



# 255 Valve Specifications



# Specifications

## Flow Rates (Valve Only)

Service @ 15 psi (1.03 bar) drop .....	15.5 gpm (3.52 m <sup>3</sup> /h)
Backwash @ 25 psi (1.72 bar) drop .....	6.0 gpm (1.36 m <sup>3</sup> /h)
Service .....	Cv = 3.99 (Kv = 3.4)
Backwash .....	Cv = 1.20 (Kv = 1.0)

Note: Tested with a 3/4-inch brass manifold

## Valve Connections/Dimensions

Tank Thread .....	2-1/2-inches – 8, male
Inlet/Outlet Manifold (Brass or Noryl®) .....	1-inch NPT or BSPT, female 3/4-inch NPT or BSPT, female 3/4-inch NPT or BSPT, male, Noryl® 1/2-inch NPT or BSPT, male, Noryl®
Drain Line .....	1/2-inch (manifold dependent)
Brine Line .....	1/4-inch or 3/8-inch NPT, male; air check built into valve
Distributor Tube Diameter .....	1.050 inches (27 mm) or 13/16-inch (20.6 mm)
Distributor Tube Length .....	1-1/8 ± 1/8 inches (29 mm ± 3 mm) above top of tank

## Design Specifications/Ratings

Valve Body .....	Glass-filled Noryl® – NSF listed material
Rubber Components .....	Compounded for cold water – NSF listed materials
Valve Materials Certification .....	NSF/ANSI 44 rated component for material safety
Weight (Valve with Control) .....	4 lbs (1.8 kg)
Recommended Operating Pressure .....	20 - 120 psi (1.38 - 8.27 bar)
Canada .....	20 - 100 psi (1.38 - 6.89 bar)
Hydrostatic Test Pressure .....	300 psi (20.69 bar)
Water Temperature .....	35° - 100°F (2° - 38°C)
Ambient Temperature* .....	35° - 120°F (2° - 48.9°C)

\*Recommended use of outdoor cover for direct sunlight applications

## Options

Turbine for Demand Units .....	Standard manifold, 1-inch Autotrol turbine
Bypass Valve .....	Noryl®, 1-inch flow path, 1/2-inch (13mm) NPT male, drain

### Bypass Inlet-Outlet Fitting Kits:

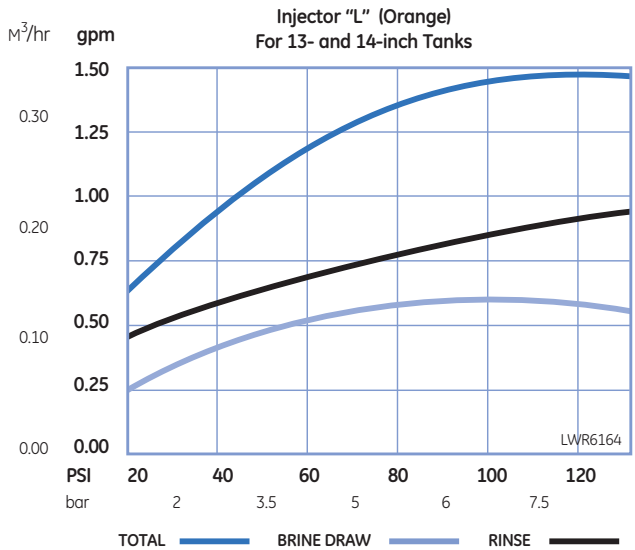
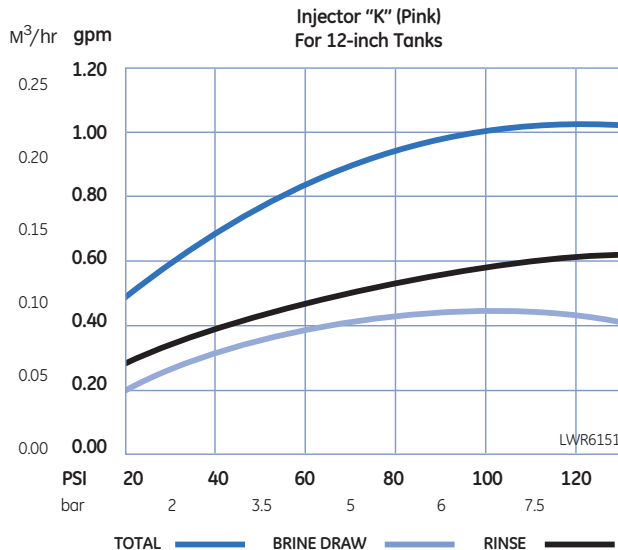
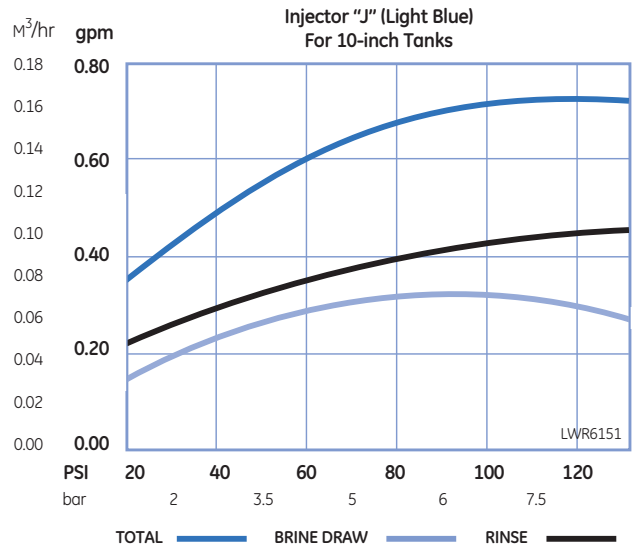
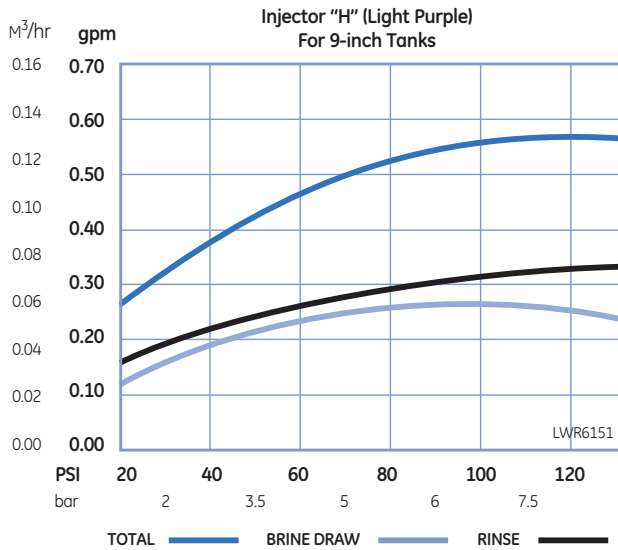
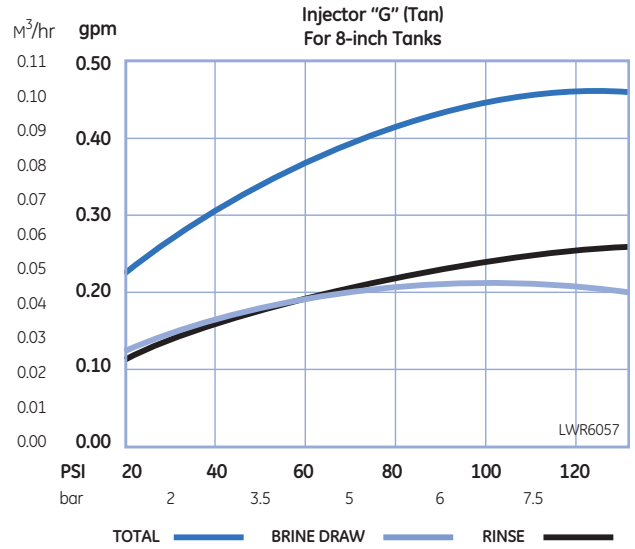
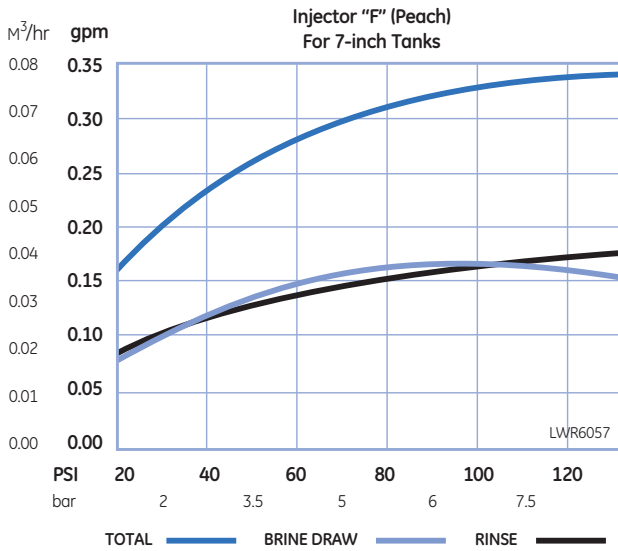
Copper, Sweat Tube Adapter .....	1-inch or 3/4-inch (25 mm or 19 mm)
CPVC, Solvent Weld Tube Adapter .....	1-inch or 3/4-inch (25 mm or 19 mm)
Plastic NPT or BSPT Pipe Adapter .....	1-inch male or 3/4-inch male (25 mm or 19 mm)
Brass NPT or BSPT Pipe Adapter .....	1-inch male or 3/4-inch male (25 mm or 19 mm)
Brine Refill Controls .....	.33 gpm (1.25 Lpm) fixed .17 gpm (.64 Lpm) fixed – optional for small tank applications 1-10 lbs (0.45 - 4.5 kg) – 400 series controllers 3-19 lbs (1.3 - 8.6 kg) – 400 series controllers

Compatible with Regenerants/Chemicals .....	Sodium chloride, potassium chloride, potassium permanganate, sodium bisulfite <sup>†</sup> , sodium hydroxide <sup>†</sup> , hydrochloric acid <sup>†</sup> , chlorine <sup>††</sup> and chloramines <sup>††</sup>
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<sup>†</sup> See owners manual for specific concentrations

<sup>††</sup> Valve for use on potable water supply

# Injector\* Performance – Logix Series Controllers

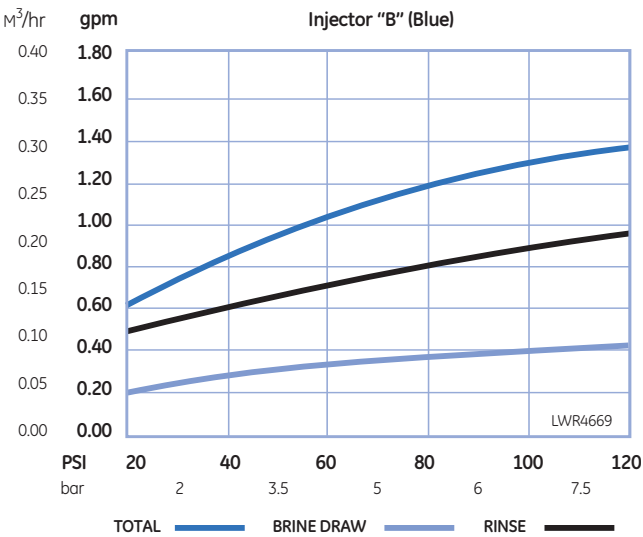
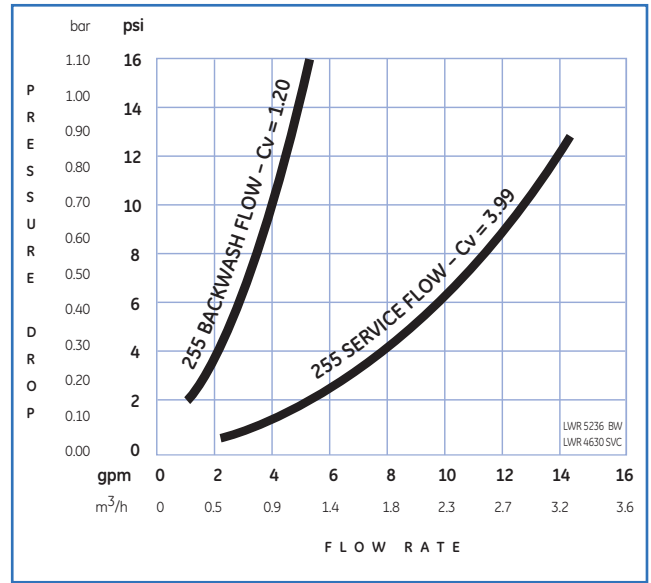
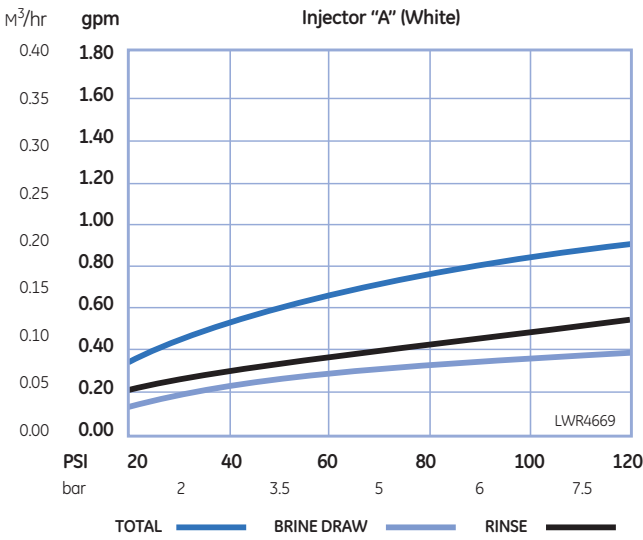


\*New injectors for high-efficiency regeneration sequence are standard with Logix Controllers.

NOTE: Actual injector performance is dependent on the resin used, tank geometry, elevated drain, etc. This injector data was taken using an empty tank (no resin).

# 400 and 900 Series Controllers

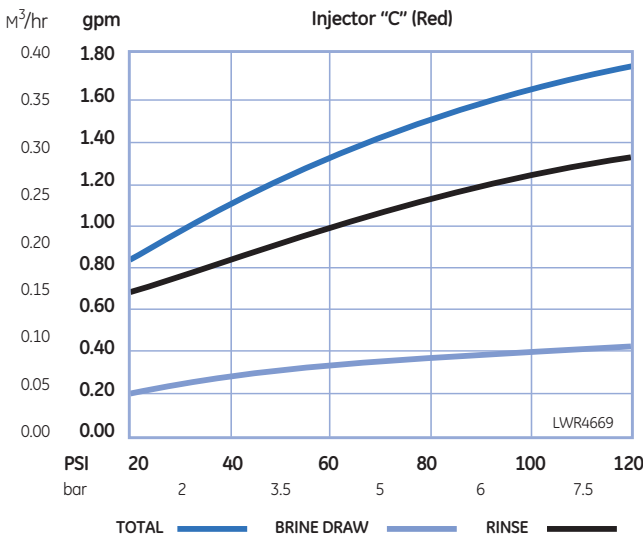
# Flow Rate Characteristics



## Backwash Flow Control Table

Backwash Number**	Flow Rate (gpm)	Flow Rate (lpm)
7	1.3	4.9
8	1.7	6.4
9	2.2	8.3
10	2.7	10.2
12	3.9	14.76
13	4.5	17.0
14	5.3	20.0

\*\*Backwash flow controls sized for 5.0 gpm/ft<sup>2</sup>



# Controller Series

GE offers a full range of valve controllers to meet all residential water-conditioning applications.

## Logix Series

### 740 Time Clock

- Simple, economic electronic time clock (chronometric)
- 7- or 99-day regeneration setting
- High efficiency regeneration sequence
- 12-volt operation
- Filter or conditioner setting in one control
- Operates 255, 263, 268 with one controller



### 760 Demand

- Simple, economic electronic demand (volumetric)
- Calendar override
- 12-volt operation
- 28-day variable reserve
- High efficiency regeneration sequence
- Automatic capacity calculations
- Operates 255, 263, 268 with one controller



### 742 Time Clock

Same features as the 740 time clock, plus:

- Fully programmable cycle times
- Salt setting in 1-pound increments
- Optional no-salt detector
- Operates 255, 263, 268, 278, and Magnum IT with one controller

### 762 Demand

Same features as the 760, plus:

- Fully programmable cycle times
- Salt setting in 1-pound increments
- Optional no-salt detector
- Operates 255, 263, 268, 278, and Magnum IT with one controller

## 400 Series

### 440i Time Clock

- Value priced, reliable mechanical control
- Time-clock regeneration
- Set it and forget it
- 12-volt or 120-volt versions available
- 6- or 7-day regeneration
- Operates 255, 263, 268 valves



### 460i Time Clock

- Economical electronic-demand control
- Simple set-up and programming
- Calendar override
- 12-volt operation
- 7-day variable reserve
- Operates 255, 268 valves










## Electrical Specifications

Controller Operating Voltage	12 Volt – AC (Requires use of GE Infrastructure supplied transformer)
Input Supply Frequency	50 or 60 Hz (Controller configuration dependent)
Motor Input Voltage	12 Volt – AC
Electronics Operating Voltage (Logix Series)	3.5 Volt – AC
Controller System Power Consumption	3 Watts average

## Transformer Specifications – All Controllers

All Controllers require the use of a GE Infrastructure supplied transformer.

Transformer Output Voltage	12 Volt – AC 400mA
Transformer Input Options	115 Volt – AC 50/60 Hz; 230 Volt – AC 50/60 Hz; 100 Volt – AC 50/60 Hz
Transformer Plug Options	Indoor North American Plug 
	Outdoor North American (UL Listed for outdoor use) 
	Japanese Plug 
	Taiwan/Korea Plug 
	Australian Plug 
	United Kingdom Plug 
	Mainland Europe Plug 

Additional transformers may be available – call for more information

**Controller valve manufactured by:**

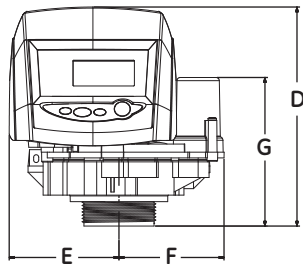
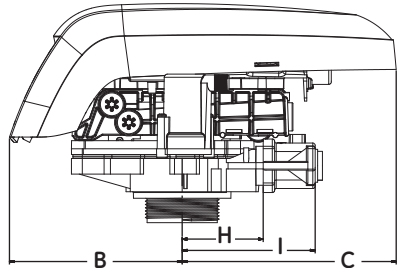
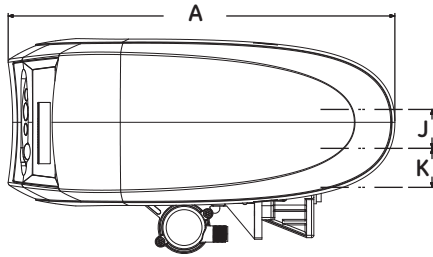
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For More Information:  
Call GE Infrastructure  
Water & Process Technologies;  
Household Water Group at  
(262) 238-4400 or  
(800) 279-9404,  
or visit [www.gewater.com](http://www.gewater.com)

# 255 Valve Outline Dimensions

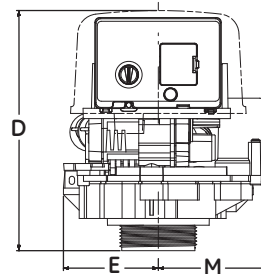
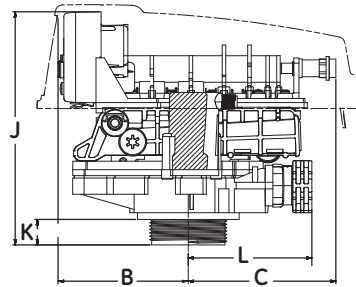
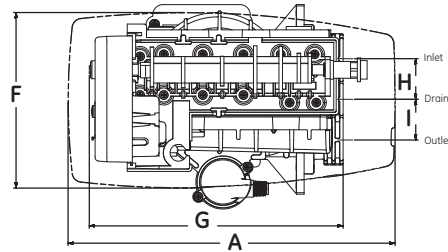
## Logix Series Controllers

255 Valve Dimensions with Logix Cover



## 400 Series Controllers

255 Valve Dimensions with 400 Series Controller



### 255 Valve – Logix Series Controller

	in	cm		in	cm
A	14.9	(37.8)	G	5.7	(34.5)
B	6.6	(16.8)	H	3.1	(7.9)
C	8.2	(20.8)	I	5.1	(13.0)
D	8.4	(21.3)	J	1.5	(3.8)
E	4.2	(10.7)	K	1.5	(3.8)
F	4.0	(10.2)			

### 255 Valve – 400 Series Controller

	in	cm		in	cm
A	12.07	(30.6)	G	9.36	(23.8)
B	4.80	(12.2)	H	1.50	(3.8)
C	5.44	(13.8)	I	1.50	(3.8)
D	8.86	(22.5)	J	8.60	(21.8)
E	3.50	(8.9)	K	.94	(2.4)
F	6.48	(16.5)	L	4.56	(11.6)

