Autotrol® ReadySoft™ Alternating and High Flow Systems

Product Specifications

The Autotrol ReadySoft alternating and high flow systems are sophisticated twin-tank designs, created for efficiency and convenience in a variety of applications. Incorporating an intelligent microprocessor control and water meter, the ReadySoft systems electronically monitor water usage and regenerate each valve at the appropriate time to provide an uninterrupted supply of treated water. The ReadySoft system's ease of operation is equaled only by the uncommon reliability of the Autotrol series 255 valve with its simple design and reinforced Noryl* construction.

Features and Operation

Each of the ReadySoft systems operate using two control valves connected by a manifold system. The main control, equipped with an easy-to-read, six-digit LED display and interface buttons, is used to program the system and provide operating instructions to the secondary control. While regeneration is initiated automatically when the resin bed is exhausted, the cycles of regeneration, such as Backwash, Slow Rinse, and Fast Rinse, can be adjusted to meet a wide variety of water challenges. In addition, salt settings and capacities may be programmed to fine-tune the operation and efficiency of the system.

Water usage information measured by the ReadySoft control system is stored in the main controller's non-volatile memory and can be easily accessed. This allows for an in-depth look at the application through a wide variety of water usage and operational information including:

- **Total water used since installation**
- **Average daily water usage for each day of the week**
- **Days since last regeneration**
- **Peak flow rate**
- **Time of day peak flow rate occurred**

*Noryl is a trademark of General Electric Company.

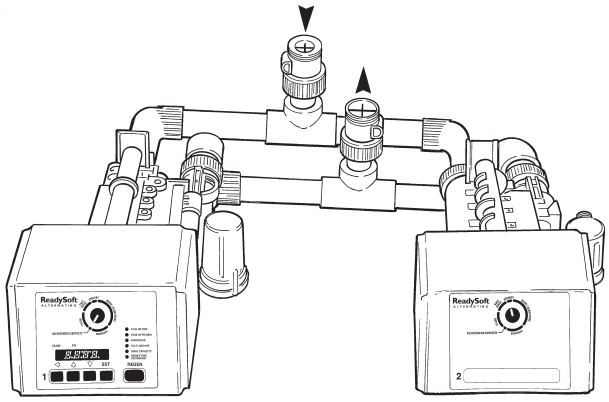
ReadySoft Alternating System

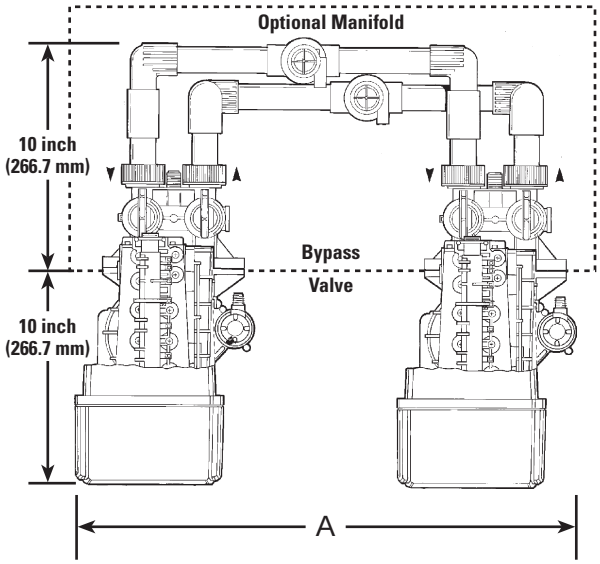
For use in residential and light commercial applications, the ReadySoft alternating system measures water flow through a flow meter in the outlet piping. During operation, when capacity of the on-line tank is reached, the main control switches the tank in standby into operation and places the on-line tank into regeneration. After completing the regeneration the tank stops in the standby position until the on-line tank becomes exhausted. Prior to coming on-line, the control valve in standby performs an automatic fast rinse to drain, cleansing the tank and removing any residual regenerant. During normal operation the main control displays the Capacity Remaining and Flow Rate for the on-line tank.

ReadySoft High Flow System

The ReadySoft high flow system is a parallel system that can provide in excess of 25 gpm of service water at peak conditions. The system measures water flow with a flow meter in the outlet piping. The control will monitor the water usage and allocate half of the total to each tank. When one tank reaches its capacity it will go into regeneration and all of the service flow will be allocated to the on-line tank. Once the regeneration of this tank is complete the control decides whether or not to regenerate the other tank and will go through the same process if needed. Regeneration can be initiated at a defined time or immediately upon bed exhaustion. During normal operation the main control will display the Capacity of tank 1, Capacity of tank 2, and Flow Rate.

Features





Estimated ReadySoft System Width

Tank Diameter in Inches	7	8	9	10	12	13	14
A	17-inch	18-inch	19-inch	20-inch	22-inch	23-inch	24-inch

Note: Above estimates are for ReadySoft control valve system width and do not include tank width in measurement.

Solid State Microprocessor
Provides maximum reliability for long-term, trouble-free service.

Turbine Operation
Single, moving turbine uses Hall effect sensor to measure water flow. There are no gears or cables to cause mechanical failure.

NOVRAM (Non-Volitile Random Access) Memory
Maintains program data and history data in the event of a power outage.

LED Display
Six-digit, easy-to-read display makes viewing and programming simple.

Standard 255 Valves and 900 Series Controls
Standard components mean customer recognition and limited stock of replacement parts.

Redundant Twin-Valve System
True twin-tank design provides continuous soft water while allowing one tank to operate independent of the other.

Optional Remote Regeneration
Initiation of regeneration is possible from remote locator or remote device.

Valve-Disc Technology
Valve discs are held closed by water pressure and regulate the on- and off-line status of the tanks without the use of solenoid valves or sliding-type seals.

Manual Regeneration Possible
Manual regeneration can be initiated with just the touch of a button.

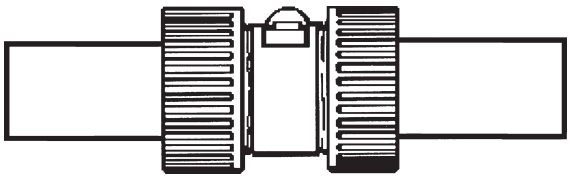
Salt Setting and Capacity Lockout
Allows you to lock out the salt and capacity settings so they cannot be changed by unauthorzied personnel.

Minimal Soft Water Used in Regeneration
The average system uses only 30 gallons of soft water for regeneration at the default setting.

Valve Specifications

Hydrostatic Test Pressure ..... 300 psi (20.7 bar)
Working Pressure ..... 20 to 127 psi (1.4 to 8.8 bar), 100 psi (6.9 bar) max in Canada
Voltage ..... 85 to 110 VAC 50/50 Hz, 102 to 132 VAC 60 Hz, 204 to 264 VAC 50 Hz, 187 to 242 VAC 50 Hz
Power ..... 4.5 volt-amps
Ambient Operating Temperature ..... 34˚ to 120˚F (1˚ to 49˚C)
Maximum Water Temperature ..... 100˚ F (38˚C)
Humidity ..... 10 to 100%, condensing allowed
Transformer ..... Wall mount with plug options
Pressure Tank Thread ..... 2 1/2 inch (63.5 mm) - 8 NPSM
Brine Line Thread ..... 1/4 inch (6.4 mm) NPT male or 3/8 JACO (9.5 mm)
Distributor Tube Diameter Required ..... 1 inch (25.4 mm)
Distributor Tube Length ..... 1 inch (25.4 mm) higher than top of mineral tank
Valve Module, Tank Adapter, Optional Bypass Valve ..... Reinforced Noryl
Optional Single-Valve Manifold ..... Brass or reinforced Noryl
Rubber Parts ..... Compounded for cold water service
Injector Size “A” White ..... See injector curves, page 4
Injector Size “B” Blue ..... See injector curves, page 4
Injector Size “C” Red ..... See injector curves, page 4
Backwash Controllers Available for ..... 7, 8, 9, 10, 12, 13, 14 inch (17.8, 20.3, 22.9, 25.4, 30.5, 33.0, 35.6 cm) diameter mineral tanks

Backwash Controller Number	7	8	9	10	12	13	14
gpm	1.2	1.6	2.0	2.5	3.5	4.2	4.8
L/min	4.5	6.1	7.6	9.5	13.2	15.9	18.2



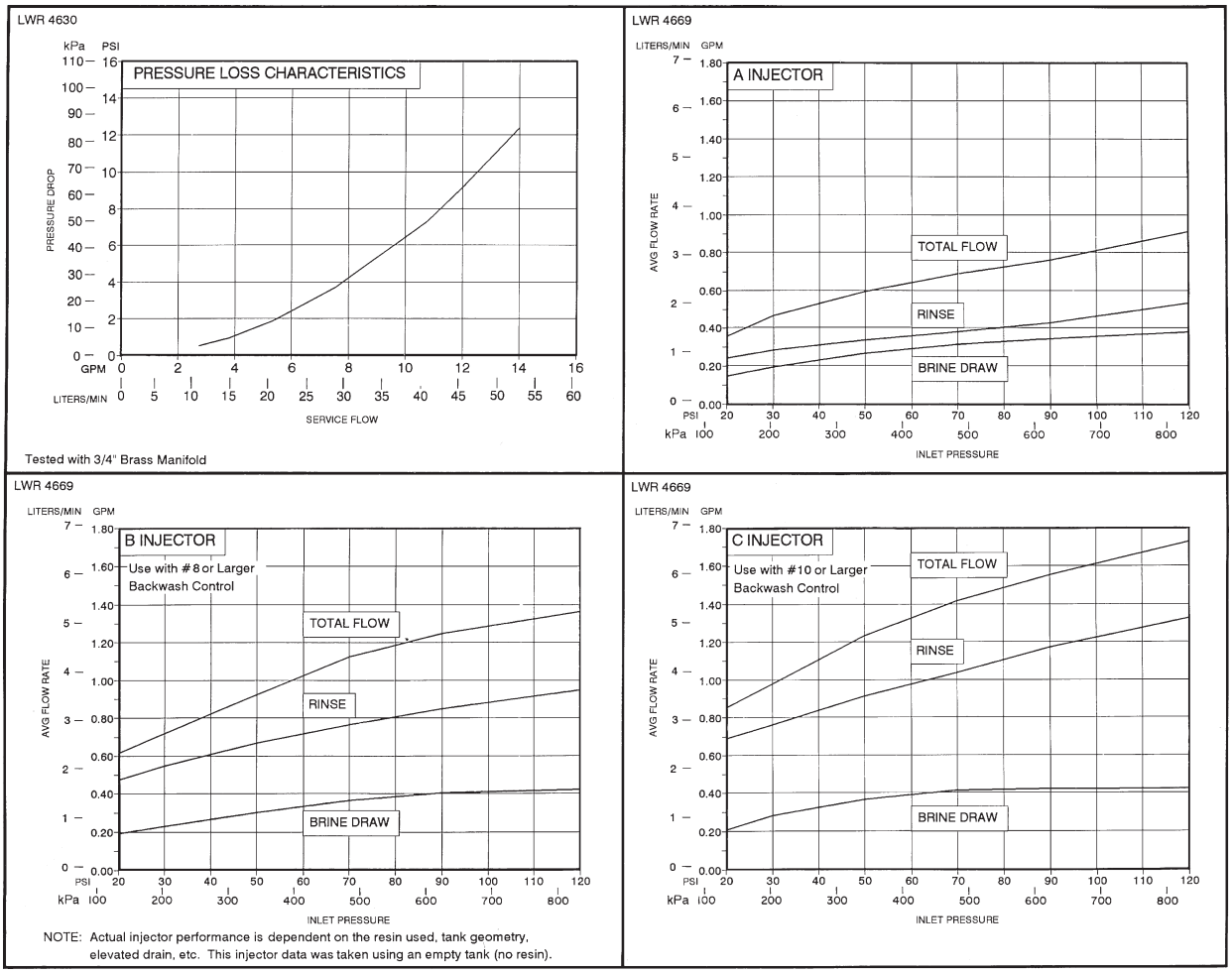
Flow Meter Specifications

Flow Rate Range (Recommended) ..... 0.50 - 25 gpm (0.11 - 5.7 m³/h)
Flow Rate Range (Minimum - Peak) ..... 0.25 - 40 gpm (0.06 - 9.1 m³/h)
Materials of Construction
- Housing ..... 30% Glass-Filled Noryl
- Turbine (impeller) ..... Polypropylene
- Bearings ..... Graphite-Filled Acetal
- Shaft ..... Stainless Steel

Accuracy ..... ± 3% of reading
Pressure Drop ..... 1.5 psi @ 30 gpm (0.10 bar @ 6.8 m³/h)
Maximum Water Temperature ..... 100˚F (38˚C)
Maximum Room Temperature ..... 122˚F (50˚C)
Maximum Pressure ..... 127.5 psi (8.8 bar)

Pressure Drop Curves

Autotrol 255 Valve



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Printed in USA, P/N 1204242 Rev. B