PENTAIR
WATER SOLUTIONS

TECHNICAL
SHEET

PERFORMA CV 278 EASY-IQ

AUTOTROL CONTROL VALVE

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AUTOTROL CONTROL VALVE

TECHNICAL CHARACTERISTICS

- Dedicated to softening applications up to 21" diameter tanks
- 100% Retrofitting capabilities with Logix valve with quick-start menu and minimal programming needed
- Time clock or Volumetric valve (1" Autotrol internal turbine)

EASY-IQ CONTROLLER

Electronic controller time clock (chronometric) or metered (volumetric) in one	Manual regeneration, immediate or delayed
Quick start-up programming for user friendliness	Calendar override
Automatically calculated or fully programmable cycle times	Remote regeneration feature
Intuitive programming menus dedicated to homeowners, installers and OEMs	Reserve options: variable based on consumption or fixed % or volume
Colour display multi-lingual - 7 languages	Wifi ready (not connected)
Customizable software and messages	Salt setting in 10-grams increments
Password setting	Salt alert settings & continuous flow alert for user
USB-C port for easy software updates on the field or in house pregramming upload	Diagnostics menu with regeneration information, history water usage, and actual status datae
Holiday mode for the user	Supercapacitor back-up for minimum 24h in case of power failure

VALVE SPECIFICATIONS

Valve Body	Glass-filled thermoplastic – NSF Listed material
Rubber Components	Compounded for cold water – NSF Listed material
Valve Materials Certification	WQA Gold Seal Certified to ORD 0902, NSF/ANSI 44, CE, ACS
Weight (Valve with Control)	2.42 kg (5.34 lbs)
Recommended Operating Pressure	1.38-8.27 bar (20-120 psi)
Hydrostatic Test Pressure	20.69 bar (300 psi)
Water Temperature	2-38°C (35-100°F)
Ambient Temperature*	2-48.9°C (35-120°F)
Controller Operating Voltage	12 VAC (Requires use of Pentair-supplied transformer)
Input Supply Frequency	50 or 60 Hz (Controller configuration dependent)
Motor Input Voltage	12 VAC
Controller System Power Consumption	3 W average

* Recommend use of outdoor cover for direct sunlight applications

TRANSFORMER

All Controllers require the use of a Pentair supplied transformer.

Transformer Output Voltage	12 VAC
Transformer Input Options	230 VAC 50/60 Hz
Transformer Plug Options	United Kingdom Plug Mainland Europe Plug

Additional transformers may be available – call for more information.

FLOW RATES (VALVE ONLY)

Service @ 1.03 bar (15 psi) drop	5.7 m^3/h (25.0 gpm)
Backwash @ 1.72 bar (25 psi) drop	4.5 m^3/h (20.0 gpm)
Service	Kv = 5.6 (Cv = 6.50)
Backwash	Kv = 3.5 (Cv = 4.00)

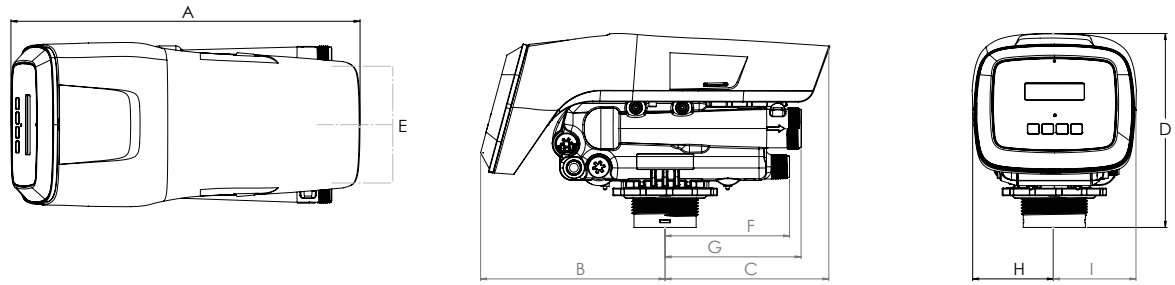
VALVE CONNECTIONS

Tank Thread	2½ inches – 8, male
Inlet/Outlet Threads	1¾ inches – 12 UNC-2A male
Drain Line	¾ inch NPT, male
Brine Line	⅜ inch NPT, male
Distributor Tube Diameter	27 mm (1.050 inch)
Distributor Tube Length	13 ± 3 mm (½ ± ⅛ inch) above top of tank

OPTIONS

Turbine for Demand Units	Internal Standard Autotrol 25 mm (1-inch) turbine
Bypass Valve, Model 1265	Thermoplastic, 1-inch flow path
Bypass Fitting Kits:	
• Copper, Sweat Tube Adapter	32, 25 or 19 mm (1¼, 1 or ¾ inch)
• CPVC, Solvent Weld Tube Adapter	25 or 19 mm (1 or ¾ inch)
• Plastic NPT or BSPT Pipe Adapter	25 or 19 mm male (1 or ¾ inch)
• Stainless steel NPT or BSPT Pipe Adapter	25 or 19 mm male (1 or ¾ inch)
• Brine Refill Controls	0.33 gpm (1.25 Lpm) fixed 1.3 gpm (4.92 Lpm) fixed

DIMENSIONS



Units	A	B	C	D	E	F	G	H	I
cm	37.9	20.3	17.8	21.1	12.7	13.5	14.8	8.7	8.7
inches	14.9	7.9	7.0	8.5	5.0	5.3	5.8	3.4	3.4

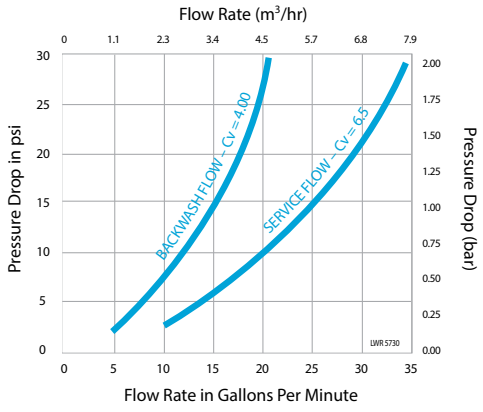
PERFORMANCE

BACKWASH FLOW CONTROL

Tank size	Backwash number*	Flow Rate (gpm)	Flow Rate (l/min)
9"	9	2	7.6
10"	10	2.5	9.5
12"	12	3.5	13.2
13"	13	4.1	15.5
14"	14	4.8	18.2
16"	EXT BW	7	26.5
18"	EXT BW	9	34
21"	EXT BW	12	45

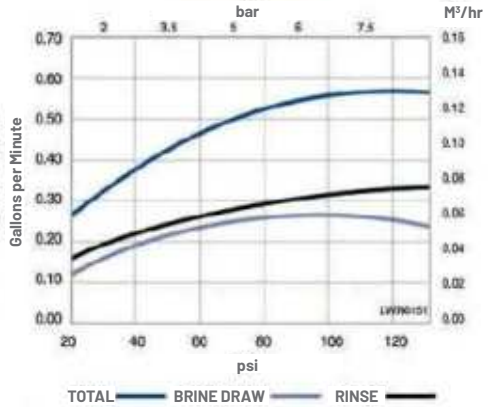
*Backwash flow controls sized for 5.0 gpm/sq. ft.

FLOW RATE VS PRESSURE DROP

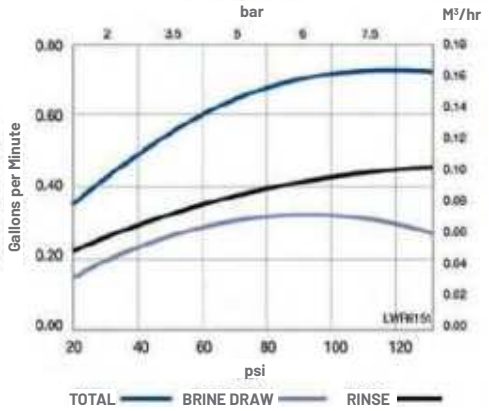


INJECTOR* PERFORMANCE

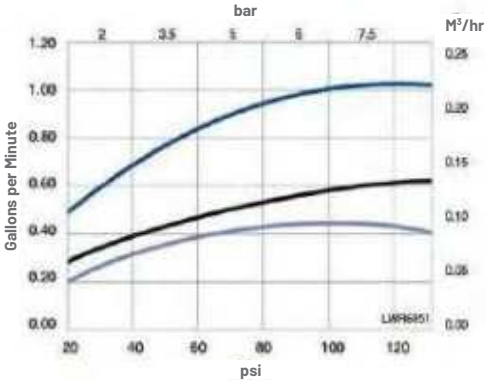
Injector "H"(Light Purple)
For 9-inch Tanks



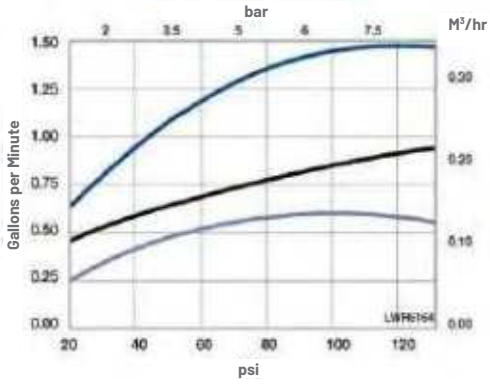
Injector "J"(Light Blue)
For 10-inch Tanks



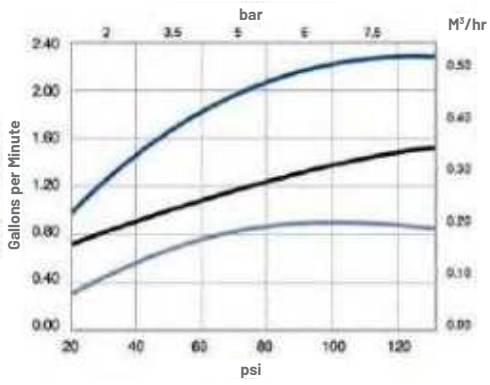
Injector "K"(Pink)
For 12-inch Tanks



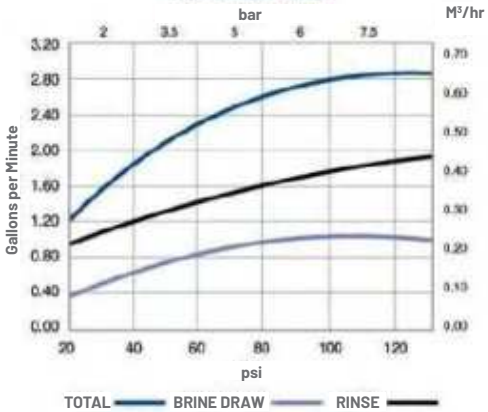
Injector "L"(Orange)
For 13-inch and 14-inch Tanks



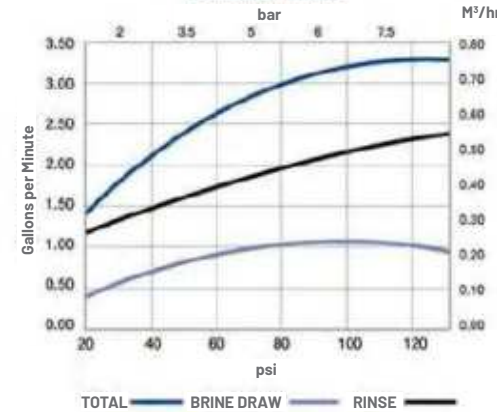
Injector "N"(Green)
For 16-inch Tanks



Injector "Q"(Purple)
For 18-inch Tanks



Injector "R"(Dark Grey)
For 21-inch Tanks



*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).

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