

HYDRO-RAIN®

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.

FEATURES AND BENEFITS

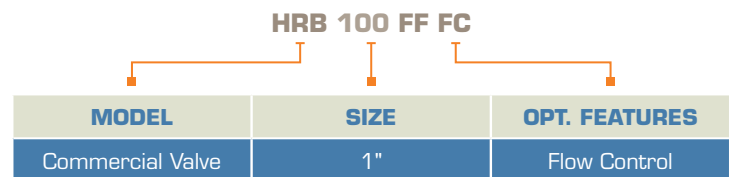
- **Fiber Reinforced Body**—Delivers superior robustness under extreme conditions.
- **Solid Brass and Stainless Steel Internals**—Ensures corrosion resistance.
- **Slow-Closing Reinforced Diaphragm**—Protects against water hammer.
- **Pilot Hole Filter Screen**—Reduces risk of clogging.
- **Stainless Steel Studs**—Prevent possible damage due to over tightening and corrosion.
- **Manual Internal Bleed**—Enables convenient, water-efficient 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", 1½" and 2" applications.



MODELS SKU DESCRIPTION

HRB-100-FF-FC	05100	HRB 100 1" NPT Commercial Valve
HRB-150-FF-FC	05101	HRB 150 1½" NPT Commercial Valve
HRB-200-FF-FC	05102	HRB 200 2" NPT Commercial Valve

HOW TO SPECIFY



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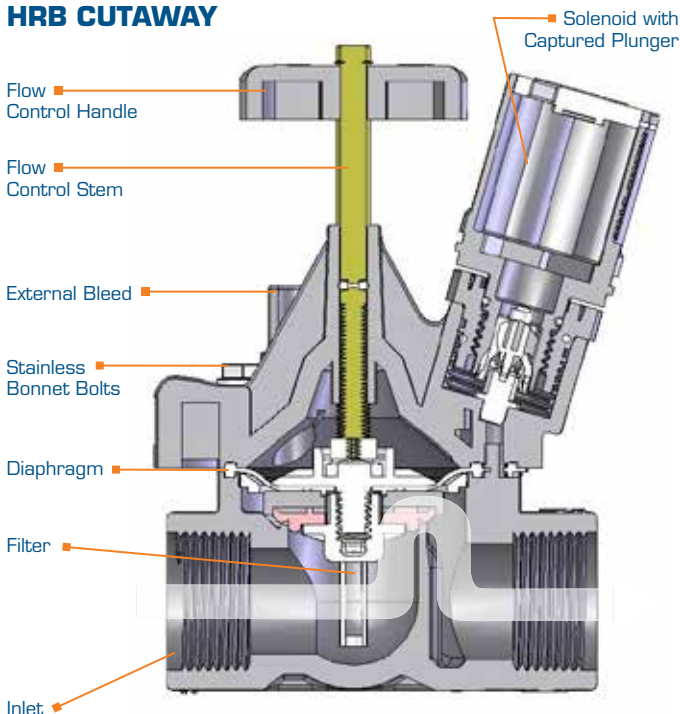
OPERATING RANGE

- **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)

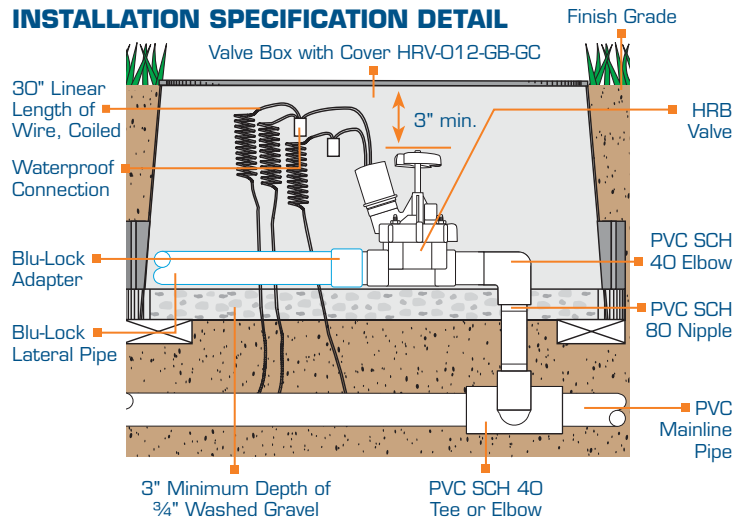
ELECTRICAL SPECIFICATIONS

- **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:** 22 OHMS

HRB CUTAWAY



INSTALLATION SPECIFICATION DETAIL



HRB SERIES VALVE PRESSURE LOSS

FLOW (GPM)	PSI			BAR				
	100 HRB	150 HRB	200 HRB	FLOW (GPM) M ³ /H	FLOW (L/S)	100 HRB	150 HRB	200 HRB
0.25	0.8	-	-	0,6	0,02	0,05	-	-
0.5	1.0	-	-	1	0,28	0,11	-	-
1	1.3	-	-	2	0,56	0,12	-	-
5	1.7	-	-	3	0,83	0,15	-	-
10	1.8	-	-	4	1,11	0,18	-	-
20	2.9	3.9	-	5	1,39	0,24	0,27	-
30	5.6	3.6	-	6	1,67	0,32	0,26	-
40	10	3.5	-	7	1,93	0,41	0,25	-
50	15.6	3.6	4.8	8	2,22	0,54	0,25	-
75	-	5.4	4.5	9	2,50	0,68	0,24	-
100	-	9.6	5.2	10	2,78	0,84	0,24	-
125	-	14.6	8.2	12	3,33	-	0,26	0,33
150	-	21.2	11.8	14	3,89	-	0,29	0,32
175	-	-	15.5	16	4,44	-	0,34	0,31
200	-	-	19.5	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:

1. 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.
2. For flows below 5 GPM Hydro-Rain recommends the use of upstream filtration to prevent debris from collecting below the diaphragm.
3. 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.

PN 05100-36 rE