

Built for Speed™

# **HRB SERIES**

The industry's fastest, best built valves. The HRB Series valves are the ones you can install and forget—they work flawlessly year after year even under pressures up to 200 PSI. We build them with durable glass-filled nylon and a fabric-reinforced diaphragm to ensure toughness and reliable, long-lasting performance. The diaphragm spring and bonnet studs and screws are made from corrosion-resistant stainless steel, and the flow-control stem is made of solid, heavy-duty brass. The self-flushing grit screen filters out sand and debris, and the slow-closing diaphragm reduces risk of water hammer.

### **BUILT FOR SPEED ADVANTAGES**

 Factory-Installed 1" Blu-Lock Adapter—Makes for lightening fast, glueless installation.

#### **BUILT FOR GREEN ADVANTAGES**

 100% Recyclable Materials—Made from recyclable materials. PVC free.

## **FEATURES AND BENEFITS**

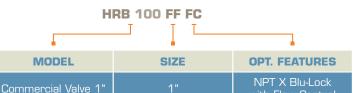
- Glass-Filled Body—Delivers superior robustness under extreme conditions.
- Solid Brass and Stainless Steel Internals— Ensures corrosion resistence.
- Slow-Closing Reinforced Diaphragm—Protects against water hammer.
- Pilot Hole Filter Screen—Reduces risk of clogging.
- Stainless Steel Studs—Prevent possible damage due to over tightening and corrosion.
- Manual Internal Bleed—Enables convenient, waterefficient manual operation.
- Manual External Bleed—Enables fast seasonal startup and shutdown.
- Low and High Flow—Satisfies a wide range of flow conditions and application requirements.
- Flow Control Stem—Provides ability to adjust flow over a wide range.
- One-Piece Solenoid Design—Secures plunger in solenoid body.
- Model Versatility—Covers 1", 11/2" and 2" applications.

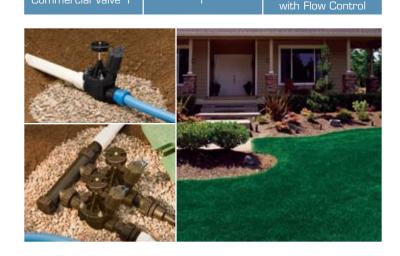


#### **MODELS SKU DESCRIPTION**

HRB-	100-FF-FC	05100	HRB 100 1" NPT Commercial Valve
HRB-	100-FB-1X	05107	HRB 100 4" NPT Commercial Valve with BL 1" Adapter
HRB-	150-FF-FC	05101	HRB 100 1½" NPT Commercial Valve
HRB-	200-FF-FC	05102	HRB 200 2" NPT Commercial Valve

#### **HOW TO SPECIFY**







Built for Speed™

# **HRB SERIES**

#### **OPERATING RANGE**

Pressure: 20~200 PSI (1,38~13,80 BAR)

• Flow: 0.25~200 GPM (0,06~45,40 m3/h; 0,32~12,60 l/s)

Water Temperature: Up to 150°F (66°C)
 Ambient Temperature: Up to 150°F (66°C)

• Dimensions:

**HRB 100** 

Height: 6 ½" (16,5 cm)
Length: 4" (10,2 cm)
Width: 4" (10,2 cm)

HRB 150 / 200

Height: 8" (20,3 cm)
Length: 6" (15,2 cm)
Width: 6" (15,2 cm)

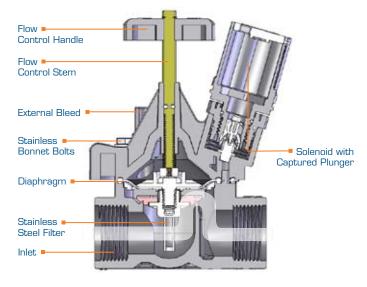
### **ELECTRICAL SPECIFICATIONS**

24 VAC 50/60 (Cycle/Sec) Solenoid

Inrush Current: .30 A (7.2 VA) at 60 HZ
 Holding Current: .19A (4.6VA) at 60 HZ

• Coil Resistance: 42~55 OHMS

# **HRB CUTAWAY**



05100-36 Rev D

#### **INSTALLATION SPECIFICATION DETAIL** Finish Grade Valve Box with Cover HRV-012-GB-GC 30" Linear Length of Remote 3" min. Wire, Coiled Control HRB Valve Waterproof Connection **PVC SCH** Blu-Lock I 40 Elbow Adapter **PVC SCH** 80 Nipple Blu-Lock -Lateral Pipe PVC Mainline Pipe 3" Minimum Depth of PVC SCH 40 34" Washed Gravel Tee or Elbow

# HRB SERIES VALVE PRESSURE LOSS PSI BAR

FLOW (GPM)	100 HRB	150 HRB	200 HRB
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	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

	FLOW (GPM) M³/H	FLOW (L/S)	100 HRB	150 HRB	200 HRB
	0,6	0,02	0,05	-	-
+	1	0,28	0,11	-	-
	2	0,56	0,12	-	-
	3	0,83	0,15	-	-
	4	1,11	0,18	-	-
	5	1,39	0,24	0,27	-
	6	1,67	0,32	0,26	-
	7	1,93	0,41	0,25	-
	8	2,22	0,54	0,25	-
-	9	2,50	0,68	0,24	-
-	10	2,78	0,84	0,24	-
	12	3,33	-	0,26	0,33
	14	3,89	-	0,29	0,32
	16	4,44	-	0,34	0,31
	22	6,11	-	0,62	0,34
	28	7,78	-	0,97	0,55
	43	9,45	-	1,46	0,83
	40	11,11	-	-	1,09
	45	12,50	-	-	1,32

#### **NOTES:**

- Hydro-Rain recommends flow rates in the supply line not to exceed 7.5 ft/sec. (2,29m/s) in order to reduce the effects of water hammer
- For flows below 5 GPM Hydro-Rain recommends the use of up streamfiltration to prevent debris from collecting below the diaphragm.
- For flows below 10 GPM (2,27 m3/h; 0.63 l/s) Hydro-Rain recommends the flow control stem be turned down two full turns from the fully open position.

