



Description



TV-2000

	TV-2000	TV-4000	TV-6000 - 12000
Frame	Welded stainless steel tube		
Membranes	Low energy, thin-film (high rejection option)		
Vessels	PVC (stainless steel option)		
Pump	Brass Positive Displacement (SS option)	SS Multi-stage Centrifugal	
Gauges	Filter inlet/outlet, Vessel inlet/outlet, SS case, bronze internals, glycerine filled		
Valves	Brine and Recirculation control valves		
Switches	Low pressure cut-out		
Filters	10 micron, 20" pre-filter and housing		
Electrical*	110/220V 50/60Hz 1-phase 220/380/460V, 50/60Hz 3-ph.	220/380/460V 50/60Hz 3-phase	
Connections Feed/Drain/Product	3/4" FPT/1/2" QC/1/2" QC	3/4" FPT/1/2" hose/1/2" hose	
Control System	Microprocessor based		
Standard Panel Instruments	TDS Monitor, Recirculation flowmeter, Brine flowmeter, Product flowmeter		

*For 220/380/480 voltage/phase options and power specifications, please see the Tomar Electrical Datasheet

Specifications

Production rate and TDS rejection are based on membrane performance after 24 hours at 115 psig (10.3bar) net operating pressure, 77°F (25°C), pH 7.5, 15% recovery on feed water containing 1,500 ppm TDS. Flow tolerance is +/- 15%

Potential membrane foulants such as Iron, Manganese and Hydrogen Sulfide must be removed from the feed stream prior to the system.

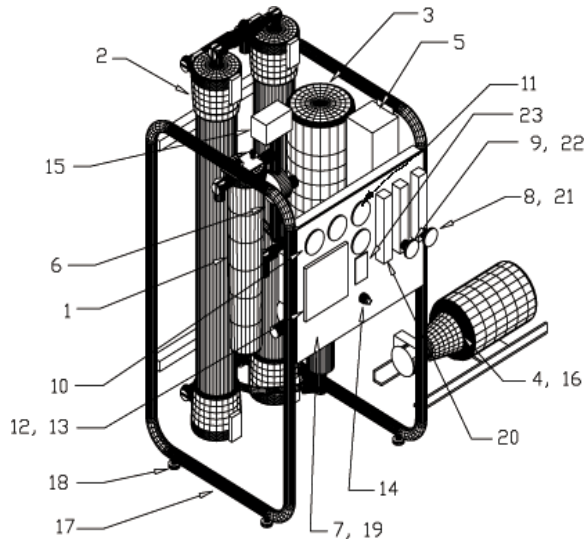
	TV-2000	TV-4000	TV-6000	TV-8000	TV-10000	TV-12000
Capacity	2000 GPD (7.6m ³ /d)	4000 GPD (15.1m ³ /d)	6000 GPD (22.7m ³ /d)	8000 GPD (30.2m ³ /d)	10000 GPD (37.8m ³ /d)	12000 GPD (45.3m ³ /d)
Membranes	1	2	3	4	5	6
Nominal/Maximum Operating Pressure	150/200 psi (10.3/13.8 bar)					
Min. Conc. Flow - Discharge + Recirc	3 gpm (0.68m ³ /h)			6-9 gpm (1.36-2.04m ³ /h)		
Nominal Recovery (with Recirc Valve)	31% (70%)	48% (70%)	58% (70%)	48% (70%)	54% (70%)	58% (70%)
Typical TDS Rejection	98%					
Max Feed Temp	113°F (45°C)					
Feed pH	3-10					
Feed Chlorination	Dechlorination reqd. if >0.1 ppm					
Maximum Feed TDS	5,000 ppm					
Motor Rating	1.0-1.5HP	1.0-1.5HP	1.5-2HP	2.0-3.0HP	3.0-5.0HP	3.0-5.0HP

System Options

Cleaning Skid • Product Storage Tanks • Tank Level Controls
Repressurization system • Automatic Flush • Pre/Post Treatment

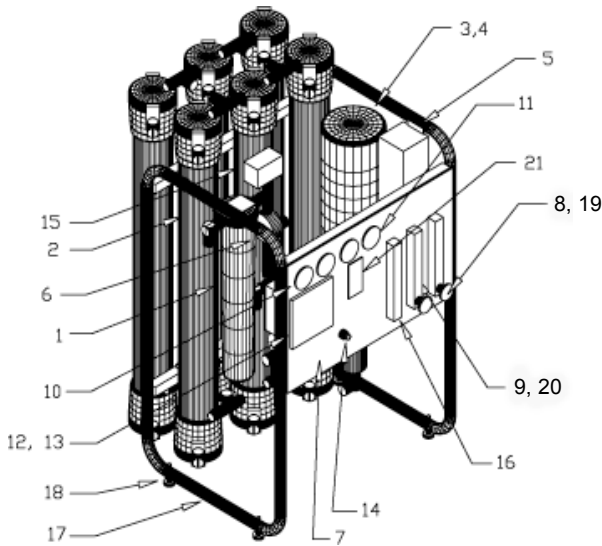


TV-2000 and TV-4000 System Diagram



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|--------------------------------|-----------------------------|
| 1. Prefilter | 12. PLC Controller |
| 2. Pressure Vessel Assembly | 13. Tank & PTL Switch Leads |
| 3. Pump & Motor (TV-4000) | 14. Main Power Switch |
| 4. Pump & Motor (TV-2000) | 15. Low Pressure Switch |
| 5. Motor Contactor & Ovl. Rly. | 16. Pressure Relief Valve |
| 6. Solenoid Valve | 17. SS Frame |
| 7. Monitoring Panel | 18. Levelling Feet |
| 8. Brine Control Valve | 19. Control Panel |
| 9. Conc. Recirc. Valve | 20. Product Flow Meter |
| 10. Prefilter In/Out Gauges | 21. Brine Flow Meter |
| 11. Vessel In/Out Gauges | 22. Recirc. Flow Meter |
| | 23. TDS Monitor |

TV-6000 to TV-12000 System Diagram



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|--------------------------------|-----------------------------|
| 1. Prefilter | 11. Vessel In/Out Gauges |
| 2. Pressure Vessel Assembly | 12. PLC Controller |
| 3. Pump | 13. Tank & PTL Switch Leads |
| 4. Motor | 14. Main Power Switch |
| 5. Motor Contactor & Ovl. Rly. | 15. Low Pressure Switch |
| 6. Solenoid Valve | 16. Product Flowmeter |
| 7. Monitoring Panel | 17. Frame |
| 8. Brine Control Valve | 18. Levelling Feet |
| 9. Conc. Recirc. Valve | 19. Brine Flowmeter |
| 10. Prefilter In/Out Gauges | 20. Recirc. Flowmeter |
| | 21. TDS Monitor |

TV-Series System Information

Dimensions and weight are for the system only. Systems are shipped on a boxed frame. A shipping crate is available for an additional charge.

	TV-2000	TV-4000	TV-6000	TV-8000	TV-10000	TV-12000
Weight lbs. (kg)	140 (64)	150 (68)	170 (157)	180 (82)	190(86)	200(91)
Dimensions	22"W x 26"D x 49"H (56 x 64 x 125cm)		29"W x 26"D x 49"H (74 x 64 x 125cm)			