THE FUTURE OF IRRIGATION

HYDRO-RAIN®
Built for Speed™

HRB Series

You want a valve you can install and forget – one that goes on working flawlessly year after year even in pressures up to 200 PSI. That's why we built the HRB series valves with a durable glass-filled nylon and a fabric-reinforced diaphragm: to ensure toughness plus reliable, long-lasting performance. The diaphragm spring and fastening components are corrosion-resistant stainless steel, and the flow-control stem is made of solid, heavy-duty brass. A grit screen on the diaphragm prevents problems from sand and debris. Plus, the valve is designed to close slowly to avoid water hammer damage.

FEATURES AND BENEFITS

- **Residential and commercial ready**—For use on low flow drip zones to high flow commercial 1" rotor applications
- **Pilot hole filter screen**—Prevents debris from inhibiting valve operation
- **Flow control handle**—Provides means to manually adjust flow rate to the sprinkler system
- **Slow Closing**—Prevents water hammer resulting in less stress on the entire sprinkler system
- **Durable design**—Glass-filled nylon body construction for maximum performance under extreme conditions
- **Stainless steel studs**—Molded directly into the valve body prevent damage due to over tightening
- **Manual external bleed**—Great for year end seasonal shut down (flushing water from the system)
- **Manual internal bleed**—For on/off operation at the valve
- **One piece solenoid design**—Captured plunger and spring keep for convenient servicing
- **Solid brass and stainless steel**—HRB's brass flow control stem and stainless steel diaphragm spring resist corrosion and promote years of reliable service
- **Versatility**—Models in the HRB series range from 1" up to 2"

BUILT FOR SPEED FEATURES

- **Factory installed 1" Blu-Lock outlet**—Fast, glue-less, clamp-less one step insert installation of 1" lateral Blu-Lock PE pipe

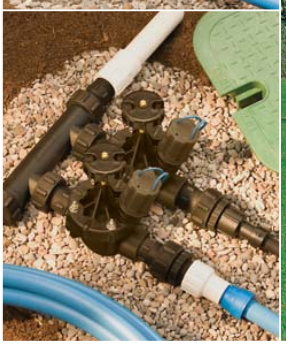
MODELS

HRB-100-FF-FC	1" Electric Valve	FNPT w/ Flow Control
HRB-100-FB-FC	1" Electric Valve	1" Blu-Lock Outlet
HRB-150-FF-FC	1.5" Electric Valve	FNPT w/ Flow Control
HRB-200-FF-FC	2" Electric Valve	FNPT w/ Flow Control

HOW TO SPECIFY

HRB 100 FF FC

MODEL	SIZE	FEATURES
Commercial Valve 1"	1"	NPT X Blu-Lock w/Flow Control



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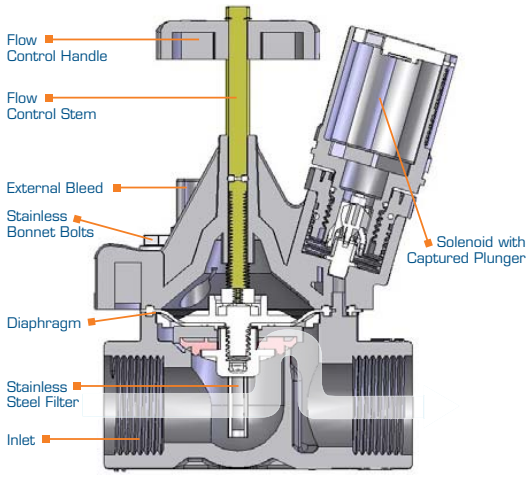
OPERATING RANGE

- Pressure: 20 to 200 PSI (1,38 to 13,80 BAR)
- Flow: 0.25 to 200 GPM (0,06 to 45,40 m³/h; 0,32 to 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)

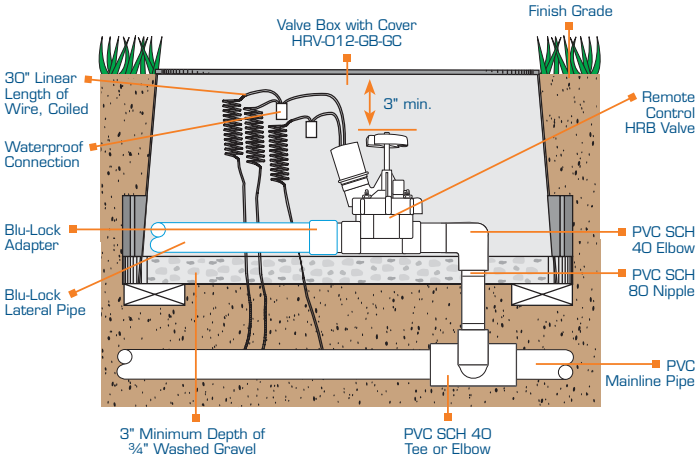
ELECTRICAL SPECIFICATIONS

- 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 to 55 OHMS

HRB CUTAWAY



INSTALLATION SPECIFICATION DETAIL



HRB SERIES VALVE PRESSURE LOSS

PSI

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

BAR

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:

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.

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