GE Infrastructure
Water & Process Technologies



Magnum Cv™ Valve Specifications

Magnum IT and Standard Configurations

imagination at work

Specifications

Flow Rates (Valve Only)

Service @ 15 psi (1.03 bar) drop ..... 76 gpm (17.3 m^3/hr)
Backwash @ 25 psi (1.72 bar) drop ..... 89 gpm (20.2 m^3/hr)
Service ..... Cv = 19.5 (Kv = 17)
Backwash ..... Cv = 17.8 (Kv = 19.9)

Valve Connections/Dimensions

Tank Thread ..... 4-inch 8 UN
Inlet/Outlet ..... 2-inch: connections NPT or BSPT, Female, CPVC
Brine Line ..... 3/4-inch NPT
Drain Line* ..... 1-1/2-inch: connections for NPT or BSPT, Female, CPVC
Riser Tube Diameter 1-1/2-inch
Riser Installation ..... Above top of tank 5/8-inch (±1/8-inch)
Pilot Drain and Auxiliary Hydraulic Output ..... 1/4-inch tube fitting

*Valve installed drain flow controls available (5 – 40 gpm). If higher backwash flow is needed, an external flow control will be required.

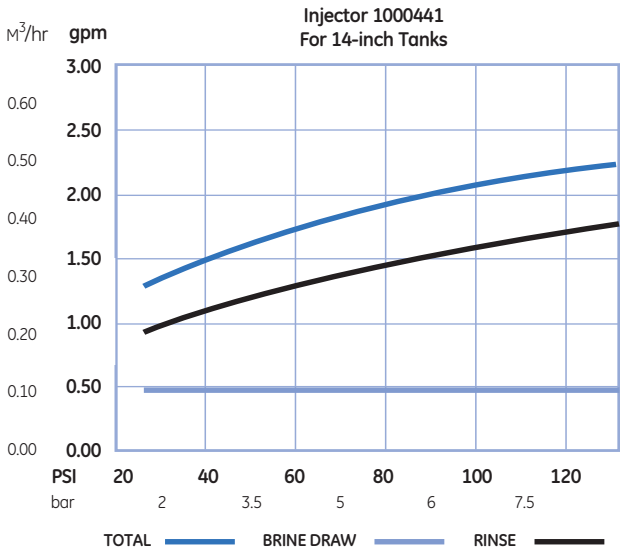
Design Specifications/Ratings

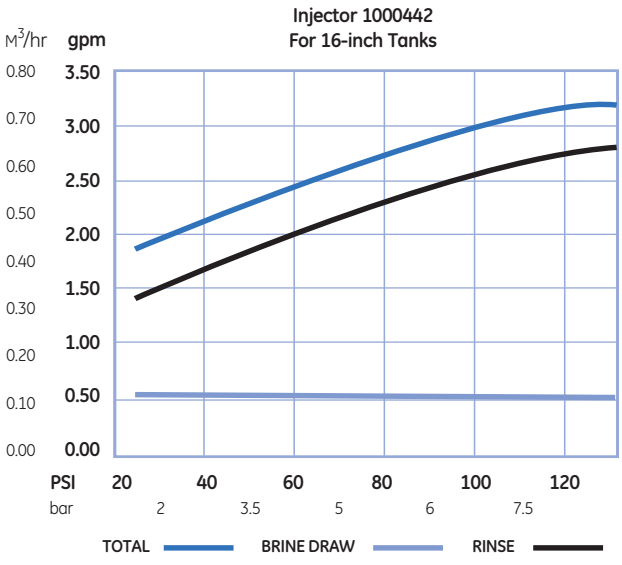
Valve Body ..... Noryl®
O-rings ..... EPDM
Injector ..... 7 sizes available: 14, 16, 18, 21, 24, 30, 36
Working Pressure ..... 25 psi – 100 psi (1.72 bar – 6.9 bar)
Water Temperature ..... 35° – 100°F (2° – 38°C), 120°F (49°C) Ambient

Options

Top Mount or Side Mount Configuration

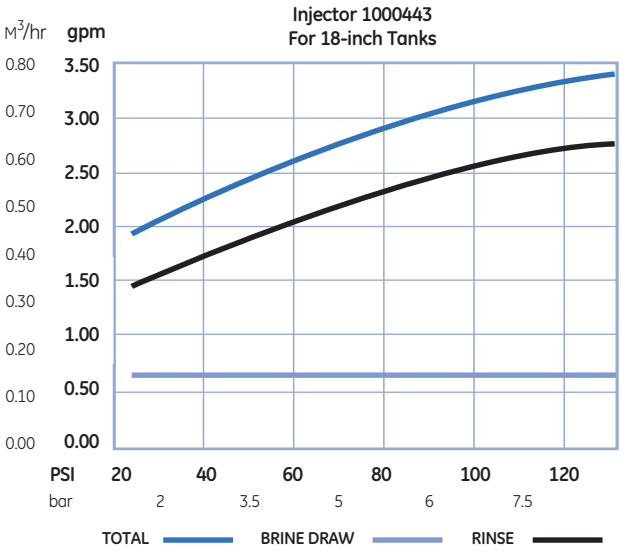
Injector Performance – **Magnum Cv**

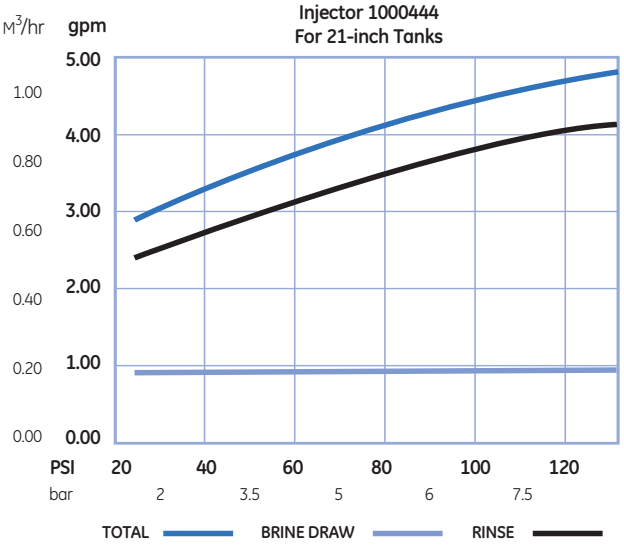


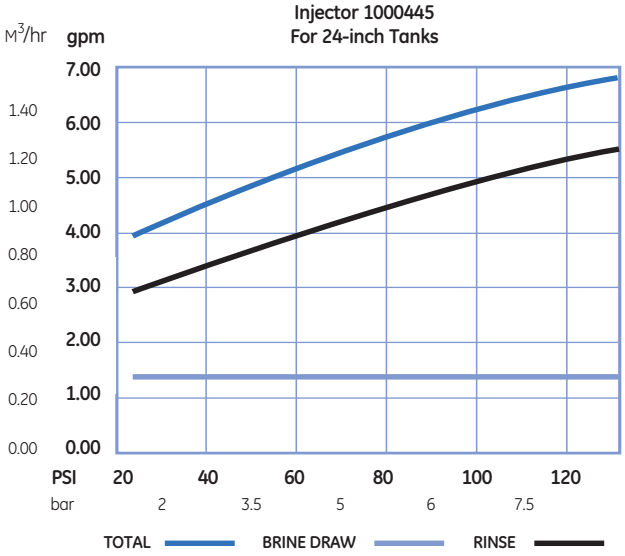


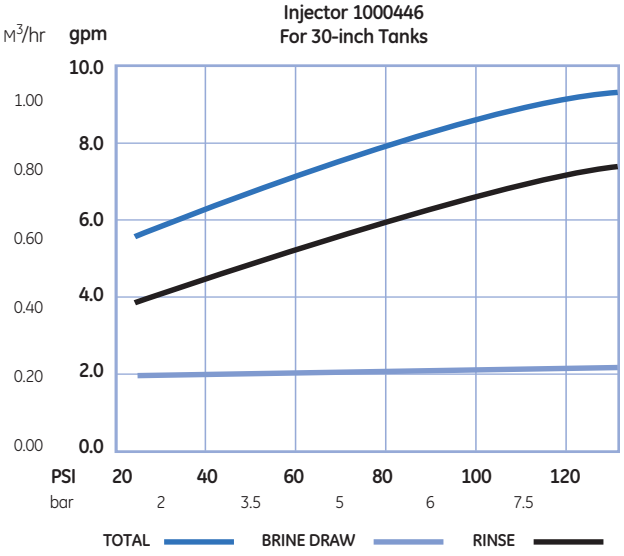
NOTE: Brine draw and rinse rates on empty tank.

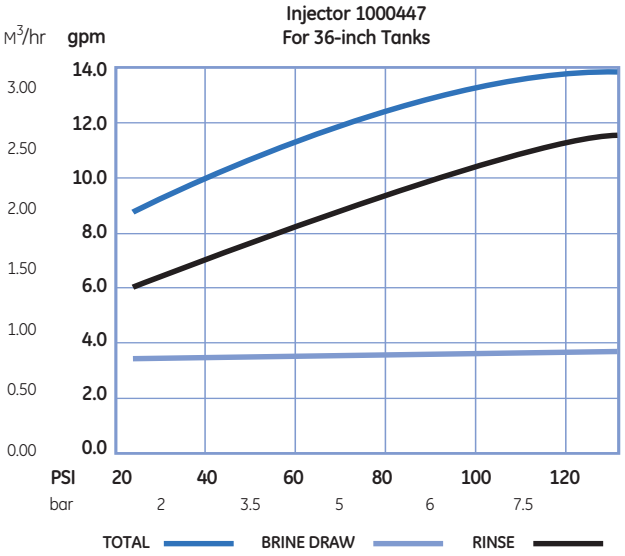
Injector Performance – **Magnum Cv (cont'd.)**











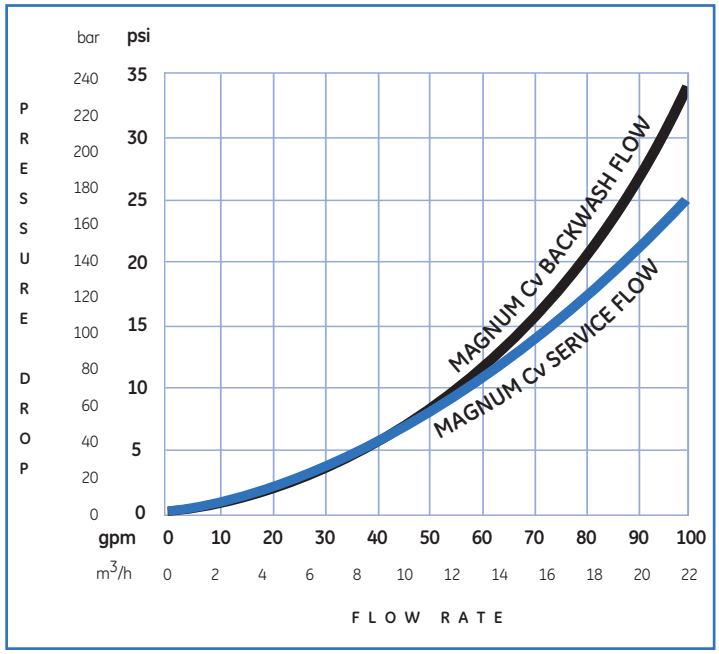
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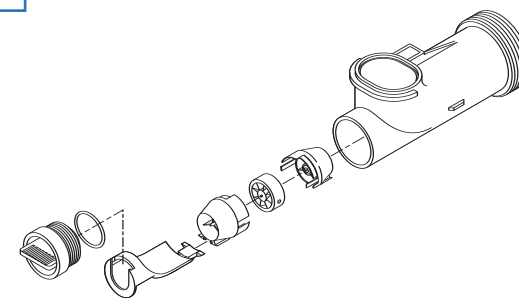


Cartridge-style assembly for easy installation and cleaning of injectors, refill and brine screen features.

Valve Flow Rate Characteristics

Magnum Cv C&I Valve (1-1/2 inch inlet)





Flow Sensor Options

Internal Turbine Unit

Normal Operating Range ..... 2 - 80 gpm (0.45 - 18.1 m^3/hr)
Peak Operating Range ..... 1 - 100 gpm (0.22 - 22.7 m^3/hr)
Normal Accuracy Range ..... ±3%



External Flow Meter – 2.0 Inch

Normal Operating Range* ..... 2.0 - 225 gpm (0.50 - 51.0 m^3/hr)
Normal Accuracy Range ..... ±3%
Connections ..... 2-inch: connections NPT or BSPT, Female, CPVC

*Recommended maximum continuous duty flow rate of 2-inch turbine is 70% of maximum flow rate.

Controller Options

The Magnum is one of the most versatile valves on the market. GE Infrastructure offers two controller series to meet any application need.

900 Series



The 962 series controller has a proven, 10-year track record with the Magnum.

- Fully programmable cycle times
- Control interlock cable for multiple tank applications
- Easy cycle indication on front of controller
- Battery backup and safe 12-volt operation

Logix Series



The Logix series offers the ultimate in control for the Magnum Cv valve. Simple 3-step programming and installation makes this electronic controller the industry leader.

- All-electronic control platform
- 24-hour super-capacitor backup – no battery necessary
- Remote mount kit allows programming module to be installed up to 40 feet away
- Universal controller – works on all Autotrol brand valves
- Automatic capacity calculations – no math or salt tables necessary
- 12-volt operation

742 Time Clock

- Simple, economic electronic time clock (chronometric)
- 7- or 99-day regeneration setting
- Filter or conditioner setting in one control
- Fully programmable cycle times
- Salt setting in 1-pound increments (lbs/cu ft)
- Operates 255, 263, 268, 278, and Magnum IT with one controller

762 Demand

- Simple, economic electronic demand (volumetric)
- Calendar override – 99 day
- 28-day variable reserve
- Filter or conditioner setting in one controller
- Automatic capacity calculations
- Fully programmable cycle times
- Salt setting in 1-pound increments (lbs/cu ft)
- Optional no-salt detector
- Operates 255, 263, 268, 278, and Magnum IT with one controller

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
Control 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

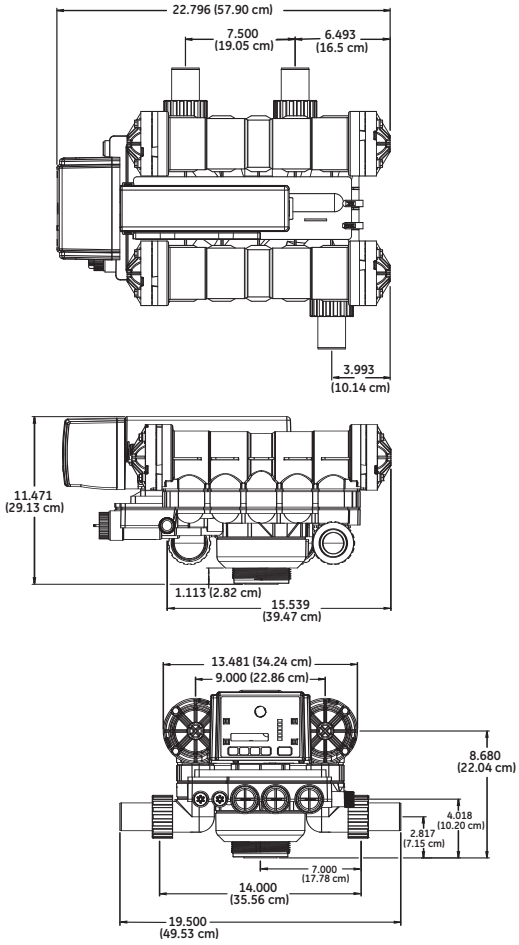
Control valve manufactured by:

North American Sales
5730 N. Glen Park Road
Milwaukee, WI
53209-4403
USA
(262) 238-4400 Phone
(262) 238-4402 Fax

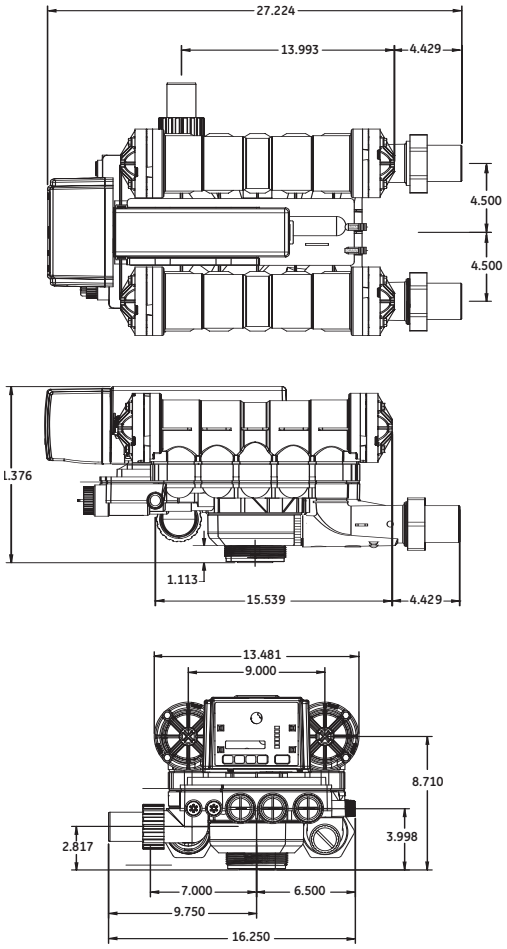
For More Information:
Call GE Infrastructure
Water & Process Technologies;
Household Water Group at
(262) 238-4400 or
(800) 279-9404,
or visit www.gewater.com/equipment/valve/index.jsp

Magnum Cv Valve Outline Dimensions

1-1/2-inch Magnum Cv



2-inch Magnum IT



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