

# PGAIVM Series Valves

Versatility at an affordable price.

TECHNICAL SPECIFICATIONS

## MODEL:



PGA Series Valve  
with TBOS Latching  
Solenoid

Whether the job calls for a globe or angle valve, PGAIVM Series valves are the right choice. Loaded with features, these heavyduty PVC valves are economical, easy to install and built to withstand constant 150 psi (10.35 bar) pressure and 2 to 150 gpm (0.45 to 34.05 m<sup>3</sup>/h; 7.8 to 568 l/m) flows.

The PGAIVM Series from Rain Bird – built to last... and last!

## FEATURES:

- Globe and angle configuration for flexibility in design and installation
- PVC and glass reinforced nylon construction
- Filtered pilot flow to resist debris and clogging of solenoid ports
- Slow closing to prevent water hammer and subsequent system damage
- Manual internal bleed operates the valve without allowing water into the valve box
- One-piece solenoid design with captured plunger and spring for easy servicing
- Prevents loss of parts during field service
- Non-rising flow control handle adjusts water flows as needed
- Normally closed, forward flow design

## OPERATING RANGE:

### Pressure

15 to 150 psi (1.04 to 10.35 bar)

### Flow with/without PRS-D

Flow: 150 gpm (0.45 to 34.05 m<sup>3</sup>/h; 7.8 to 568 l/m)

Flow with PRS-D: 5 –150 gpm (1.14 to 34.05 m<sup>3</sup>/h; 19.2 to 568 l/m)

### Temperature

up to 150° F (66° C)

## OPTIONS (ORDER SEPARATELY):

- Accommodates optional, field installed PRS-D pressure regulating module

## ELECTRICAL SPECIFICATIONS:

### Power

26.5 Vrms 50/60 Hz (cycles/sec)

### Inrush current

<40mA (Peak)

### Quiescent current

<0.4mA (ave.)

### Voltage range

15.6 - 29.2 Vrms

Compatible with LXIVM

controllers

## DIMENSIONS:

### IVM100PGA

Height: 7 1/4" (18.4 cm)

Length: 5 1/2" (14.0 cm)

Width: 3 1/4" (8.3 cm)

### IVM200PGA

Height: 10" (25.4 cm)

Length: 7 3/4" (19.7 cm)

Width: 5" (12.7 cm)

### IVM150PGA

Height: 8" (20.3 cm)

Length: 6 3/4" (17.2 cm)

Width: 3 1/2" (8.9 cm)

### Note:

The PRS-D option adds 2" (5.1 cm) to valve height.

## MODELS:

IVM100PGA 1"

IVM150PGA 1 1/2"

IVM200PGA 2"

\*BSP threads available; specify when ordering.

## HOW TO SPECIFY:

### IVM100 - PGA - PRS-D

Size	Model	Optional Feature
100: 1"	PGA	PRS-Dial: pressure regulating module (must be ordered separately)
150: 1 1/2"		
200: 2"		

### Note:

Valve and PRS-Dial module must be ordered separately. For non-U.S. applications, it is necessary to specify NPT or BSP thread type.



**SPECIFICATIONS:**

The electric remote control valve shall be a normally closed 26.5 Vrms 50/60 Hz (cycles/sec) solenoid actuated globe/angle pattern design. The valve pressure rating shall not be less than 150 psi (10.35 bar). The valve shall have the following characteristics (circle one):

Flow rate: \_\_\_\_\_ gpm    m<sup>3</sup>/h    l/m

Pressure loss not to exceed: \_\_\_\_\_ psi    bar

The valve body and bonnet shall be constructed of high-impact, water-resistant PVC for the body and glass-filled nylon for the bonnet with stainless steel screws.

The valve shall have manual open/close control (internal bleed) for manual opening and closing of valve without electrically energizing the solenoid. The valve's internal bleed shall prevent flooding of the valve box.

The valve shall house a fully-encapsulated, one-piece solenoid. The solenoid shall have a captured plunger with a removable retainer for easy servicing, and a leverage handle for easy turning. This 26.5 Vrms 50/60 Hz latching solenoid shall open between 15.6 and 29.2 Vrms with an inrush current less than 40mA.

The valve shall have a flow control stem for accurate manual regulation and/or shut off of outlet flow. The valve must open or close in less than 1 minute at 150 psi (10.35 bar), and less than 30 seconds at 20 psi (1.38 bar).

The valve construction shall provide for all internal parts to be removable from the top of the valve without disturbing the valve installation. The body shall have a removable O-ringed plug for installation in either globe or angle configuration.

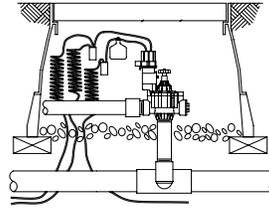
**OPTIONAL FEATURE SPECIFICATION:**

**PRS-D Pressure Regulating Module IVM100PGA-PRS-D, IVM150PGA-PRS-D, IVM200PGA-PRS-D**

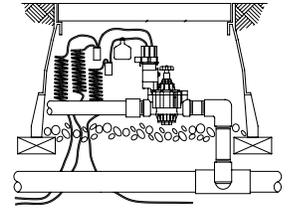
When so indicated on the design, the electric remote control valve shall have a pressure regulating module (PRS-D) capable of regulating outlet pressure between 15 and 100 psi (±3 psi) (1.04 and 6.90 bar (±0.21 bar)).

The PRS-D module shall have an adjusting knob for setting pressure and Schrader valve connection for monitoring pressure. The pressure shall be adjustable from the PRS-D when the valve is internally manually bled or electrically activated.

**Plastic Electric Remote Control PGAIVM Valve (with PRS-D) using bottom inlet**



**Plastic Electric Remote Control PGAIVM Valve (with PRS-D) using side inlet**



PGAIVM Series Valve Pressure Loss (psi)						
FLOW GPM	IVM 100-PGA GLOBE 1"	IVM 100-PGA ANGLE 1"	IVM 100-PGA GLOBE 1 1/2"	IVM 150-PGA ANGLE 1 1/2"	IVM 200-PGA GLOBE 2"	IVM 200-PGA ANGLE 2"
2	5.1	4.3	-	-	-	-
5	5.5	5.0	-	-	-	-
10	5.9	5.5	-	-	-	-
20	6.0	5.6	-	-	-	-
30	6.4	5.5	1.9	1.3	-	-
40	7.0	7.5	3.2	2.0	1.2	1.0
50	-	-	4.8	3.0	1.5	0.9
75	-	-	11.1	6.5	3.0	1.7
100	-	-	19.2	11.7	5.5	3.0
125	-	-	-	-	8.6	4.8
150	-	-	-	-	12.0	6.5

**Notes**

- Loss values are with flow control fully open.
- PRS-D module recommended for all flow ranges.

**Recommendations**

- Rain Bird recommends flow rates in the supply line not to exceed 7.5 ft./sec. (2.29 m/s) in order to reduce the effects of water hammer.
- For flows below 5 gpm (1.14 m<sup>3</sup>/h; 19.21 l/m), Rain Bird recommends use of upstream filtration to prevent debris from collecting below the diaphragm.
- For flows below 10 gpm (2.27 m<sup>3</sup>/h; 37.8 l/m) Rain Bird recommends the flow control stem be turned down two full turns from the fully open position.

PGAIVM Series Temperature Rating	
WATER TEMP.	CONTINUOUS PRESSURE
73° F (23° C)	150 psi (10.40 bar)
80° F (27° C)	132 psi (9.10 bar)
90° F (32° C)	112 psi (7.70 bar)
100° F (38° C)	93 psi (6.40 bar)
110° F (43° C)	75 psi (5.20 bar)

PGAIVM Series Valve Pressure Loss (bar)							
FLOW M <sup>3</sup> /H	FLOW L/M	IVM 100-PGA GLOBE 2.5CM	IVM 100-PGA ANGLE 2.5CM	IVM 100-PGA GLOBE 3.8CM	IVM 150-PGA ANGLE 3.8CM	IVM 200-PGA GLOBE 5.1CM	IVM 200-PGA ANGLE 5.1CM
0.23	3.8	0.35	0.30	-	-	-	-
0.6	10	0.36	0.32	-	-	-	-
1.2	20	0.38	0.35	-	-	-	-
3	50	0.41	0.38	-	-	-	-
6	100	0.43	0.38	0.10	0.07	-	-
9	150	0.48	0.51	0.22	0.14	0.08	0.07
12	200	-	-	0.38	0.23	0.12	0.07
15	250	-	-	0.61	0.36	0.17	0.10
18	300	-	-	0.86	0.51	0.24	0.13
21	350	-	-	1.16	0.70	0.33	0.18
24	400	-	-	-	-	0.43	0.23
27	450	-	-	-	-	0.54	0.30
30	500	-	-	-	-	0.66	0.36
34	568	-	-	-	-	0.83	0.45

**Rain Bird Corporation**  
 6991 East Southpoint Rd.  
 Tucson, AZ 85756  
 (520) 741-6100

**Rain Bird Corporation**  
 970 West Sierra Madre Ave.  
 Azusa, CA 91702  
 (626) 812-3400

**The Intelligent Use of Water™**  
[www.rainbird.com](http://www.rainbird.com)