multistage	Submersible Multistage	Submersible Multistage	Submersible Multistage	Submersible Multistage
VC Model	Vertical Multistage	Vertical Multistage	Vertical Multistage	Vertical Multistage	Vertical Multistage	Vertical Multistage	Vertical Multistage
VS Motor HP (ref.)	1.5	1.5	3	3	3	3	3
VC Motor HP (ref.)	3	3	5	5	5	5	5
System Dimensions**							
H x W x D							
inches	72 x 38 x 34	72 x 38 x 34	72 x 38 x 34	72 x 38 x 34	72 x 38 x 34	72 x 38 x 34	72 x 38 x 34
cm	183 x 97 x 86	183 x 97 x 86	183 x 97 x 86	183 x 97 x 86	183 x 97 x 86	183 x 97 x 86	183 x 97 x 86
Shipping Weight							
lb	550	575	600	625	700	725	750
kg	250	261	273	284	318	330	341
Electrical							
High Voltage Service	480VAC	480VAC	480VAC	480VAC	480VAC	480VAC	480VAC
High Voltage Amp Draw VS/VC .	4.1/6.8	4.1/6.8	5.8/6.8	5.8/6.8	5.8/6.8	5.8/6.8	5.8/6.8

*Product Flow rates are based on equipment design parameters. These Product Flow rates may not be appropriate for other feed waters.

**Does not include operating space requirements.

Standard Options	Description
Modem	This option provides a modem and necessary communication port to allow for remote operation, monitoring and linking multiple Reverse Osmosis units together; each individual unit must be fitted with a systems controller. The components for this option are internal to the systems controller.
Motor voltages	This option provides a standard model Reverse Osmosis unit with voltage specific wiring and electrical components designed to work with the electrical service available. Please note, when ordering the 380VAC 50Hz voltage option, RO performance is slightly de-rated from the other standard models.

SERVICE AND TECHNICAL SUPPORT

USFilter service centers provide easy access to professional, local service. Our support network of technically trained field personnel ensures that you receive immediate and reliable service.

STANDARD PRODUCT ORDERING INFORMATION				
Vantage RO Part Number Matrix / Single Pass Reverse Osmosis Units				
	VRO	VC	04	AX
VANTAGE MODEL				
VS	Vertical w/ controller commercial RO submersible pump			
VC	Vertical w/ controller commercial RO centrifugal pump			
VESSEL QUANTITY DESIGNATION				
01	1 VESSEL			
02	2 VESSELS			
03	3 VESSELS			
04	4 VESSELS			
05	5 VESSELS			
06	6 VESSELS			
08	8 VESSELS			
VS/VC OPTION DESIGNATIONS				
AM	208VAC 3PH 60 HZ WITH MODEM			
AX	208VAC 3PH 60 HZ WITHOUT MODEM			
BM	230VAC 3PH 60HZ WITH MODEM			
BX	230VAC 3PH 60HZ WITHOUT MODEM			
CM	460VAC 3PH 60HZ WITH MODEM			
CX	460VAC 3PH 60HZ WITHOUT MODEM			
DM	380VAC 3PH 50HZ WITH MODEM			
DX	380VAC 3PH 50HZ WITHOUT MODEM			

USFilter staff is available for:

- Troubleshooting
- Preventative maintenance contracts
- Preventative and emergency maintenance on any manufacturer's system
- New system installations and upgrades
- Water sampling and analysis, and more

The quality of our product is reflected in the quality of our service professionals. We take pride in providing our customers with the best maintenance and service in the industry.

Call now for information on USFilter products or services.

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