

COMMERCIAL
CONTROL
VALVES



Magnum® Control Valve



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Controller Options

The Pentair Water® Magnum Control Valve is one of the most versatile valves on the market.

Logix™ Series

- 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

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



742 Time Clock

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

764 Demand

Same features as the 762, plus:

- Multi-tank applications (twin alternating, multi-tank parallel)
- Control lockout
- Remote regeneration





Specifications

Electrical Specifications

Controller Operating Voltage	12 Volt – AC (Requires a transformer supplied by GE)
Input Supply Frequency	50 or 60 Hz (Controller configuration dependent)
Motor Input Voltage	12 Volt – AC
Control System Power Consumption	3 Watts average

Transformer Specifications – All Controllers

All Controllers require the use of a Pentair Water 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  Australian Plug  Outdoor North American  United Kingdom Plug  (UL Listed for outdoor use) Mainland Europe Plug  Japanese Plug  Taiwan/Korea Plug  Additional transformers may be available – call for more information.

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

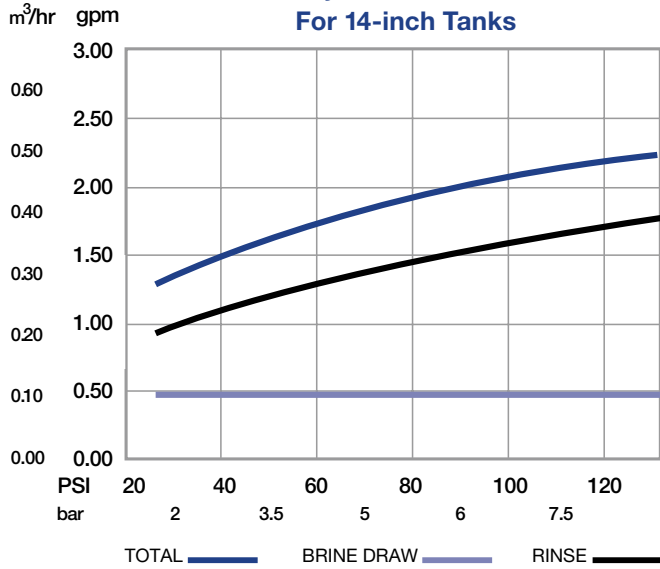
Valve Body	Thermoplastic
O-rings	EPDM
Injector	7 sizes available: 14, 16, 18, 21, 24, 30, 36
Working Pressure	25 psi – 100 psi (1.72 bar – 6.9 bar)
Water Temperature	35° – 100°F (2° – 38°C), 120°F (49°C) Ambient

Options

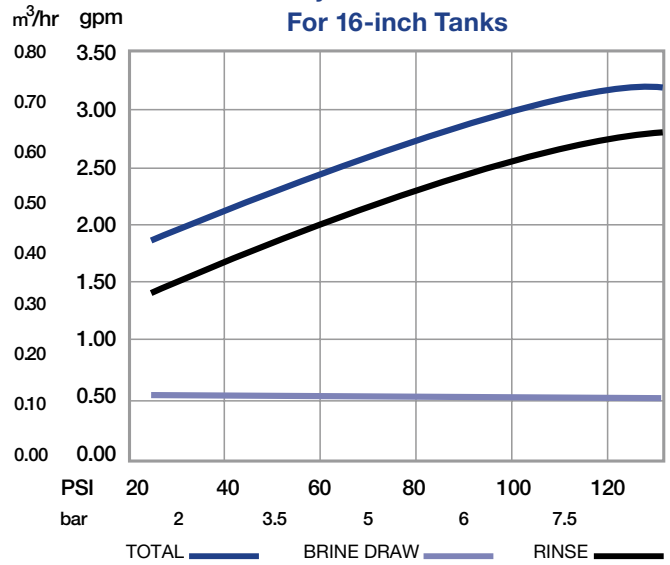
Top Mount or Side Mount Configuration

Injector Performance – Magnum

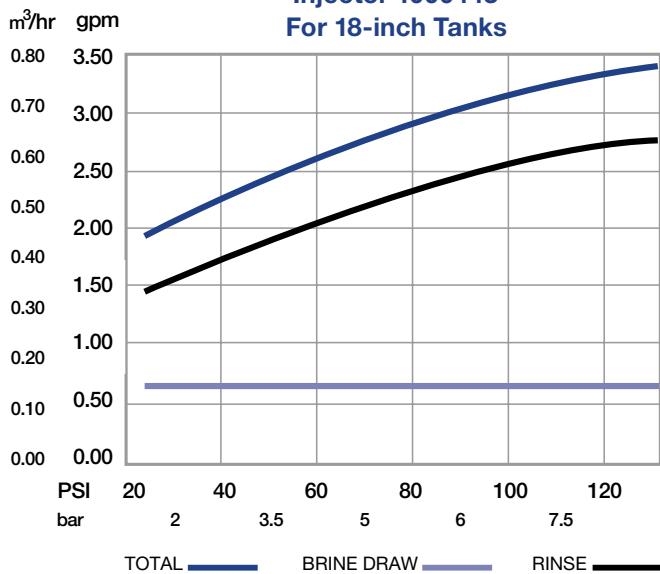
**Injector 1000441
For 14-inch Tanks**



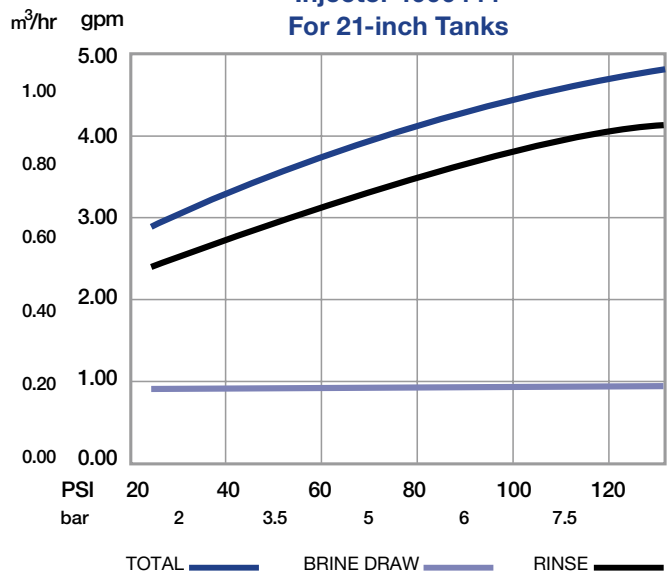
**Injector 1000442
For 16-inch Tanks**

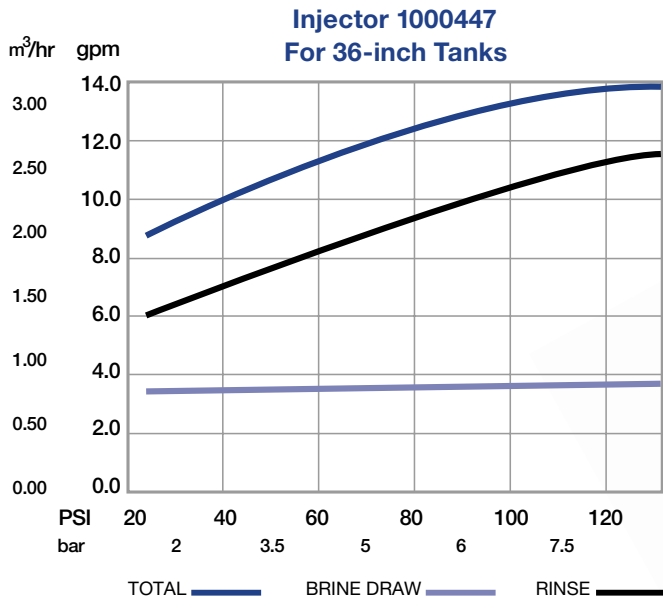
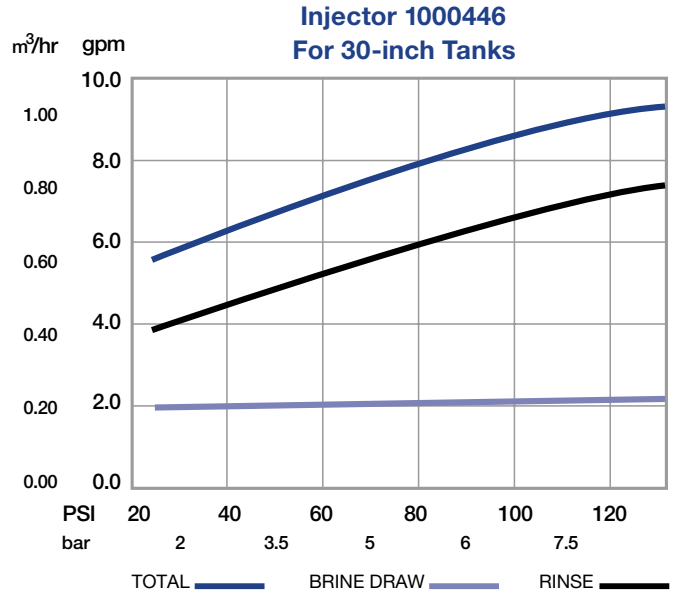
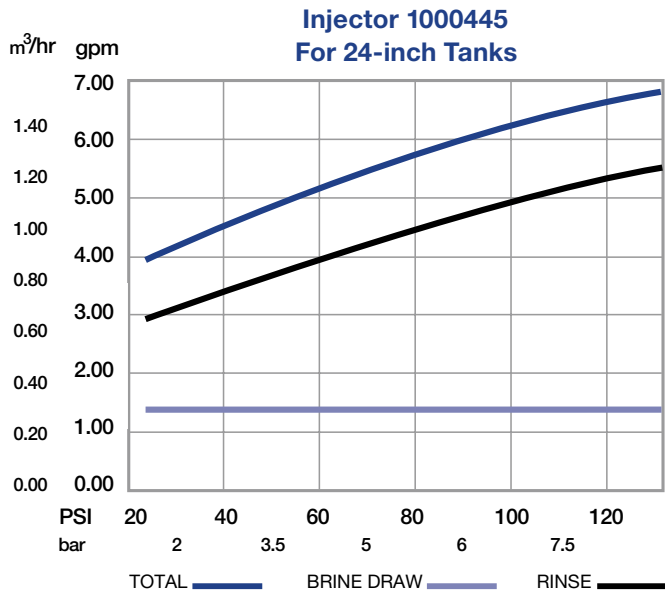
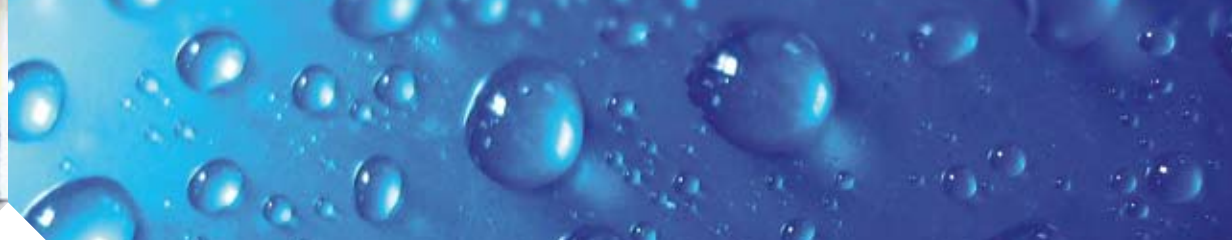


**Injector 1000443
For 18-inch Tanks**



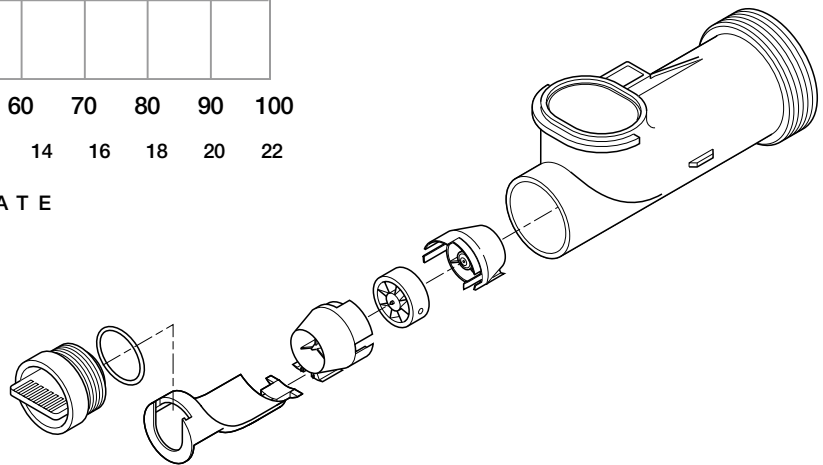
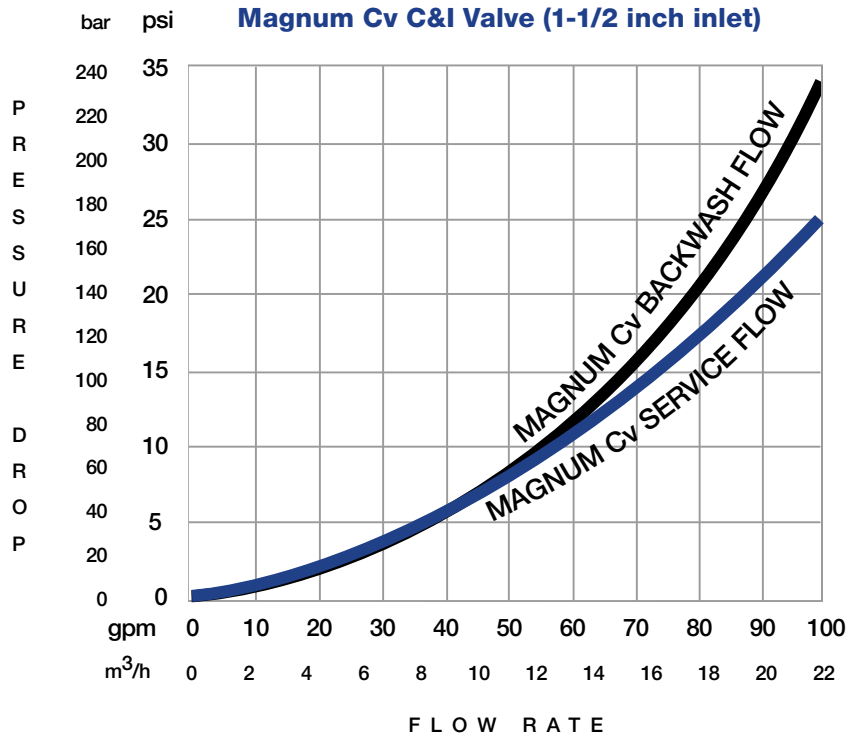
**Injector 1000444
For 21-inch Tanks**





NOTE: Brine draw and rinse rates on empty tank.

Valve Flow Rate Characteristics



Flow Sensor Options

Internal Turbine Unit

Normal Operating Range	2 - 80 gpm (0.45 - 18.1 m³/hr)
Peak Operating Range	1 - 100 gpm (0.22 - 22.7 m³/hr)
Normal Accuracy Range	±3%

External Flow Meter – 2.0 Inch

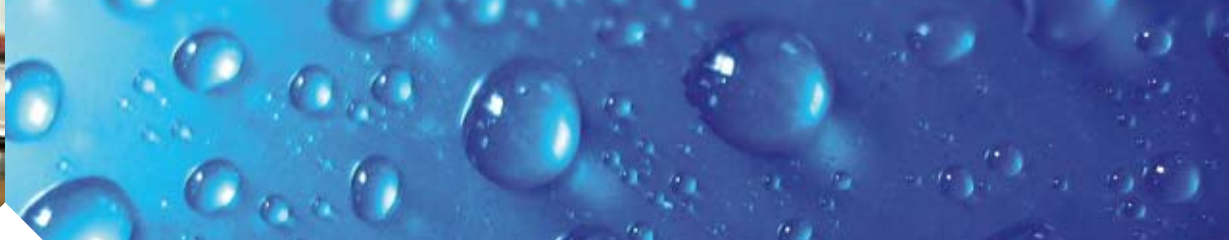
Normal Operating Range*	5.0 - 225 gpm (0.50 - 51.0 m³/hr)
Normal Accuracy Range	±3%
Connections	2-inch: connections NPT or BSPT, Female, CPVC

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



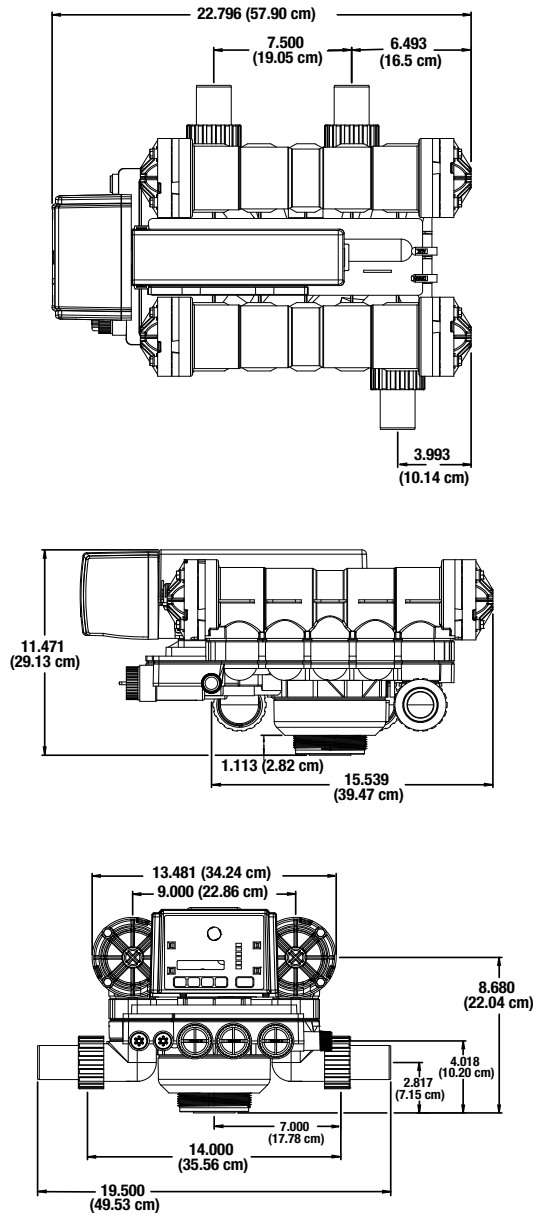
Tank Adapter Options

Threaded Stainless Steel	4-inch 8 UN
Flanged Stainless Steel	6-inch

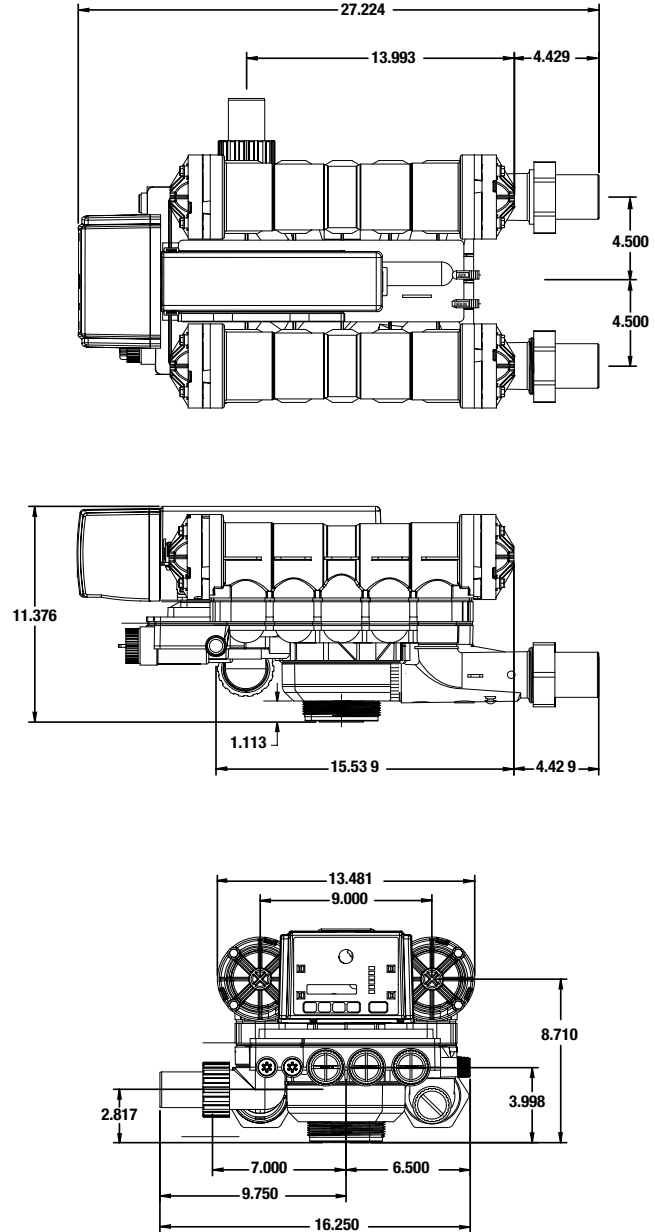


Magnum Valve Outline Dimensions

1-1/2-inch Magnum Cv



2-inch Magnum IT





**Pentair
Water**

20580 Enterprise Avenue
Brookfield, WI 53045
Tel: 262.784.4490
Fax: 262.784.7794

5730 North Glen Park Road
Milwaukee, WI 53209
Tel: 262.238.4400
Fax: 262.238.4402

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Customer Care: 800.279.9404 www.pentairwatertreatment.com