



Chiricahua at Desert Mountain

Valves and Valve Boxes

Raising the Standards of Reliability.

Rain Bird valves are expertly engineered and manufactured to provide a level of quality and durability that's unmatched in the industry. Constructed of industrial-strength glass-filled nylon or classic brass, every model is built to stand up to the harshest environments. For decades, these valves have been delivering trouble-free performance that continues to earn the trust of golf course maintenance professionals worldwide.



Options for Every Need

Hold every aspect of your system to the highest standard. From pre-assembled, reclaimed water applications to an integration control (IC) configuration, Rain Bird valves are designed to meet the needs of any course.

GSV Series Valves



Rain Bird® GSV Series Valves deliver reliable performance you can trust year after year in a full line of plastic and brass options. With industry-leading surge protection and precision pressure regulation pre-installed, the GSV Series provides an innovative solution that's strong enough to weather any storm.

FEATURES AND BENEFITS

Unmatched Surge Resistance

The pre-installed Rain Bird® GBS25 Solenoid is designed to withstand up to 25kV of surge.

Adjustable Pressure Regulation

Pre-installed PRS-DIAL regulates and maintains constant outlet pressure between 15 and 100 psi (1.04 to 6.90 bar) within ± 3 psi (± 0.21 bar).

- Improved pressure spike reduction capabilities minimize water hammer
- Waterproof dial cartridge eliminates fogging and binding
- Consistent sprinkler performance for block applications
- Ergonomic design with snap-tight cover on dial cartridge prevents vandalism

Engineered for Reclaimed Water

Chlorine-resistant diaphragm delivers increased protection against harsh chemicals. Optional purple flow control handle and cover allow for easy indication of non-potable water use.

Uncompromising Durability

Plastic models feature a glass-filled polypropylene body that delivers heavy-duty performance up to 200 psi (13.80 bar) pressure.

- GSV211 (BSP only) model includes a red brass body and bonnet for longer life and more rugged performance up to 200 psi (13.80 bar) pressure
- Scrubber mechanism (plastic models only) encapsulates stainless steel screen to dislodge grit and plant material
- External bleed protects solenoid ports from debris when system is flushed

SPECIFICATIONS

Models:

- GSV100:** Plastic 1" (2.5 cm) (26/34), National Pipe Thread
- GSV101:** Plastic 1" (2.5 cm) (26/34), British Standard Pipe
- GSV150:** Plastic 1.5" (3.8 cm) (40/49), National Pipe Thread
- GSV151:** Plastic 1.5" (3.8 cm) (40/49), British Standard Pipe
- GSV200:** Plastic 2" (5.1 cm) (50/60), National Pipe Thread
- GSV201:** Plastic 2" (5.1 cm) (50/60), British Standard Pipe
- GSV211:** Brass 2" (5.1 cm) (50/60), British Standard Pipe

Flow:

5 to 200 gpm (19.2 to 757 l/m); (1.1 to 45.4 m³/h)

Pressure:

Up to 200 psi (13.80 bar)

Electrical Specifications:

Power: 24 VAC 50/60 Hz (cycles/sec) solenoid

Inrush Current: 0.41 A (9.84 VA) at 60 Hz

Hold Current: 0.20 A (4.80 VA) at 60 Hz, 0.23 A (5.40 VA) at 50 Hz

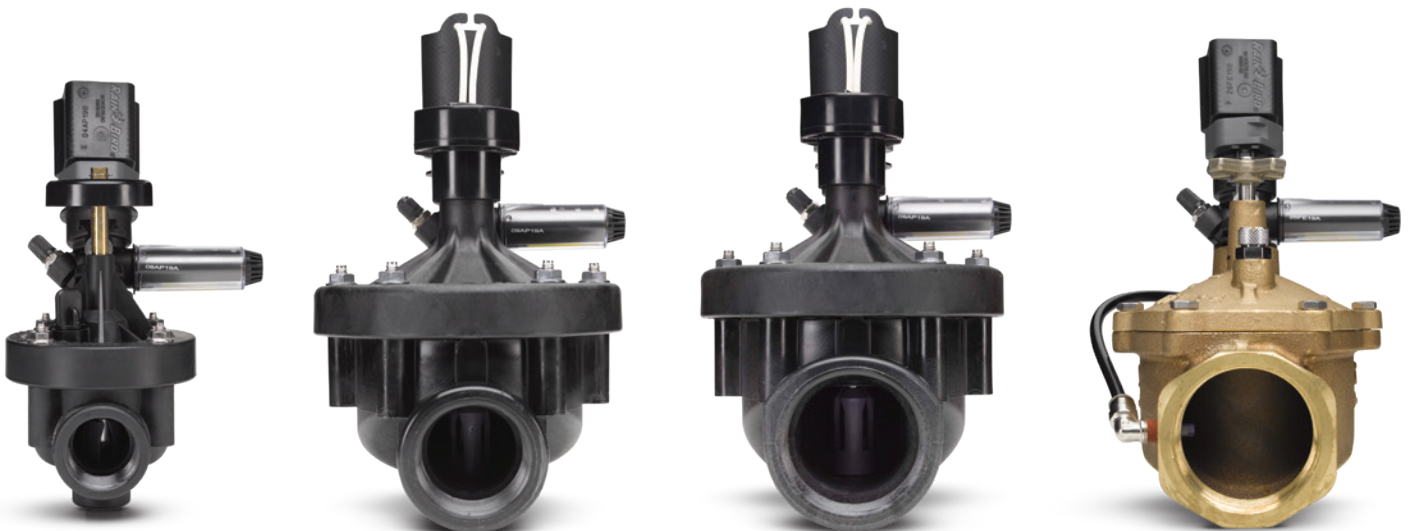
Coil Resistance: 30 to 39 ohms

HOW TO SPECIFY

MODEL	SIZE
GSV	100 = 1" NPT
	101 = 1" BSP
	150 = 1 1/2" NPT
	151 = 1 1/2" BSP
	200 = 2" NPT
	201 = 2" BSP
	211 = 2" BSP (brass)



Purple flow control handle and cover included to designate non-potable water.



All GSV Series Valves can be converted to IC System use with ICM Valve Kit; Model: ICMVLVKIT

DIMENSIONS

MODEL	SIZE	HEIGHT	LENGTH	WIDTH
GSV100 / GSV101	1"	8.3" (21.1 cm)	5.6" (14.2 cm)	5.2" (13.2 cm)
GSV150 / GSV151	1.5"	9.5" (24.1 cm)	6.1" (15.5 cm)	6.2" (15.8 cm)
GSV200 / GSV201	2"	9.9" (25.2 cm)	6.1" (15.5 cm)	6.2" (15.8 cm)
GSV211 (Brass)	2"	9.4" (23.9 cm)	6.9" (17.5 cm)	5.9" (14.9 cm)

U.S. Data — Pressure Loss (psi)

Flow gpm	GSV100	GSV150	GSV200	Flow gpm	GSV211
	GSV101 1"	GSV151 1½"	GSV201 2"		
5	2.9	—	—	5	—
10	2.9	—	—	10	—
20	2.6	3.5	—	15	—
30	5.8	3.1	—	20	0.5
40	10.2	2.3	—	30	0.6
50	16.0	2.1	—	40	0.8
75	—	4.3	3.3	50	1.1
100	—	7.5	4.7	60	1.8
125	—	11.9	8.6	80	2.4
150	—	17.0	12.6	100	3.8
175	—	—	14.8	120	5.9
200	—	—	18.9	140	7.8
				160	10.0
				180	12.5
				200	15.8

Rain Bird recommends flow rates in the supply line not to exceed 7½ ft/sec (2.29 m/s) to reduce the effects of water hammer.

Metric Data — Pressure Loss (bar)

Flow		GSV100	GSV150	GSV200	Flow		GSV211
l/m	m³/h	GSV101 1"	GSV151 1.5"	GSV201 2"	l/m	m³/h	
20	1.2	0.20	—	—	19	1	—
50	3	0.19	—	—	50	3	—
100	6	0.32	0.22	—	100	6	0.04
150	9	0.69	0.16	—	150	9	0.05
200	12	—	0.16	—	200	12	0.09
250	15	—	0.24	—	250	15	0.14
300	18	—	0.33	0.25	300	18	0.16
350	21	—	0.45	0.30	350	21	0.23
400	24	—	0.59	0.38	400	24	0.30
450	27	—	0.75	0.53	450	27	0.40
500	30	—	0.91	0.67	500	30	0.49
550	33	—	1.10	0.82	550	33	0.58
600	36	—	—	0.92	600	36	0.68
650	39	—	—	1.00	650	39	0.79
700	42	—	—	1.13	700	42	0.92
757	45	—	—	1.30	757	45	1.09

VALVES AND VALVE BOXES

PRS-DIAL

Maintain the constant pressure you need between 15 and 100 psi (1.04 to 6.90 bar), regardless of incoming pressure fluctuations with the PRS-DIAL. The regulator fits all Rain Bird PGA, PEB, PESIC, and GB Series Valves.

(See pages 61–62)



IC Valve

All GSV Series Valves can be converted to an IC Valve by replacing the GBS25 solenoid with an IC Module.

(See page 35)



PESB Series Integrated Control (IC) Valve with Scrubber

SPECIFICATIONS

Models:

100-PESIC: 1" (2.5 cm) (26/34)

150-PESIC: 1 ½" (3.8 cm) (40/49)

200-PESIC: 2" (5.1 cm) (50/60)

Valve and PRS-D module must be ordered separately. See pages 61–62 for more information on the PRS-D option. For non-U.S. applications it is necessary to specify NPT or BSP thread type.

Flow: 0.25 to 200 gpm
(1.2 to 757 l/m); (0.06 to 45.5 m³/h)

Flow with PRS-D*: 5 to 200 gpm
(19.2 to 757 l/m); (1.1 to 45.4 m³/h)

Pressure: 20 to 200 psi (1.38 to 13.8 bar)

Pressure with PRS-D*: Up to 100 psi
(6.90 bar)

Dimensions:

100-PESIC (1"):

Height: 6 ½" (16.5 cm)

Length: 4" (10.2 cm)

Width: 4" (10.2 cm)

150-PESIC (1 ½"):

Height: 8" (20.3 cm)

Length: 6" (15.2 cm)

Width: 6" (15.2 cm)

200-PESIC (2"):

Height: 8" (20.3 cm)

Length: 6" (15.2 cm)

Width: 6" (15.2 cm)



U.S. Data — Pressure Loss** (psi)

Flow gpm	100-PESIC 1"	150-PESIC 1 ½"	200-PESIC 2"
0.25	0.8	—	—
0.5	1.0	—	—
1	1.3	—	—
5	1.7	—	—
10	1.8	—	—
20	2.9	3.9	—
30	5.6	3.6	—
40	10.0	3.5	—
50	15.6	3.6	4.8
75	—	5.4	4.5
100	—	9.6	5.2
125	—	14.6	8.2
150	—	21.2	11.8
175	—	—	15.5
200	—	—	19.5

Metric Data — Pressure Loss** (bar)

Flow		100-PESIC 2.5 cm	150-PESIC 3.8 cm	200-PESIC 5.1 cm
l/m	m³/h			
1	0.06	0.06	—	—
5	0.3	0.09	—	—
10	0.6	0.10	—	—
20	1.2	0.12	—	—
50	3	0.15	—	—
100	6	0.32	0.26	—
150	9	0.68	0.24	—
200	12	—	0.26	0.33
250	15	—	0.33	0.32
300	18	—	0.42	0.32
350	21	—	0.57	0.34
400	24	—	0.74	0.41
450	27	—	0.92	0.51
500	30	—	1.14	0.64
550	33	—	1.38	0.77
600	36	—	—	0.90
650	39	—	—	1.04
700	42	—	—	1.18
757	45	—	—	1.34

Rain Bird recommends flow rates in the supply line not to exceed 7 ½ ft/sec (2.29 m/s) in order to reduce the effects of water hammer. For flows below 5 gpm (19.2 l/m, 1.14 m³/h), Rain Bird recommends use of upstream filtration to prevent debris from collecting below the diaphragm. For flows below 10 gpm (37.8 l/m, 2.27 m³/h), Rain Bird recommends that the flow control stem be turned down two full turns from the fully open position. PRS-D recommended for use in shaded area only.

PRS-Dial

The PRS-Dial is an excellent means of regulating outlet pressure at the valve regardless of incoming pressure fluctuations. The visible scale makes adjustment quick and easy. The regulator fits all Rain Bird® PGA, PEB, PESB, PESB-R, GB, EFB-CP and BPES series valves.

- Regulates and maintains constant outlet pressure between 15 and 100 psi (1.04 to 6.9 bar) within ± 3 psi (± 0.21 bar).
- Adjustment knob with detents permits fine-tune setting in $\frac{1}{3}$ psi (0.02 bar) increments. Dial cartridge makes installation and adjustment quick, easy and accurate.

FEATURES

- Improved spike reduction capabilities reduce water hammer.
- Ergonomic design with snap-tight cover to prevent vandalism.
- Waterproof dial cartridge eliminates fogging and binding.
- Dial cartridge retrofits into all existing PRS-D units.
- Schrader valve connects pressure hose gauge, ordered separately.
- Easy field installation — PRS-Dial threads underneath the solenoid and adapter.
- Corrosion-resistant glass-filled nylon for rugged performance.

SPECIFICATIONS

Operating Range:

Pressure: Up to 100 psi (6.9 bar)*

Regulation: 15 to 100 psi (1.04 to 6.9 bar)

Flow: Refer to chart

Model: PRS-D

APPLICATION INFORMATION

- Proper operation requires inlet pressure to be a minimum of 15 psi (1.04 bar) higher than desired outlet pressure.
- For areas with very high pressure or uneven terrain, install sprinklers with PRS pressure regulating stems and/or SAM check valves.
- When inlet pressure exceeds 100 psi (6.9 bar), a pressure regulating master valve or inline pressure regulator is required.
- Rain Bird does not recommend using the pressure regulating module for applications outside the recommended flow ranges.
- To reduce the effects of water hammer, Rain Bird recommends flow rates in the supply line not to exceed $7\frac{1}{2}$ ft/sec (2.29 m/s).
- For flows below 10 gpm (37.8 l/m, 2.27 m³/h), Rain Bird recommends the flow control stem be turned down two full turns from the fully open position.
- The PRS-D option adds an additional 2" (5.1 cm) to valve height.

*While the PRS-Dial unit can withstand pressures up to 200 psi (13.8 bar), accurate pressure regulation can be maintained only up to 100 psi (6.9 bar).

NOTE: Valve and PRS-D module must be ordered separately.



U.S. Data — Valve Flow Ranges **

Model	gpm
PGA	
100-PGA	5 – 40
150-PGA	30 – 100
200-PGA	40 – 150
PEB	
100-PEB	5 – 50
150-PEB	20 – 150
200-PEB	75 – 200
PESB / PESB-R	
100-PESB/PESB-R	5 – 50
150-PESB/PESB-R	20 – 150
200-PESB/PESB-R	75 – 200
GB	
100-GB	5 – 50
125-GB	20 – 80
150-GB	20 – 120
200-GB	20 – 200
EFB-CP-R	
100-EFB-CP-R	5 – 50
125-EFB-CP-R	20 – 80
150-EFB-CP-R	20 – 120
200-EFB-CP-R	20 – 200
BPES	
300-BPES	60 – 300

Metric Data — Valve Flow Ranges **

Model	l/m	m ³ /h
PGA		
100-PGA	19.2 – 15.1	1.14 – 9.08
150-PGA	113 – 378	6.81 – 22.70
200-PGA	151 – 568	9.08 – 34.05
PEB		
100-PEB	19.2 – 189	1.14 – 11.35
150-PEB	76 – 568	4.54 – 34.05
200-PEB	284 – 757	17.03 – 45.40
PESB / PESB-R		
100-PESB/PESB-R	19.2 – 189	1.14 – 11.35
150-PESB/PESB-R	76 – 568	4.54 – 34.05
200-PESB/PESB-R	284 – 757	17.03 – 45.40
GB		
100-GB	19.2 – 189	1.14 – 11.35
125-GB	76 – 302	4.54 – 18.16
150-GB	76 – 529	4.54 – 31.78
200-GB	76 – 757	4.54 – 45.40
EFB-CP-R		
100-EFB-CP-R	19.2 – 189	1.14 – 11.35
125-EFB-CP-R	76 – 302	4.54 – 18.16
150-EFB-CP-R	76 – 529	4.54 – 31.78
200-EFB-CP-R	76 – 757	4.54 – 45.40
BPES		
300-BPES	227 – 1136	13.62 – 68.10

**The PRS-Dial regulates only up to 100 psi (6.9 bar).

ICM Valve Kit

Rain Bird® ICM Valve Kit includes a ready-to-install ICM (Integrated Control Module) and a Rain Bird Valve Adapter with necessary o-rings and filter. This kit is designed to convert Rain Bird PEB, PESB, BPES, EFB-CP Series Electric Remote Control Valves into Integrated Control (IC) Valves.

See pages 32–37 for more information on the IC System™.



PESB with ICM Valve Kit

Quick Coupling Valves and Valve Keys

SPECIFICATIONS

Models:

- 3RC:** ¾" (1.9 cm) (20/27) Rubber cover, one-piece body
- 33DRC:** ¾" (1.9 cm) (20/27) Double track key lug, rubber cover, two-piece body
- 33DLRC:** ¾" (1.9 cm) (20/27) Double track key lug, locking rubber cover, two-piece body
- 33DNP:** ¾" (1.9 cm) (20/27) Non-potable, purple locking rubber cover, two-piece body
- 44RC:** 1" (2.5 cm) (26/34) Rubber cover, two-piece body
- 44LRC:** 1" (2.5 cm) (26/34) Locking rubber cover, two-piece body
- 44NP:** 1" (2.5 cm) (26/34) Non-potable, purple locking rubber cover, two-piece body
- 5RC:** 1" (2.5 cm) (26/34) Rubber cover, one-piece body
- 5LRC:** 1" (2.5 cm) (26/34) Locking rubber cover, one-piece body
- 5NP:** 1" (2.5 cm) (26/34) Non-potable, purple locking rubber cover, one-piece body
- 7:** 1 ½" (3.8 cm) (40/49) Metal cover, one-piece body

Flow:

- Models 3RC, 33DRC, 33DLRC, 33DNP, 44RC, 44LRC, 44NP, 5RC, 5LRC, 5NP, 7:** 10 to 125 gpm (37.8 to 473 l/m; 2.27 to 28.39 m³/h)
- Models 33DNP, 44NP, 5NP:** 10 to 70 gpm (37.8 to 265 l/m; 2.27 to 15.89 m³/h)

Pressure: 5 to 125 psi (0.4 to 8.6 bar)

Height:

- 3RC:** 4.3" (10.8 cm)
- 33DRC:** 4.4" (11.1 cm)
- 33DLRC:** 4.6" (11.8 cm)
- 33DNP:** 4.4" (11.1 cm)
- 44RC:** 6.0" (15.2 cm)
- 44LRC:** 6.0" (15.2 cm)
- 44NP:** 6.0" (15.2 cm)
- 5RC:** 5.5" (14.0 cm)
- 5LRC:** 5.5" (14.0 cm)
- 5NP:** 5.5" (14.0 cm)
- 7:** 5.8" (14.6 cm)



Quick Coupling Valve Keys

Top Pipe Threads					
Valve	Key	Male		Female	
3RC	33DK	¾"	19 mm	½"	13 mm
33DRC	33DK	¾"	19 mm	½"	13 mm
33NP	33DK	¾"	19 mm	½"	13 mm
44NP	44K	1"	25 mm	¾"	19 mm
44RC	44K	1"	25 mm	¾"	19 mm
5RC	55K-1	1"	25 mm	—	—
5NP	55K-1	1"	25 mm	—	—
7	7K	1 ½"	38 mm	—	—



Quick Coupling Valves

U.S. Data — Pressure Loss* (psi)						
Flow gpm	3RC ¾"	33DRC, 33DLRC, 33DNP ¾"	44RC, 44LRC, 44NP 1"	5RC, 5LRC, 5NP 1"	7 1 ½"	
10	1.8	2.0	—	—	—	
15	4.7	4.3	2.2	—	—	
20	7.2	7.6	4.4	—	—	
30	—	—	11.5	4.1	—	
40	—	—	—	7.3	—	
50	—	—	—	11.0	1.7	
60	—	—	—	15.7	2.5	
70	—	—	—	21.5	3.6	
80	—	—	—	—	4.9	
90	—	—	—	—	8.4	
100	—	—	—	—	14.0	

Metric Data — Pressure Loss* (bar)								
Flow l/m	Flow m³/h	3RC 1.9 cm	33DRC, 33DLRC, 33DNP 1.9 cm	44RC, 44LRC, 44NP 2.5 cm	5RC, 5LRC, 5NP 2.5 cm	7 3.8 cm		
38	2.3	0.12	0.12	—	—	—		
67	4	0.41	0.42	0.23	—	—		
83	5	0.57	0.62	0.40	—	—		
100	6	—	—	0.62	—	—		
117	7	—	—	0.83	0.30	—		
133	8	—	—	—	0.40	—		
150	9	—	—	—	0.50	—		
167	10	—	—	—	0.61	—		
200	12	—	—	—	0.85	0.13		
233	14	—	—	—	1.15	0.18		
267	16	—	—	—	1.50	0.25		
367	22	—	—	—	—	0.54		
473	28	—	—	—	—	0.97		

VALVES AND VALVE BOXES

*The PRS-D option adds 2" (5.1 cm) to valve height. **Loss values are with flow control fully open using the tan solenoid retainer.

VB Series Valve Boxes

FEATURES

- Commercial-grade boxes.
- Multiple sizes and shapes designed with corrugated sides and wide flange bases for maximum durability, compression strength and stability.
- Smart lid design with no holes to keep out pests and beveled edges to minimize damage potential from turf equipment with an easy-access shovel slot for lid removal.
- Interlocking stacking capabilities, extension models and pipe hole knockouts support deeper and more flexible installations.
- All black bodies and lids are made from 100% recycled materials, making them earth-friendly and LEED compliant.
- Locking systems with vandal-resistant hex or penta bolt, washers and clips.
- **Warranty:** 5-year trade warranty

Locking Systems:

VB-LOCK-H: Hex Head $\frac{3}{8}$ " x $2\frac{1}{4}$ " (1.0 x 5.7 cm) bolt, washer and clip

VB-LOCK-P: Penta Head $\frac{3}{8}$ " x $2\frac{1}{4}$ " (1.0 x 5.7 cm) bolt, washer and clip



VALVES AND VALVE BOXES



Size	7" Round	10" Round	Standard	Jumbo
Bottom Diameter	9.9" (25.1 cm)	13.7" (34.9 cm)	—	—
Length x Width	—	—	21.8" (55.4 cm) x 16.6" (42.2 cm)	26.3" (66.8 cm) x 19.8" (50.3 cm)
Height	9.0" (22.9 cm)	10.0" (25.4 cm)	12.0" (30.5 cm)	12.1" (30.7 cm)
Number of Knockouts	4	4	13	2
Pipe Sizing	Knock-outs sized with 2" (50 mm) pipe	Knock-outs sized with 2" (50 mm) pipe	2 knock-outs sized for 3" (80 mm) pipe 11 knock-outs sized for 2" (50 mm) pipe	Knock-outs sized with 3" (80 mm) pipe



MODELS

7" Round

Item ID	Lid Color	Model Number
G11480	Green	GVB7RNDGR
G11481	Black	GVB7RNDBLK
G11482	Purple	GVB7RNDPUR
G11483	Tan	GVB7RNDTAN

Standard

Item ID	Lid Color	Model Number
G11400	Green	GVBSTDGR
G11401	Black	GVBSTDBLK
G11402	Purple	GVBSTDPURP
G11403	Tan	GVBSTD TAN

10" Round

Item ID	Lid Color	Model Number
G11450	Green	GVB10RNDGR
G11451	Black	GVB10RNDBL
G11452	Purple	GVB10RNDPU
G11453	Tan	GVB10RNDTA

Jumbo

Item ID	Lid Color	Model Number
G11430	Green	GVBJMBGR
G11431	Black	GVBJMBBLK
G11432	Purple	GVBJMBPURP
G11433	Tan	GVBJMBTAN