# P-220 Plastic Series Valves

## 25, 40, 50 and 80 mm Electric Models

With superior regulation and a 1515 kPa rating, the P-220 Series gives you 'brass strength' at a value price.

### **Key Features**

- 1515 kPa maximum operating pressure
- Globe/Angle configuration
- Pressure control option with compact EZReg® dial-design (serviceable under pressure — no need to shut down system)
- Pressure regulates in electric and manual modes
- Tough, double-beaded, fabric-reinforced rubber diaphragm rated at 5200 kPa burst pressure
- Self-cleaning, stainless-steel metering rod
- Extended 5-year warranty

### **Additional Features**

- Construction: Plastic- Tough 33% glass-filled (GFN) and stainless steel
- Rugged, reinforced bonnet design withstands tough and high-pressure applications
- Forward-flow design for more precise regulation
- Standard, built-in Schrader-type valve for downstream pressure verification
- No external tubing for either-electric or pressure-regulating models
- Internal downstream manual bleed keeps valve box dry and allows for manually checking pressure regulation.
- · External manual bleed for system flushing
- Manual flow control: adjustable to zero-flow
- Flow control independent of solenoid
- Self-aligning bonnet to ensure correct installation
- Brass flow control stem 50 mm and 80 mm models

- Positive O-ring seal on inlet plug prevents leaks
- Low-flow capability down to 20 LPM with EZReg® module
- · Easily serviced without system removal
- Proven, encapsulated, injection-moulded solenoid with captured hex plunger and spring
- Low-power requirement for longer wire runs
- 45cm lead wires for easy installation

## **Options Available**

- DC Latching solenoid assembly DCLS-P
- 24 V DC solenoid assembly (R576804)
- 24 V.a.c. 50 Hz solenoid assembly (588403)
- EZR–30 30–200 kPa pressureregulation module
- EZR-100 30-700 kPa pressureregulation module

External manual bleed screw

Ergonomic, manual flow control handle (removable)

EZReg® pressure-regulating module or port plug

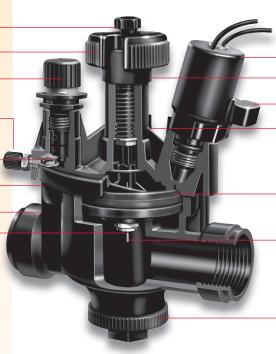
Standard Schrader valve for operating pressure readings

Anchored studs and nut design

Tough GFN bonnet for 1515 kPa rating

Globe/angle body for 25 mm to 80 mm sizes

Aerospace locknut



P-220 Series

Solenoid with captured hex plunger and spring

Debris skirt

Internal manual bleed

Spare nut

Brass flow control stem on 50 mm and 80 mm (not illustrated)

Fabric reinforced 5200 kPa rated, double-beaded diaphragm

Self-cleaning, stainless-steel metering-rod

0-ring seal cap plug

# P-220 Plastic Series Valves

## **Specifications**

Recommended flow range

25 mm — 20-114 LPM

40 mm — 114-265 LPM

50 mm — 300-530 LPM

80 mm — 568-852 LPM

· Operating pressure:

- Electric - 70-1515 kPa

Pressure regulating models:Outlet: EZR-3030-200 kPa (± 20 kPa)

Outlet: EZR-100 30-700 kPa (± 20 kPa)

- Inlet: 100-1515 kPa

 Minimum pressure differential (between inlet and outlet): 70 kPa for EZReg operation

 Body styles: Globe/angle valve, female-threads BSP

Solenoid: 50 Hz 24 V.a.c.Inrush: 0.3 amps, 7.2 VA

- Holding: 0.2 amps, 4.8 VA

Dimensions (H × W)											
Model	Н	W									
25 mm	171 mm	92 mm									
40 mm	184 mm	92 mm									
50 mm	241 mm	156 mm									
80 mm	273 mm	156 mm									



Specifying Information – P-220											
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Туре	Configuration	Solenoid	Size								
P220— P-220 Series Plastic Valve	23—BSP, Electric	5—50 Hz Solenoid	4—25 mm 6—40 mm 8—50 mm 0—80 mm								
For Example: When specifying a 25mm (1") P–220 Series plastic electric valve with a 50 Hz solenoid											

BSP threads, and pressure regulation, you would specify::

P220-23-54 and EZR-100



#### **Pressure Regulation**

An accurate and visible adjustable dial, coupled with a forward-flow valve design allows the P220 Series with the EZReg module to regulate with flows of only 20 LPM (25 mm valve) and requires only 70 kPa differential to operate. The pressure regulator is perfect for retrofit projects and can be easily and quickly installed (even under pressure) with no danger of water geysers from the removed solenoid area or valve opening. The EZReg regulates in the manual mode should power be unavailable. A standard, Schrader-type valve permits quick verification of downstream operating pressure.

	P-220 Series Friction Loss Data – LPM Flow																							
	Flow – LPM																							
Size	Configuration	20	40	60	80	100	120	140	160	180	200	250	300	350	400	450	500	550	600	700	800	900	1000	1100
25 mm (1″)	Globe Angle	28 28	29 29	25 25	25 21	26 20	32 31	43 29	55 38	69 49	82 61													
40 mm (1.5°)	Globe Angle						12 9	14 10	18 13	23 17	28 22	43 34	62 48	85 65	111 85									
50 mm (2')	Globe Angle												14 8	20 12	25 15	32 19	40 24	48 29	54 32					
80 mm (3´′)	Globe Angle																		18 14	24 19	32 26	41 34	52 43	65 54

Light grey shading indicates recommended flow range.

Note: For optimum performance when designing a system, be sure to calculate total friction 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 35 kPa pressure loss.