



Osmonics®

Autotrol® Product Specifications

255/460i

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)
- Backwash13 Minutes
- Brine/Slow Rinse.....52 Minutes
- Fast Rinse.....6 Minutes
- Brine Refill.....9 Minutes

Valve Connections/Dimensions

- Tank Thread2 1/2 inches - 8, 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 1/8 ± 1/8 inches (29 mm ± 3 mm) Above Tank

Design Specifications/Ratings

- Valve BodyGlass-Filled Noryl
- Rubber ComponentsCompounded for Cold Water
- Weight (Valve with Control).....4 lbs (1.8 kg)
- Transformer Output.....12VAC 400 mA
- Transformer Input.....115V 50/60 Hz, 230V 50/60 Hz
.....100V 50/60 Hz
- Recommended Operating Pressure.....20-120 psi (1.38-8.27 bar)
.....Canada ...20-100 psi (1.38-6.89 bar)
- Water Temperature.....35°-100°F (2°-38°C)

Options

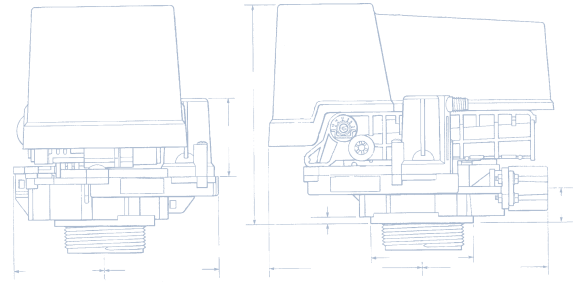
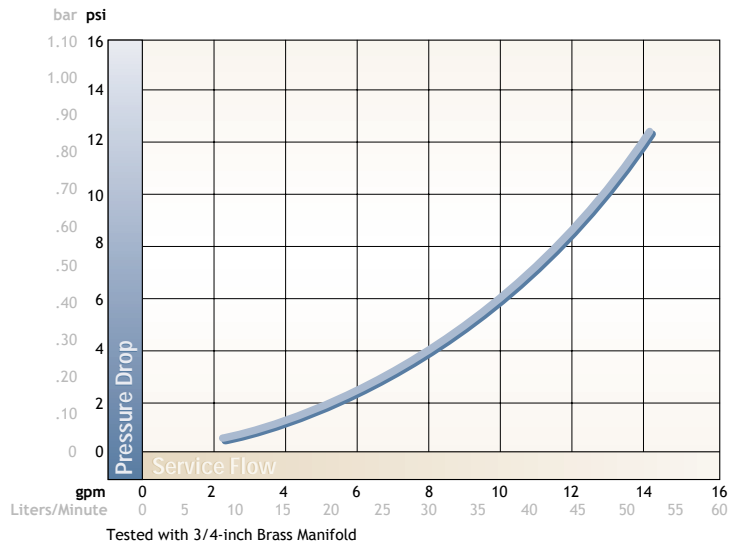
- Bypass ValveNoryl, 1/2-inch NPT Male, Drain
- Bypass Inlet/Outlet Fitting Kits:
- Copper, Sweat Tube Adapter1 inch or 3/4 inch or 28 mm or 22 mm
- CPVC, Solvent Weld Tube Adapter.....1 inch or 3/4 inch or 25 mm
- Plastic NPT or BSPT Pipe Adapter1-inch Male or 3/4-inch Male
- Brass NPT or BSPT Pipe Adapter1-inch Male or 3/4-inch Male
- Brine Refill Controls1-10 lbs (0.45-4.5 kg)
.....3-19 lbs (1.3-8.6 kg)

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)	1.3	1.7	2.2	2.7	3.4	4.5	5.3
Flow Rate (Lpm)	4.9	6.4	8.3	10.2	12.9	17.0	20.0

*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)

psi	"A" Injector with #7 Backwash Control			"B" Injector with #8 Backwash Control			"C" Injector with #10 Backwash Control		
	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)

bar	"A" Injector with #7 Backwash Control			"B" Injector with #8 Backwash Control			"C" Injector with #10 Backwash Control		
	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.

Call (719) 264-3937 for additional information, (800) 605-6698 in the U.S., or visit www.osmonics.com



Corporate Headquarters

5951 Clearwater Drive
 Minnetonka, MN
 55343-8995
 USA
 (952) 933-2277 Phone
 (952) 933-0141 Fax

Milwaukee Operations

5730 North Glen Park Road
 Milwaukee, WI
 53209-4454
 USA
 (262) 238-4400 Phone
 (262) 238-4402 Fax

Euro/Africa Operations

230 rue Robert Schuman
 ZA des Uselles
 F-77350 Le Mée sur Seine
 FRANCE
 +33 1 64 10 2000 Phone
 +33 1 64 10 3747 Fax

Asia/Pacific Operations

1044/8 SOI 44/2
 Sukhumvit Road Prakanong
 Bangkok 10110
 THAILAND
 +66 2 38 14213 Phone
 +66 2 39 18183 Fax