

VALVES



Rain Bird® Valves are ruggedly reliable and expertly engineered to provide an elevated standard of product integrity that is unmatched in the industry. Constructed of industrial-strength glass-filled nylon or classic brass, Rain Bird Valves are designed to withstand the harshest environments, and the lasting, trouble-free performance continues to earn the trust of golf course professionals worldwide.



100-PESB, 150-PESB and 200-PESB

SPECIFICATIONS

Models:

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

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

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

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

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

Dimensions:

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

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

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

Temperature: 150°F (66°C) maximum

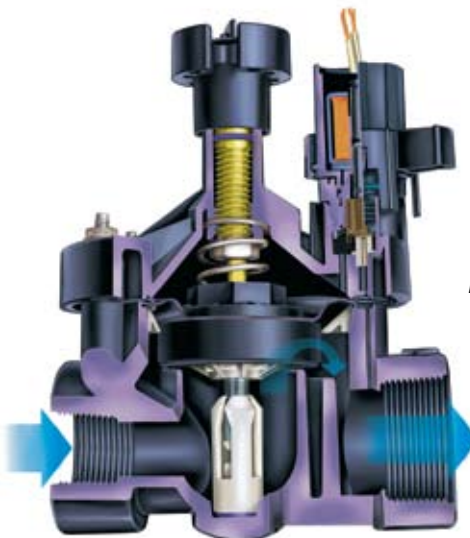
Electrical Specifications:

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: 30 to 39 ohms



Note: Plastic scrubber on the PESB valve scrapes the stainless steel screen to clean and break-down grit and plant material. Prevents debris build-up and clogging.

Note: For non-U.S. applications, it is necessary to specify NPT or BSP thread type.

● 100-PESB

HOW TO SPECIFY

XXX - PESB - XXX-X

Size: 100, 150, 200
Model: PESB
Optional Feature: PRS-D

Also available in IC configuration. Please see page 18 on how to specify.

PESB SERIES VALVES — U.S.

PRESSURE LOSS* (PSI)			
Flow (gpm)	100-PESB 1"	150-PESB 1 1/2"	200-PESB 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

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

PESB SERIES VALVES — METRIC

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

- 1) 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.
- 2) For flows below 5 gpm (1.14 m³/h, 19.2 l/m), Rain Bird recommends use of upstream filtration to prevent debris from collecting below the diaphragm.
- 3) For flows below 10 gpm (2.27 m³/h, 37.8 l/m), Rain Bird recommends that the flow control stem be turned down two full turns from the fully open position.
- 4) PRS-D recommended for use in shaded area only.

100-PESB-R, 150-PESB-R and 200-PESB-R

SPECIFICATIONS

Models:

- 100-PESB-R: 1" (2.5 cm) (26/34)
 - 150-PESB-R: 1 1/2" (3.8 cm) (40/49)
 - 200-PESB-R: 2" (5.1 cm) (50/60)
 - 100-PESB-R-WK: 1" (2.5 cm) (26/34) Conversion Kit
 - 150-PESB-R-WK: 1 1/2" (3.8 cm) (40/49) Conversion Kit
 - 200-PESB-R-WK: 2" (5.1 cm) (50/60) Conversion Kit
- BSP threads available, specify when ordering.*

Flow: 0.25 to 200 gpm (0.06 to 45.0 m³/h),
(1.2 to 757 l/m)

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

Pressure: 20 to 200 psi (1.38 to 13.80 bar)

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

Pressure Requirements using PRS-D: 15 psi (1.00 bar)
inlet pressure above desired outlet pressure

Dimensions:

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

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

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

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

Temperature: 150°F (66°C) maximum

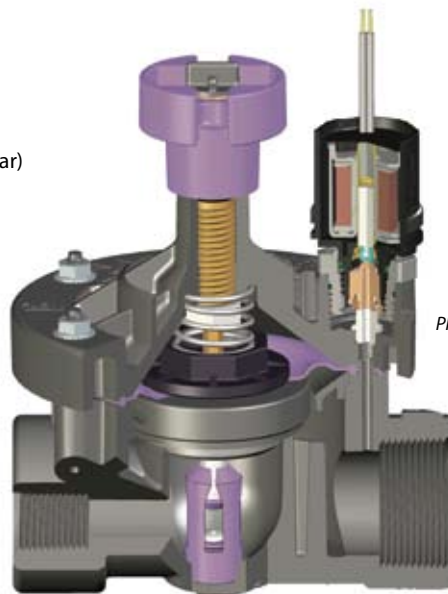
Electrical Specifications:

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: 30 to 39 ohms



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

● 150-PESB-R

HOW TO SPECIFY

XXX	-	PESB-R	-	XXX-X
Size		Model		Optional Feature
100		PESB-R		PRS-D
150				
200				

Also available in IC configuration. Please see page 18 on how to specify.

PESB-R SERIES VALVES — U.S.

PRESSURE LOSS* (PSI)			
Flow (gpm)	100-PESB-R 1"	150-PESB-R 1 1/2"	200-PESB-R 2"
0.25	1.6	—	—
0.5	3.0	—	—
1	1.8	—	—
5	2.9	—	—
10	2.9	—	—
20	2.6	3.5	—
30	5.8	3.1	—
40	10.2	2.3	—
50	16.0	2.1	3.7
75	—	4.3	3.3
100	—	47.5	4.7
125	—	11.9	8.6
150	—	17.0	12.6
175	—	—	14.8
200	—	—	18.9

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

PESB-R SERIES VALVES — METRIC

PRESSURE LOSS* (BAR)				
Flow (m ³ /h)	Flow (l/m)	100-PESB-R 2.5 cm	150-PESB-R 3.8 cm	200-PESB-R 5.1 cm
0.06	1	0.11	—	—
0.3	5	0.13	—	—
0.6	10	0.15	—	—
1.2	20	0.20	—	—
3	50	0.19	—	—
6	100	0.32	0.22	—
9	150	0.69	0.16	—
12	200	—	0.16	0.25
15	250	—	0.24	0.24
18	300	—	0.33	0.25
21	350	—	0.45	0.30
24	400	—	0.59	0.38
27	450	—	0.75	0.53
30	500	—	0.91	0.67
33	550	—	1.10	0.82
36	600	—	—	0.92
39	650	—	—	1.00
42	700	—	—	1.13
45	757	—	—	1.30

- 1) 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.
- 2) For flows below 5 gpm (1.14 m³/h, 19.2 l/m), Rain Bird recommends use of upstream filtration to prevent debris from collecting below the diaphragm.
- 3) For flows below 10 gpm (2.27 m³/h, 37.8 l/m), Rain Bird recommends that the flow control stem be turned down two full turns from the fully open position.
- 4) PRS-D recommended for use in shaded area only.

100-EFB-CP-R, 125-EFB-CP-R, 150-EFB-CP-R and 200-EFB-CP-R

SPECIFICATIONS

Models: 100-EFB-CP-R (1", 2.5 cm), 125-EFB-CP-R (1 ¼", 3.2 cm), 150-EFB-CP-R (1 ½", 3.8 cm) and 200-EFB-CP-R (2", 5.1 cm) (Brass)

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 7.0 bar)

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

Dimensions:

100-EFB-CP-R (1"):

Height: 6" (15.2 cm)
Length: 4 ½" (11.4 cm)
Width: 3 ¼" (8.3 cm)

125-EFB-CP-R (1 ¼"):

Height: 5 ¾" (14.6 cm)
Length: 5" (12.7 cm)
Width: 3 ¼" (8.3 cm)

150-EFB-CP-R (1 ½"):

Height: 6 ½" (16.5 cm)
Length: 5 ½" (14.0 cm)
Width: 4 ½" (11.4 cm)

200-EFB-CP-R (2"):

Height: 7" (17.8 cm)
Length: 6 ¾" (17.1 cm)
Width: 5 ¾" (14.6 cm)

Temperature: 150°F (66°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: 30 to 39 ohms



● 100-EFB-CP-R

Note: For non-U.S. applications, it is necessary to specify NPT or BSP thread type.

HOW TO SPECIFY

XXX	- EFB-CP-R -	XXX-X
Size	Model	Optional Feature
100	EFB-CP-R	PRS-D
125		
150		
200		

Also available in IC configuration. Please see page 18 on how to specify.

NEW RELCAIMED STANDARD:

Features chlorine-resistant EPDM diaphragm for applications using reclaimed water.

EFB-CP-R SERIES VALVES — U.S.

PRESSURE LOSS* (PSI)				
Flow (gpm)	100-EFB-CP-R 1"	125-EFB-CP-R 1 ¼"	150-EFB-CP-R 1 ½"	200-EFB-CP-R 2"
5	0.2	—	—	—
10	0.7	—	—	—
15	1.2	—	—	—
20	2.1	1.4	2.3	0.5
30	5.0	2.3	2.9	0.6
40	8.2	4.1	2.0	0.8
50	13.0	6.8	3.3	1.1
60	—	9.8	4.6	1.8
80	—	16.5	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

EFB-CP-R SERIES VALVES — METRIC

PRESSURE LOSS* (BAR)					
Flow (m³/h)	Flow (l/m)	100-EFB-CP-R 2.5 cm	125-EFB-CP-R 3.1 cm	150-EFB-CP-R 3.8 cm	200-EFB-CP-R 5.1 cm
1	19	0.01	—	—	—
3	50	0.07	—	—	—
6	100	0.27	0.14	0.19	0.04
9	150	0.56	0.28	0.14	0.05
12	200	—	0.53	0.25	0.09
15	250	—	0.82	0.38	0.14
18	300	—	1.12	0.51	0.16
21	350	—	—	0.70	0.23
24	400	—	—	0.91	0.30
27	450	—	—	1.13	0.40
30	500	—	—	—	0.49
33	550	—	—	—	0.58
36	600	—	—	—	0.68
39	650	—	—	—	0.79
42	700	—	—	—	0.92
45	757	—	—	—	1.09

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

- 1) 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.
- 2) For flows below 5 gpm (1.14 m³/h, 19.2 l/m), Rain Bird recommends use of upstream filtration to prevent debris from collecting below the diaphragm.
- 3) For flows below 10 gpm (2.27 m³/h, 37.8 l/m), Rain Bird recommends that the flow control stem be turned down two full turns from the fully open position.
- 4) PRS-D recommended for all flow ranges.

300-BPE and 300-BPES Brass Valves

SPECIFICATIONS

Models:

- 300-BPE: 3" (7.6 cm) (89/90)
- 300-BPES: 3" (7.6 cm) (80/90)

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

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 (1.0 bar)
inlet pressure above desired outlet pressure

Dimensions:

- 300-BPE (3"):
 - 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:

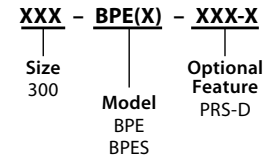
- Power:** 24 VAC 50/60 Hz
(cycles/sec) solenoid
- Inrush current:** 0.41 A (9.84 VA)
at 60 Hz
- Holding current:** 0.28 A
(6.72 VA) at 60 Hz
- Coil resistance:** 28 ohms, nominal



● 300-BPES

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

HOW TO SPECIFY



Also available in IC configuration. Please see page 18 on how to specify.

BPE 3" VALVES — U.S.

PRESSURE LOSS* (PSI)		
Flow (gpm)	GLOBE	ANGLE
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

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

BPES 7,6 cm VALVES — METRIC

PRESSURE LOSS* (BAR)			
Flow (m ³ /h)	Flow (l/m)	GLOBE 2.5 cm	ANGLE 3.8 cm
13.6	227	0.46	0.47
24	400	0.19	0.21
36	600	0.14	0.14
48	800	0.21	0.19
60	1000	0.29	0.26
68	1136	0.34	0.31

Recommendations

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.

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

*Available in BSP model.

Flow:

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

Models 33DNP, 44NP, 5NP: 10 to 70 gpm (2.27 to 15.89 m³/h; 37.8 to 265 l/m)

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

Height:

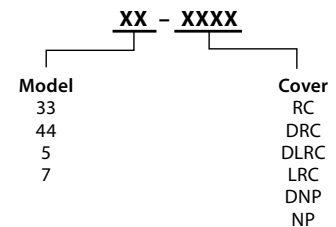
- 3RC:** 4.3" (10.8 cm)
- 33DRC:** 4.4" (11.1 cm)
- 33DLRC:** 4.6" (11.8 cm)
- 33DNP:** 4.4" (11.1 cm)
- 44RC:** 6.0" (15.2 cm)
- 44LRC:** 6.0" (15.2 cm)
- 44NP:** 6.0" (15.2 cm)
- 5RC:** 5.5" (14.0 cm)
- 5LRC:** 5.5" (14.0 cm)
- 5NP:** 5.5" (14.0 cm)
- 7:** 5.8" (14.6 cm)



● Quick Coupling Valves

Note: For non-U.S. applications, it is necessary to specify NPT or BSP thread type (for 5RC, 5LRC, 7 only).

HOW TO SPECIFY



QUICK COUPLING VALVES — U.S.

VALVE PRESSURE LOSS* (PSI)					
Flow (gpm)	3RC 0.75"	33DRC 33DLRC 33DNP 0.75"	44RC 44LRC 44NP 1"	5RC 5LRC 5NP 1"	7 1.50"
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

QUICK COUPLING VALVES — METRIC

VALVE PRESSURE LOSS* (BAR)						
Flow (m ³ /h)	Flow (l/m)	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
2.3	38	0.12	0.12	—	—	—
4	67	0.41	0.42	0.23	—	—
5	83	0.57	0.62	0.40	—	—
6	100	—	—	0.62	—	—
7	117	—	—	0.83	0.30	—
8	133	—	—	—	0.40	—
9	150	—	—	—	0.50	—
10	167	—	—	—	0.61	—
12	200	—	—	—	0.85	0.13
14	233	—	—	—	1.15	0.18
16	267	—	—	—	1.50	0.25
22	367	—	—	—	—	0.54
28	473	—	—	—	—	0.97

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*	1½"	38 mm	—	—

*Available in BSP models.



55K-1

● Quick Coupling Valve Keys

VALVES



PRESSURE REGULATING MODULE

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, BPE 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 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-B 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.

OPERATING RANGE

Pressure: Up to 100 psi (6.9 bar)*

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

Accuracy: ±3 psi (±0.21 bar)

Flow: Refer to chart

**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).*

MODELS

- 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 1/2 ft/sec (2.29 m/s).
- For flows below 10 gpm (2.27 m³/h, 37.8 l/m), Rain Bird recommends the flow control stem be turned down two full turns from the fully open position.



VALVE FLOW RANGES* — U.S.

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

VALVE FLOW RANGES* — METRIC

MODEL	M ³ /H	L/M
100-PGA	1.14–9.08	19.2–15.1
150-PGA	6.81–22.70	113–378
200-PGA	9.08–34.05	151–568
100-PEB	1.14–11.35	19.2–189
150-PEB	4.54–34.05	76–568
200-PEB	17.03–45.40	284–757
100-PESB/PESB-R	1.14–11.35	19.2–189
150-PESB/PESB-R	4.54–34.05	76–568
200-PESB/PESB-R	17.03–45.40	284–757
100-GB	1.14–11.35	19.2–189
125-GB	4.54–18.16	76–302
150-GB	4.54–31.78	76–529
200-GB	4.54–45.40	76–757
100-EFB-CP-R	1.14–11.35	19.2–189
125-EFB-CP-R	4.54–18.16	76–302
150-EFB-CP-R	4.54–31.78	76–529
200-EFB-CP-R	4.54–45.40	76–757
300-BPE	13.62–68.10	227–1,136
300-BPES	13.62–68.10	227–1,136

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