

# TASK MASTER IV

## Commercial Industrial Water Softener and Filter Valve

- The **Task Master IV** is a cast and machined 316 Stainless Steel, five cycle, water softener control valve.
- The valve piston diameter is 1.685 inches with 1 ½" and 2" FNPT or FBSPT inlet outlet fittings available.
- The valve Cv = 15.
- There is only one moving part – the piston.
- The valve body and piston are 316 SS and the piston is stainless steel with EPDM seals.
- The valve has two different tank adaptors allowing for top mount or side mount configurations.
- The housing for the brine ejector is cast into the valve body making it an integral part of the valve.
- The piston is motor driven. Operation is not dependent on water pressure. It shifts smoothly without water hammer.
- The valve design assures synchronization of the drive assembly with the electronic timer and optical sensors making certain the piston is correctly positioned for each of the five cycles of softening.
- ERCT 99-day electronic timer with ability to independently program each cycle time.
- ERCd demand regeneration timer with variable reserve. ERCd operates a twin alternating system.
- The electrical enclosure is NEMA 4.
- Since brining and process control often must be coordinated with the regeneration cycles of a softener, the valve is designed to provide an on/off signal and dry contacts for external electrical functions.



- **Temperature rating is 180° F.**  
**Maximum operating pressure is 125 psi.**
- **Service flow Cv = 15.**  
**Backwash rate is 71 gpm at 25 psi head loss.**



### Control Valve Specifications.

The main control valve(s) shall be the Task Master IV with electronic controller to actuate the cycles of backwash, brine, slow rinse, fast rinse, and service for a water softener (or backwash, rinse and service for a filter). The control valve(s) shall be Task Master IV 5-Cycle, multi-port control valve(s) with machined and passivated CF8M Type 316 Stainless Steel body, Type 316 Stainless Steel piston assembly, and EPDM inserts and seals with electronic controller and drive motor assembly in a NEMA 4/IP65 Style

Enclosure. The valve shall operate with a single motor driven piston positioned by optical sensors. Valve inlet and outlet shall be 1 ½" FNPT or FBSPT. Backwash drain shall be ¾" or 1 ½" FNPT or FBSPT depending on flow. The brine inlet shall be ½". The one piece brine eductor shall be installed in the valve. The valve shall be equipped with threaded ¼" FNPT ports for the installation of sample taps and pressure gauges. Hard water by-pass shall be available during all regeneration cycles at 70 gpm or at the peak flow rate of the unit, at a pressure drop less than 25 psi, whichever is less. No hard water bypass option is obtained by adding a shut off kit to the valve. The valve shall be of a single piston design and shall not use multiple plungers or diaphragm valves. Maximum rated power shall be 125 watts with available current options of 115 VAC, 230 VAC, 100 VAC, 200 VAC, in 50 or 60 Hertz. Ambient operating temperature range shall be 34°F (1°C) to 150°F (65°C). Fluid temperature range shall be 34°F (1°C) to 180°F (82°C). Operating pressure range shall be 20-125 psi (1.38 - 8.6 bar).



**Top Mount  
Tank Adaptor**

**Side Mount  
Tank Adaptor**

### Stainless Steel "Overmolded" Piston



**BSPT** = British Standard Pipe Thread  
**NPT** = National Pipe Thread (US)  
**F** = Female; **M** = Male