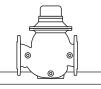
BERMAD Irrigation



900 Series

Flow Control

Flow Control Hydrometer

Magnetic Drive with Solenoid Control

IR-970-M0-55-RV

The BERMAD Model IR-970-M0-55-RV integrates a vertical turbine Woltman-type water meter with a diaphragm actuated hydraulic control valve. As the system's Flow Meter and Main Valve, it controls system irrigation together with the irrigation controller. The BERMAD Hydrometer limits the flow to a constant preset maximum. It either opens or shuts in response to an electric signal.

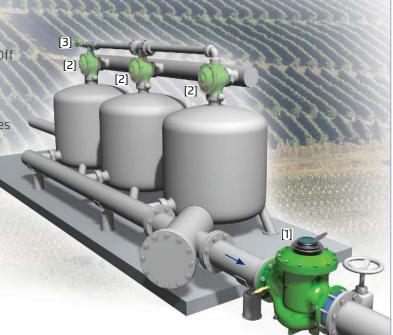


Features and Benefits

- Integrated "All-in-One" Control Valve
 - □ Saves space, cost and maintenance
- Line Pressure Driven, Electrically Controlled On/Off
 - □ Limits fill-up rate and consumer over-demand
- Magnetic Drive with Vacuum-Sealed Register
 - Water-free gear train mechanism
 - Reed-switch and Opto pulse-generating modes
 - Various pulse combinations
- Internal Inlet & Outlet Flow Straighteners
 - Saves on straightening distances
 - Maintains accuracy
- Integrated Flow Metering Calibration Device
- Paddle-Type Hydro-Mechanic Flow Pilot
 - No added head loss
 - Wide setting range
- Simple In-Line Inspection and Service

Typical Applications

- Computerized Irrigation Systems
- Remote Flow Data Read-Out
- Distanced and/or Elevated Plots
- Flow Monitoring and Leakage Control
- Multiple Independent Consumer Systems
- Line Fill-Up Control
- Irrigation Machines
- Filter Stations



- [1] BERMAD Model IR-970-M0-55-RV opens in response to an electric signal, limitis fill-up rate and consumer over-demand, and measures flow.
- [2] BERMAD Backwash Valve Model IR-3x2 350-A-I
- [3] BERMAD Backwash Flow Control Valve Model IR-470-beKU



BERMAD Irrigation



For full technical details, refer to Engineering Section.



900 Series

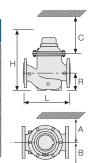
Flow Control

Technical Specifications

Dimensions and Weights

Size	DN Inch	80 3	100 4	150 6	200 8	250 10
L	mm	300	350	500	600	600
	inch	11.8	13.8	19.7	23.6	23.6
Н	mm	382	447	602	617	617
	inch	15	17.6	23.7	24.3	24.3
С	mm	290	340	450	465	465
	inch	11.4	13.4	17.7	18.3	18.3
R	mm	123	137	216	228	228
	inch	4.8	5.4	8.5	9	9
A; B	mm	305	325	390	390	415
	inch	12	12.8	15.4	15.4	16.3
Weight	Kg	23	31	71	93	141
	Ib.	57.7	68.3	156.5	205	310.9





Accuracy & Flow Data (ISO 4064-1, Class B)

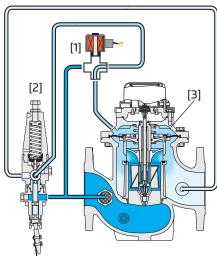
Size	Accuracy	DN inch	80 3	100 4	150 6	200 & 250 8 & 10
Q min	5%	m³	1.2	1.8	4	6.3
(Minimum flow)		qpm	5.3	7.9	17.6	27.7
Qn, ISO 4064-1	2%	m³	40	60	150	250
(Nominal flow)		qpm	176	264	660	1100
Qper=Q3	2%	m³	100	160	250	400
(Permanent flow)		gpm	440	704	1100	1760

Pulse Option

One pulse per Size	L	iter ; Gallo	m³ ; Gallon		
Size	1; 0.1	10; 1	100; 10	1; 100	10; 1000
			A	A	
3-4"; DN80-100	•		A		
	-			A	
				A	A
6-10"; DN150-250	l		l	A	l
		•			

▲ R.S. = Reed-Switch ■ O.E. = Opto-Electric
Two parllel pulses are transmitted, other pulse rates are avaiable on request

Operation



The Solenoid [1] hydraulically connects the Flow Pilot [2] to the Hydrometer Control Chamber [3]. The flow pilot commands the Hydrometer to throttle closed should demand rise above pilot setting, and to modulate open when demand drops. In response to an electric signal, the solenoid switches, directing line pressure into the control chamber, and thereby causes the Hydrometer to shut.

Technical Data

Patterns and Sizes:

Globe: 3-10"; DN80-250 Angle 90°: 3-8"; DN80-200 Angle 120°: 4"; DN100

End Connections:

Flanged: 3-10"; DN80-250 Pressure Ratings: 16 bar; 232 psi Minimum Operating Pressure:

0.5 bar; 7 psi

For lower pressure requirements.

consult factory

Setting Range: 1-5.0 m/sec; 3.3-16.5 f/sec Setting ranges vary according to specific pilot spring. Please consult factory.

Materials:

Body and Cover: Polyester Coated Cast or Ductile Iron Metal Internals:

St. St. & Glass Fiber Reinforced Nylon

Impeller: Polypropylene

Elastomers: Reinforced NR & NBR Pivots and Bearings: Tungsten Carbide

Control Accessories: Brass

Tubing and Fittings: Reinforced Plastic and Brass

Solenoid Voltage Range:

S-390 & S-400: 24 VAC, 24 VDC S-392 & S-402: 9-20 VDC, Latch S-982 & S-985: 12-50 VDC, Latch

Other voltages available

How to Order

Please specify the requested valve in the following sequence: (for more options, refer to Ordering Guide.)

