



Flow Rates (Valve Only)

- Service @ 15 psi (1.03 bar) drop15.5 gpm (58 Lpm)
- Backwash @ 30 psi (2.07 bar) drop.....6.5 gpm (24.6 Lpm)
- Service.....Cv = 3.99 (Kv = 3.35)
- BackwashCv = 1.20 (Kv = 1.02)

Tested with a 3/4-inch Brass Manifold

Control Operation

- Timer ConfigurationDemand Initiated Regeneration
- Cycles: Length: Standard
- Backwash3-30 Minutes
- Brine/Slow Rinse.....8-125 Minutes
- Fast Rinse.....2-19 Minutes
- Salt Dosage.....0.5-99.5 lbs or 0.22-45.0 kg

Valve Connections/Dimensions

- Tank Thread2 1/2 inches- 8 NPSM, Male
- Inlet/Outlet Manifold (Brass or Noryl*).....1-inch NPT or 1-inch BSPT, Female
.....3/4-inch NPT or 3/4-inch BSPT, Female
- Brine Line1/4-inch NPT, Male
- Distributor Tube Diameter1.050 inches (27 mm) or 13/16 inch (20.6 mm)
- Distributor Tube Length1 1/4 inches (32 mm) Above Tank

Design Specifications/Ratings

- Valve BodyGlass-Filled Noryl
- Rubber ComponentsCompounded for Cold Water
- Weight, Valve with Timer4.80 lbs (2.18 kg)
- Transformer Output.....12VAC 400 mA
- Transformer Input.....115V 50/60 Hz, 230V 50/60 Hz
.....100V 50/60 Hz
- Operating Pressure20-120 psi (1.38-8.27 bar)
.....Canada ...20-100 psi (1.38-6.89 bar)
- Water Temperature.....35°-100°F (2°-38°C)

Options

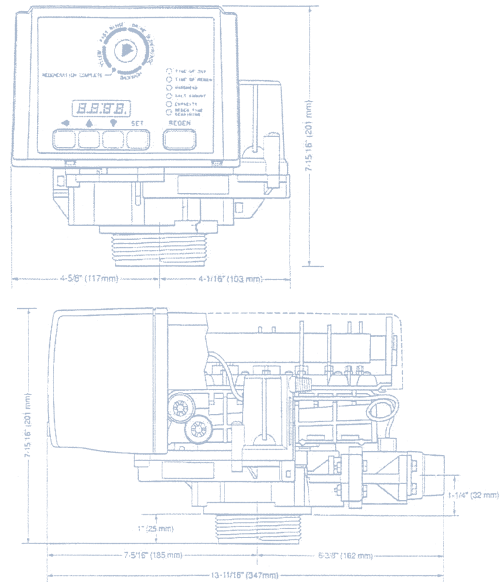
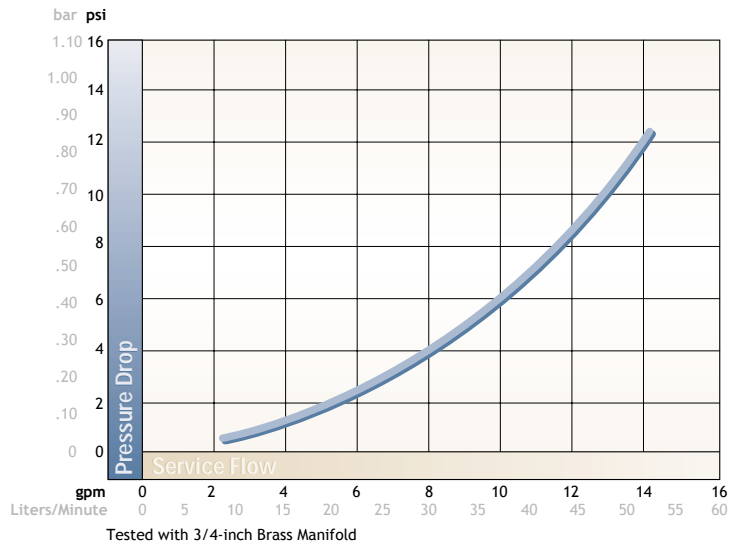
- Bypass ValveNoryl, 1/2-inch NPT Male, Drain
- Bypass Inlet/Outlet Fitting Kits:
 - Copper, Sweat Tube Adapter1 inch or 3/4 inch or 28 mm or 22 mm
 - CPVC, Solvent Weld Tube Adapter.....1 inch or 3/4 inch or 25 mm
 - Plastic NPT or BSPT Pipe Adapter1-inch Male or 3/4-inch Male
 - Brass NPT or BSPT Pipe Adapter1-inch Male or 3/4-inch Male
- Brine Refill Controls0.14 gpm (0.53 Lpm)
.....0.33 gpm (1.25 Lpm)
.....0.40 gpm (1.50 Lpm)

Backwash Flow Control Table

| Backwash Number** | 7 | 8 | 9 | 10 | 12 | 13 | 14 |
|---------------------------|-------|-------|-------|--------|--------|--------|--------|
| Tank Diameter (inches/mm) | 7/186 | 8/210 | 9/235 | 10/260 | 12/305 | 13/334 | 14/369 |
| Flow Rate (gpm) | 1.2 | 1.6 | 2.0 | 2.5 | 3.5 | 4.1 | 4.8 |
| Flow Rate (Lpm) | 4.5 | 6.0 | 7.6 | 9.5 | 13.2 | 15.5 | 18.2 |

*Noryl is a trademark of General Electric Company.
**Backwash flow controls sized for 5.0 gpm/ft².

Pressure Loss Characteristics



Injector Flow Rate Chart (gpm)

| "A" Injector with #7 Backwash Control | | | | "B" Injector with #8 Backwash Control | | | "C" Injector with #10 Backwash Control | | |
|---------------------------------------|------|--------|-------|---------------------------------------|--------|-------|--|--------|-------|
| psi | Draw | Motive | Rinse | Draw | Motive | Rinse | Draw | Motive | Rinse |
| 20 | 0.15 | 0.22 | 0.24 | 0.17 | 0.41 | 0.46 | 0.20 | 0.64 | 0.69 |
| 30 | 0.20 | 0.27 | 0.27 | 0.23 | 0.48 | 0.53 | 0.28 | 0.69 | 0.76 |
| 50 | 0.26 | 0.33 | 0.33 | 0.29 | 0.63 | 0.66 | 0.36 | 0.87 | 0.91 |
| 70 | 0.32 | 0.38 | 0.37 | 0.37 | 0.75 | 0.75 | 0.41 | 1.00 | 1.00 |
| 90 | 0.35 | 0.42 | 0.42 | 0.41 | 0.83 | 0.83 | 0.41 | 1.13 | 1.17 |
| 120 | 0.39 | 0.48 | 0.48 | 0.43 | 0.94 | 0.93 | 0.42 | 1.30 | 1.32 |

Injector Flow Rate Chart (Lpm)

| "A" Injector with #7 Backwash Control | | | | "B" Injector with #8 Backwash Control | | | "C" Injector with #10 Backwash Control | | |
|---------------------------------------|------|--------|-------|---------------------------------------|--------|-------|--|--------|-------|
| bar | Draw | Motive | Rinse | Draw | Motive | Rinse | Draw | Motive | Rinse |
| 1.38 | 0.56 | 0.83 | 0.91 | 0.64 | 1.55 | 1.74 | 0.75 | 2.42 | 2.87 |
| 2.08 | 0.75 | 1.02 | 1.02 | 0.87 | 1.82 | 2.00 | 1.06 | 2.61 | 2.87 |
| 3.46 | 0.98 | 1.25 | 1.25 | 1.09 | 2.38 | 2.50 | 1.36 | 3.29 | 3.44 |
| 4.85 | 1.21 | 1.44 | 1.40 | 1.40 | 2.84 | 2.84 | 1.55 | 3.78 | 3.78 |
| 6.24 | 1.32 | 1.59 | 1.59 | 1.55 | 3.14 | 3.14 | 1.55 | 4.28 | 4.16 |
| 8.32 | 1.47 | 1.81 | 1.81 | 1.62 | 3.56 | 3.52 | 1.59 | 4.92 | 4.99 |

Note: Injector tested on an empty tank (no resin). Actual injector performance is dependent on type of resin, tank geometry and drain line configuration. Motive flow rate indicates feedwater (excluding brine) through the injector nozzle during the brine draw cycle. Rinse flow rate indicates flow through the injector after closure of the air check.

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