



The 220G Brass Series valves provide extra durability in the most challenging environments on the course. With precise pressure regulation the optimum operating pressure and exact flow requirements are delivered to every sprinkler ensuring maximum efficiency and uniformity.

## FEATURES & BENEFITS

### **EZReg® Pressure Regulating System**

Can be adjusted from 5-100 psi to provide the optimum operating pressure for every zone.

### **Spike Guard™ Solenoid**

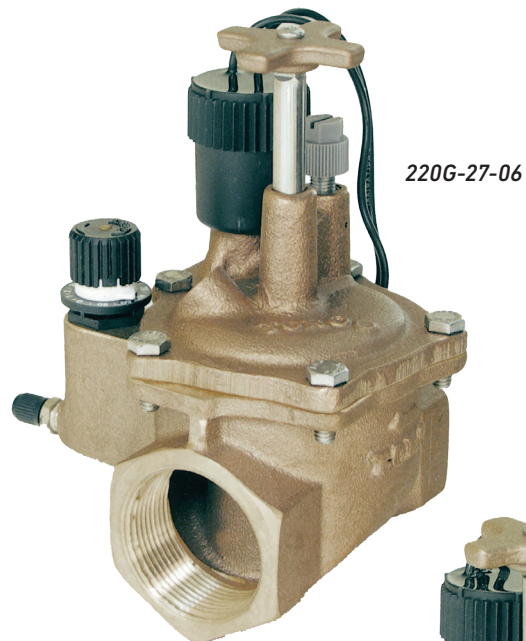
With 20,000 volt lightning rating, it virtually eliminates the need for solenoid replacements. And with half the amperage draw of traditional solenoids you can run twice as many valves simultaneously, reduce the cost of wire during installation or increase the distance from controller to valve.

### **Internal Manual Bleed**

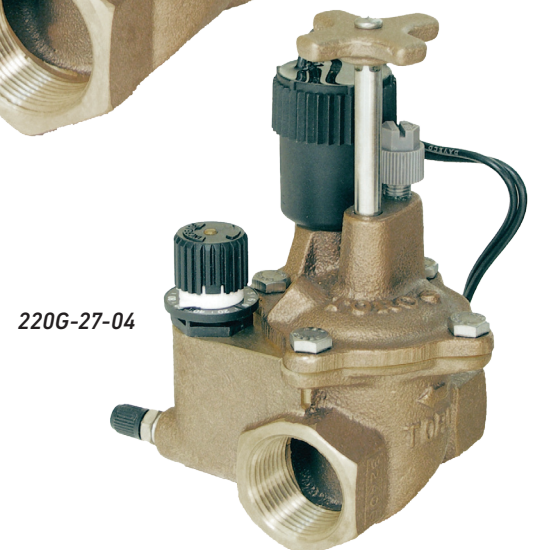
Ensures the optimum pressure of the system even when being operated manually.

### **Self Flushing And Serviceable Filter**

A 120 mesh stainless steel screen in the flow of water is continually being cleaned any time the valve is in operation. Serviceable from the side of the valve the filter can be removed without valve disassembly.



220G-27-06



220G-27-04

## Additional Features

- ✓ Diaphragm stem guide
- ✓ Ingot brass and stainless steel construction
- ✓ Pressure regulates in electric and manual modes, serviceable under pressure
- ✓ Forward-flow design for more precise regulation
- ✓ Standard, built-in Schrader-type valve for downstream pressure verification
- ✓ Anti-vandal dust cap on pressure-regulating models
- ✓ No external tubing
- ✓ External manual bleed for system flushing
- ✓ Manual flow control: adjustable to zero flow
  - Stainless steel diaphragm support ring for minimum wear
  - Stainless steel solenoid seat for longer life and positive shutoff
  - Low-power requirement for longer wire runs

### VALVE WIRE SIZING CHART

Maximum One-way Distance (in ft.) Between Controller and Valve Using Spike-Guard™ Solenoid\*

Ground Wire	Control Wire						
	18	16	14	12	10	8	6
18	2040	2520	2940	3280	3540	3720	3860
16	2520	3260	4000	4660	5220	5620	5920
14	2940	4000	5180	6360	7420	8300	8960
12	3280	4660	6360	8240	10100	11800	13180
10	3540	5220	7420	10100	13180	16060	18770
8	3720	5260	8300	11800	16060	20800	25540
6	3860	5960	8960	13180	18700	25540	33080

\* Solenoid Model: 24 Vac  
 Pressure: 150 psi  
 Voltage Drop: 4 V  
 Minimum Operating Voltage: 20 V  
 Amperage (peak) 0.12 A

## SPECIFICATIONS

### Operational

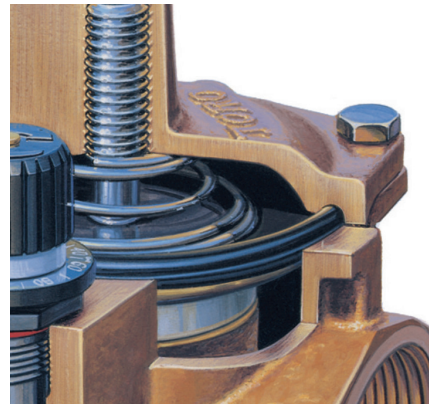
- Flow Range:
  - 1" – 5 to 40 gpm – 1¼" – 20 to 100 gpm
  - 1½" – 20 to 130 gpm – 2" – 30 to 180 gpm
- Operating Pressure (220 psi maximum pressure rating):
  - Electric – 10 to 220 psi
- Pressure regulating:
  - Outlet: 5 to 100 psi ± 3 psi
  - Inlet: 10 to 220 psi
- Minimum pressure differential (between inlet and outlet) for pressure regulation: 10 psi (2" is 20 psi)
- Burst pressure safety rating: 750 psi
- Body style:
  - Globe valve – 1", 1¼", 1½", 2" female threads
- Spike Guard™ Solenoid: 24 VAC (50/60 Hz) Standard
  - Inrush: 60 Hz: 0.12 amps
  - Holding: 60 Hz: 0.1 amps
- DC latching – momentary low voltage pulse

### Dimensions

- 1" – 5¼" H x 5" W
- 1¼" – 6½" H x 6" W
- 1½" – 6½" H x 6" W
- 2" – 7½" H x 7" W

### Warranty

- Five years



**Fabric Reinforced Diaphragm**  
 Provides superior performance and extended life without tearing in high pressure applications.

## 220 BRASS SERIES FRICTION LOSS DATA

Model	Type	gpm Flow																			
		5	10	15	20	30	40	50	60	70	80	100	120	150	170	180	200	250	300	350	
1"	Electric	1.75	2.0	2.2	3.10	5.05	7.80														
1¼"	Electric				1.85	2.50	2.70	3.50	4.10	5.6											
1½"	Electric				2.15	2.45	2.80	3.05	3.80	5.0	6.55										
2"	Electric					3.05	3.20	2.90	2.95	3.25	3.40	4.50	6.55	10.10	13.45	14.85					

Notes: For optimum performance when designing a system, 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 5 psi loss.

## Specifying Information—220G Brass Series

220G-27-0XXX			
Type	Body Style	Size	Optional
<b>220G</b>	<b>27</b>	<b>0X</b>	<b>XX</b>
220G—220G Brass Series Valve	27—NPT, Pressure-regulated (5–100 psi)	4–1" 6–1½" 5–1¼" 8–2"	DL—Latching Solenoid for 2-wire GDC Systems E—Effluent

**Example:** A 1" NPT pressure-regulated, 220G Brass Series Valve with 60 Hz solenoid, would be specified as: **220G-27-04**