



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.

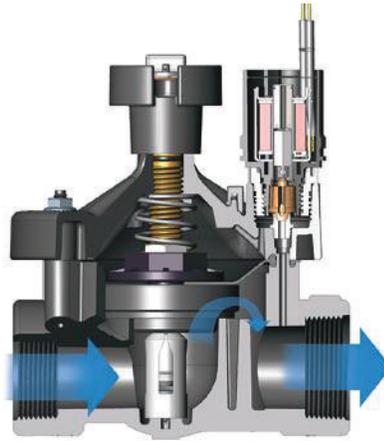
PESB / PESB-R Series

SPECIFICATIONS

Models:

- 100-PESB: 1" (2.5 cm) (26/34)
- 100-PESB-R: 1" (2.5 cm) (26/34)
- 150-PESB: 1 1/2" (3.8 cm) (40/49)
- 150-PESB-R: 1 1/2" (3.8 cm) (40/49)
- 200-PESB: 2" (5.1 cm) (50/60)
- 200-PESB-R: 2" (5.1 cm) (50/60)

Valve and PRS-D module must be ordered separately. See pages 58-59 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)

Electrical Specifications:

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

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

Holding Current: 0.14 A (3.43 VA)
at 60 Hz

Coil Resistance: 30 to 39 ohms

Temperature: 150°F (66°C) maximum

Dimensions:

100-PESB/PESB-R (1"):
Height: 6 1/2" (16.5 cm)
Length: 4" (10.2 cm)
Width: 4" (10.2 cm)

150-PESB /PESB-R (1 1/2"):
Height: 8" (20.3 cm)
Length: 6" (15.2 cm)
Width: 6" (15.2 cm)

200-PESB /PESB-R (2"):
Height: 8" (20.3 cm)
Length: 6" (15.2 cm)
Width: 6" (15.2 cm)



HOW TO SPECIFY

XXX	XXXX-X	XXX-X
SIZE	MODEL	OPTIONAL FEATURE
100 = 1"	PESB	PRS-D = PRS Dial
150 = 1 1/2"	PESB-R	ICM = ICM Module
200 = 2"		

NOTE: Valve and PRS-D or ICM must be ordered separately. See page 34 on how to specify the IC configuration.

U.S. Data — Pressure Loss** (psi)

Flow gpm	100-PESB 1"	100-PESB-R 1"	150-PESB 1 1/2"	150-PESB-R 1 1/2"	200-PESB 2"	200-PESB-R 2"
0.25	0.8	1.6	—	—	—	—
0.5	1.0	3.0	—	—	—	—
1	1.3	1.8	—	—	—	—
5	1.7	2.9	—	—	—	—
10	1.8	2.9	—	—	—	—
20	2.9	2.6	3.9	3.5	—	—
30	5.6	5.8	3.6	3.1	—	—
40	10.0	10.2	3.5	2.3	—	—
50	15.6	16.0	3.6	2.1	4.8	3.7
75	—	—	5.4	4.3	4.5	3.3
100	—	—	9.6	7.5	5.2	4.7
125	—	—	14.6	11.9	8.2	8.6
150	—	—	21.2	17.0	11.8	12.6
175	—	—	—	—	15.5	14.8
200	—	—	—	—	19.5	18.9

Rain Bird recommends flow rates in the supply line not to exceed 7 1/2 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.

Metric Data — Pressure Loss** (bar)

Flow l/m	m ³ /h	100-PESB 2.5 cm	100-PESB-R 2.5 cm	150-PESB 3.8 cm	150-PESB-R 3.8 cm	200-PESB 5.1 cm	200-PESB-R 5.1 cm
1	0.06	0.06	0.11	—	—	—	—
5	0.3	0.09	0.13	—	—	—	—
10	0.6	0.10	0.15	—	—	—	—
20	1.2	0.12	0.20	—	—	—	—
50	3	0.15	0.19	—	—	—	—
100	6	0.32	0.32	0.26	0.22	—	—
150	9	0.68	0.69	0.24	0.16	—	—
200	12	—	—	0.26	0.16	0.33	0.25
250	15	—	—	0.33	0.24	0.32	0.24
300	18	—	—	0.42	0.33	0.32	0.25
350	21	—	—	0.57	0.45	0.34	0.30
400	24	—	—	0.74	0.59	0.41	0.38
450	27	—	—	0.92	0.75	0.51	0.53
500	30	—	—	1.14	0.91	0.64	0.67
550	33	—	—	1.38	1.10	0.77	0.82
600	36	—	—	—	—	0.90	0.92
650	39	—	—	—	—	1.04	1.00
700	42	—	—	—	—	1.18	1.13
757	45	—	—	—	—	1.34	1.30

*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.

EFB-CP Series

SPECIFICATIONS

Models:

- 100-EFB-CP:** 1" (2.5 cm)
- 150-EFB-CP:** 1 ½" (3.8 cm)
- 200-EFB-CP:** 2" (5.1 cm) (Brass)

Valve and PRS-D module must be ordered separately. See pages 58-59 for more information on the PRS-D option. For non-U.S. applications it is necessary to specify NPT or BSP thread type.

Flow with or without PRS-D*: 5 to 200 gpm
(19.2 to 757 l/m)

Pressure: 15 to 200 psi (1.0 to 13.8 bar)

Pressure with PRS-D*: 15 to 100 psi (1.0 to 6.9 bar)

Pressure Requirements using PRS-D*: 15 psi (1.0 bar) inlet pressure above desired outlet pressure

Electrical Specifications:

- Power:** 24 VAC 50/60 Hz (cycles/sec) solenoid
- Inrush current:** 0.41 A (9.84 VA) at 60 Hz
- Holding current:** 0.14 A (3.43 VA) at 60 Hz
- Coil resistance:** 30 to 39 ohms

Dimensions:

- | | |
|-------------------------------|-------------------------------|
| 100-EFB-CP (1"): | 150-EFB-CP (1 ½"): |
| Height: 6" (15.2 cm) | Height: 6 ½" (16.5 cm) |
| Length: 4 ½" (11.4 cm) | Length: 5 ½" (14.0 cm) |
| Width: 3 ¼" (8.3 cm) | Width: 4 ¼" (11.4 cm) |

- | |
|-------------------------------|
| 200-EFB-CP (2"): |
| Height: 7" (17.8 cm) |
| Length: 6 ¾" (17.1 cm) |
| Width: 5 ¾" (14.6 cm) |

Temperature: 150°F (66°C) maximum

Reclaimed Water Compatible

All models feature chlorine-resistant EPDM diaphragm for applications using reclaimed water.

U.S. Data — Pressure Loss** (psi)

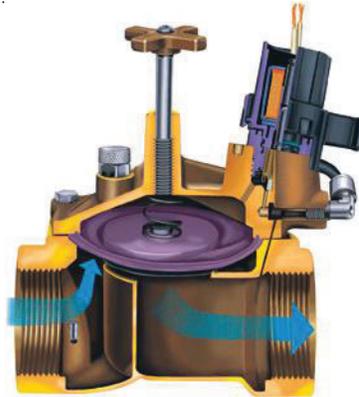
Flow gpm	100-EFB-CP 1"	150-EFB-CP 1 ½"	200-EFB-CP 2"
5	0.2	—	—
10	0.7	—	—
15	1.2	—	—
20	2.1	2.3	0.5
30	5.0	2.9	0.6
40	8.2	2.0	0.8
50	13.0	3.3	1.1
60	—	4.6	1.8
80	—	7.5	2.4
100	—	11.8	3.8
120	—	16.6	5.9
140	—	—	7.8
160	—	—	10.0
180	—	—	12.5
200	—	—	15.8

Metric Data — Pressure Loss** (bar)

Flow		100-EFB-CP 2.5 cm	150-EFB-CP 3.8 cm	200-EFB-CP 5.1 cm
l/m	m ³ /h			
19	1	0.01	—	—
50	3	0.07	—	—
100	6	0.27	0.19	0.04
150	9	0.56	0.14	0.05
200	12	—	0.25	0.09
250	15	—	0.38	0.14
300	18	—	0.51	0.16
350	21	—	0.70	0.23
400	24	—	0.91	0.30
450	27	—	1.13	0.40
500	30	—	—	0.49
550	33	—	—	0.58
600	36	—	—	0.68
650	39	—	—	0.79
700	42	—	—	0.92
757	45	—	—	1.09

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.

Purple handle cover included to designate non-potable water.



HOW TO SPECIFY

XXX	-	EFB-CP	-	XXX-X
SIZE		MODEL		OPTIONAL FEATURE
100 = 1"		EFB-CP		PRS-D = PRS Dial
150 = 1 ½"				
200 = 2"				

NOTE: Valve and PRS-D or ICM must be ordered separately. See page 34 on how to specify the IC configuration.

BPES Brass Valves

SPECIFICATIONS

Model: 300-BPES: 3" (7.6 cm) (80/90)

Valve and PRS-D module must be ordered separately. See pages 58-59 for more information on the PRS-D option. For non-U.S. applications it is necessary to specify NPT or BSP thread type.

Flow with or without PRS-D*: 60 to 300 gpm
(227 to 1136 l/m); (13.6 to 68.1 m³/h)

Pressure: 20 to 200 psi (1.4 to 13.8 bar)

Pressure with PRS-D*: Up to 100 psi (6.9 bar)

Pressure Requirements using PRS-D*: 15 psi (1.04 bar) inlet pressure above desired outlet pressure

Dimensions:

Height: 13 5/8" (34.6 cm)

Length: 8" (20.32 cm)

Width: 7" (17.78 cm)

Temperature: 110°F (43°C) maximum

Electrical Specifications:

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

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

Holding current: 0.28 A (6.72 VA) at 60 Hz

Coil resistance: 28 ohms, nominal

U.S. Data — Pressure Loss**

Flow gpm	Globe psi	Angle psi
60	6.6	6.8
80	5.1	5.9
100	3.2	3.5
120	1.8	1.8
140	1.8	2.1
160	2.0	2.1
180	2.2	2.0
200	2.7	2.5
250	4.0	3.4
300	4.9	4.5

Metric Data — Pressure Loss** (bar)

Flow		Globe 2.5 cm	Angle 3.8 cm
l/m	m ³ /h		
227	13.6	0.46	0.47
400	24	0.19	0.21
600	36	0.14	0.14
800	48	0.21	0.19
1000	60	0.29	0.26
1136	68	0.34	0.31

Rain Bird recommends flow rates in the supply line not to exceed 7 1/2 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.



HOW TO SPECIFY

XXX	-	BPES	-	XXX-X
SIZE		MODEL		OPTIONAL FEATURE
300 = 3"		BPES		PRS-D = PRS Dial ICM = ICM Module

NOTE: Valve and PRS-D must be ordered separately. See page 34 on how to specify the ICM configuration.



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	

*Loss values are with flow control fully open using the tan solenoid retainer.

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

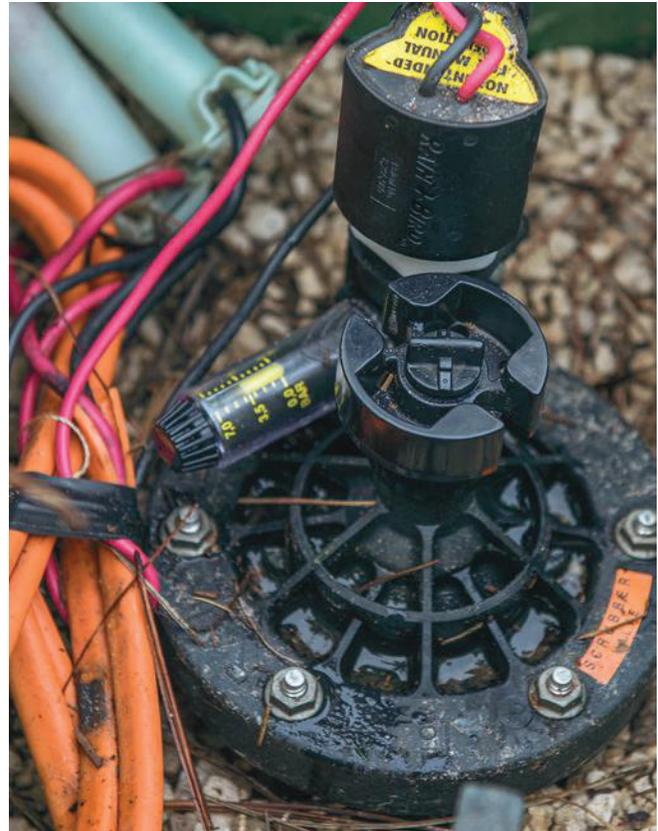
Model: PRS-D

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).



150-PESB with PRS-D

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.



PESB with ICM Valve Kit

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

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

Bolt Hole Knock-Out keeps hazardous insects and pests out when bolt is not used.

Beveled Lid Edges prevent damage from lawn equipment.

Finger or Shovel Access Slot for easy removal of lid.

Corrugated Sides maintain structural integrity under heavy loads.

Interlocking Feature locks two boxes together when fitted bottom-to-bottom for deep installations.

Knock-Out Retainers hold removed knock-outs in place during backfill.

Knock-Outs built into all four sides.

Wide Flange stabilizes box eliminating need for brick and provides enhanced side load strength.



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