

P-220 SERIES VALVES

For proven reliability in the field, the Toro® P-220 Series valves deliver. Constructed of heavy-duty, glass-filled nylon material, these valves are ready to consistently withstand pressures up to 15,1 Bar.

FEATURES & BENEFITS

Durable Glass-Filled Nylon Construction

Ensures the P-220 can operate at pressures up to 15,1 Bar.

Precise Pressure Control Option

Compact EZReg® dial-design technology can be factory or field installed and does not require the removal of the solenoid.

Standard Schrader Valve at Outlet

Simple verification of downstream pressure.

Optional Spike Guard™ Solenoid

Reduces wire size requirements, allows twice as many valves to run simultaneously on a transformer, and lowers power costs with a lightning rating exceeding 20,000 volts.

Filter Screen On 2" and 3" Models

Allows for upstream filtration of water to ensure no clogging occurs inside the valve.

Flow Control Handle

Adjusts the flow of each zone on a system.

Additional Features

- ✓ No external tubing for either pressure-regulating model
- ✓ Self-aligning bonnet to ensure correct installation
- ✓ Self-cleaning, stainless steel metering rod
- ✓ Low-flow capability down to 18,9 LPM with EZReg®
- ✓ EPDM diaphragm and seat seal



Effluent
Options
Available



Pressure
Regulation



DC Latching
Solenoid
Option

SPECIFICATIONS

Operational

- Flow Range:
 - 1": 18,9-132,5 LPM
 - 1½": 113,6-416,4 LPM
 - 2": 302,8-681,4 LPM
 - 3": 567,8-1135,6 LPM
- Operating Pressure
 - 1" & 1½" Models: 0,7-15,0 Bar
 - 2" & 3" Models: 1,3-15,0 Bar
- Pressure Regulating:
 - Outlet (EZR-30): 0,3-2,0 Bar ± 3
 - Outlet (EZR-100): 0,3-7,0 Bar ± 3
 - Minimum flow requirement of 0,3 Bar

- Minimum Pressure Differential (between inlet and outlet) for Pressure Regulation: 0,7 Bar
- Body Styles:
 - Globe/Angle – 1", 1½", 2" & 3" female threads
- 118-5983 Solenoid: 24 Vac(50Hz)
 - Inrush: 50 Hz, 0.34 amps
 - Holding: 50 Hz, 0.2 amps

Options Available

- EZR-30 - EZReg®, 0,3-2,1 Bar Regulator Module
- EZR-100 - EZReg®, 0,3-7,0 Bar Regulator Module
- EFF-KIT-50HZ - Effluent Water Solenoid Assembly, 24 Vac, 50 Hz; and Warning Tag
- DCLS-P - Potted DC Latching Solenoid Assembly
- 118-5983 - 24 VAC Solenoid Assembly, 50 Hz, 457mm Leads, Captive Plunger

Dimensions

- 1": 171 x 92mm (H x W)
- 1½": 184 x 92mm (H x W)
- 2": 241 x 156mm (H x W)
- 3": 273 x 156mm (H x W)

Warranty

- Five years

PRODUCT HIGHLIGHT



Pressure Regulator

The EZReg® module can regulate flows as low as 0,3 Bar with a 1" valve and only requires 0,7 Bar differential to operate. The pressure regulator can be easily and quickly installed—even under pressure—with no danger of water geysers.

P-220 SERIES MODEL LIST

Model	Description
WITH AC SOLENOID	
P220-23-54	Electric, In-Line 1" BSP Plastic Valve, 50 Hz Solenoid
P220-23-56	Electric, In-Line 1½" BSP Plastic Valve, 50 Hz Solenoid
P220-23-58	Electric, In-Line 2" BSP Plastic Valve, 50 Hz Solenoid
P220-23-50	Electric, Angle 3" BSP Plastic Valve, 50 Hz Solenoid
WITH D.C. LATCHING SOLENOID	
P220-23-94	Electric, In-Line 1" BSP Plastic, with DCLS-P latching solenoid pre-installed
P220-23-96	Electric, In-Line 1½" BSP Plastic, with DCLS-P latching solenoid pre-installed
P220-23-98	Electric, In-Line 2" BSP Plastic, with DCLS-P latching solenoid pre-installed
P220-23-90	Electric, Angle 3" BSP Plastic, with DCLS-P latching solenoid pre-installed

P-220 SERIES PRESSURE LOSS DATA

Size	Config.	LPM Flow																						
		40	60	80	100	120	140	160	180	200	250	300	350	400	450	500	550	600	700	800	900	1000	1100	
1"	Globe	0,29	0,25	0,25	0,26	0,32	0,43	0,55	0,69	0,82														
	Angle	0,29	0,35	0,21	0,20	0,21	0,29	0,38	0,49	0,61														
1½"	Globe					0,12	0,14	0,18	0,23	0,28	0,43	0,62	0,85	1,11										
	Angle					0,09	0,10	0,13	0,17	0,22	0,34	0,48	0,65	0,85										
2"	Globe											0,14	0,20	0,25	0,32	0,40	0,48	0,54						
	Angle											0,08	0,12	0,15	0,19	0,24	0,29	0,32						
3"	Globe																	0,18	0,24	0,32	0,41	0,52	0,65	
	Angle																	0,14	0,19	0,26	0,34	0,43	0,54	

Note: For optimum performance when designing a system, be sure to calculate total Pressure Loss to ensure sufficient downstream pressure. For optimum regulation performance, size regulating valves toward the higher flow ranges. Flow rates are recommended not to exceed 5 psi loss.

Specifying Information—P-220 Series Valves

P220-2X-XX			
Model	Activation Type	Solenoid	Size
P220	2X	X	X
P220—P-220 Series Plastic Valve	23—BSP	5—50Hz Solenoid 9—DC Latching Solenoid	4—1" 6—1½" 8—2" 0—3"

Example: A 1" P-220 Series plastic electric valve with AC Solenoid would be specified as: **P220-23-54**