

Pressure Sustaining Automatic Metering Valve (AMV)

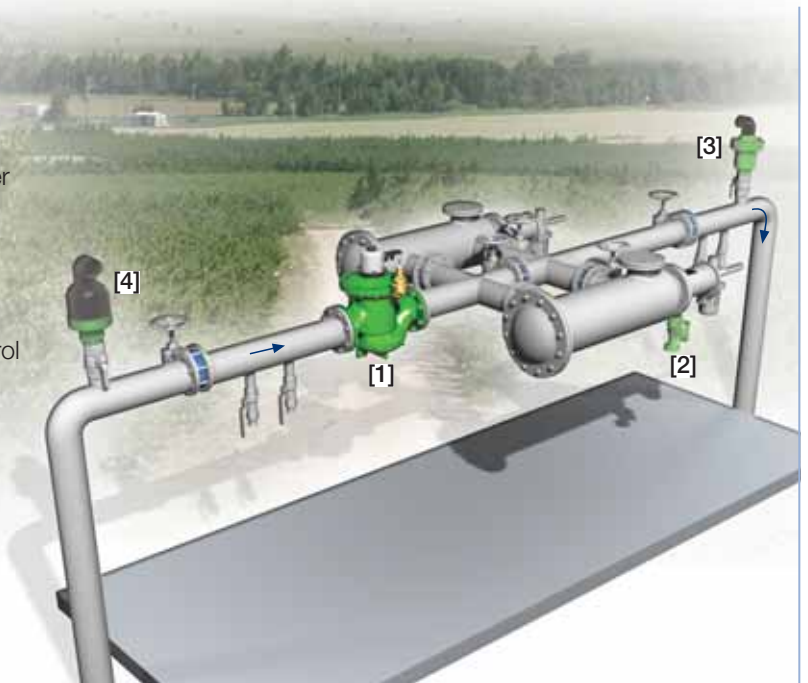
IR-930-D2-R

The BERMAD Model IR-930-D2-R integrates a vertical turbine Woltman-type water meter with a diaphragm actuated hydraulic control valve. Equipped with a Mechanical Shut-Off Pilot and a Pressure Sustaining Pilot, the BERMAD AMV sustains minimum preset upstream (back) pressure. It automatically shuts itself after accurately delivering a preset quantity of water.



Features and Benefits

- Integrated "All-in-One" Control Valve
 - Saves space, cost and maintenance
- Easy Modification to Mechanical Drive Hydrometer
 - Adaptable to future computerized systems
- Hydraulic Pressure and Batch Control
 - Sustains upstream line pressure
 - Controls system fill-up
 - Non-computerized quantity follow-up and control
- Internal Inlet & Outlet Flow Straighteners
 - Saves on straightening distances
 - Maintains accuracy
- Integrated Flow Metering Calibration Device
- User-Friendly Design
 - Easy pressure setting
 - Simple in-line inspection and service

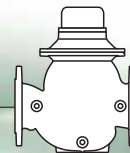


Typical Applications

- Semi-Automatic Irrigation
- Manual Irrigation intended for computerization
- Pressure Zone Prioritizing
- Line Fill-Up Control
- Line Emptying Prevention
- Volumetric Irrigation Systems
- Distribution Centers

- [1] BERMAD Model IR-930-D2-R sustains filters back flush pressure and delivers precise water quantity.
- [2] BERMAD Filter Flush Valve Model IR-405
- [3] BERMAD Air Valve Model ARC-A-I-I
- [4] BERMAD Air Valve Model ARC-A-P-I

BERMAD Irrigation



IR-930-D2-R

For full technical details, refer to Engineering Section.

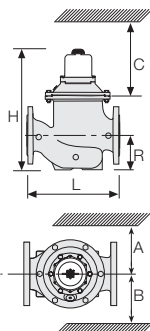
900 Series

Pressure Sustaining

Technical Specifications

Dimensions and Weights

Size	DN Inch	80 3	100 4	150 6	200 8	250 10
L	mm inch	300 11.8	350 13.8	500 19.7	600 23.6	600 23.6
H	mm inch	405 15.9	470 18.5	625 24.6	640 25.2	640 25.2
C	mm inch	290 11.4	340 13.4	450 17.7	465 18.3	465 18.3
R	mm inch	123 4.8	137 5.4	216 8.5	228 9	228 9
A; B	mm inch	305 12	325 12.8	390 15.4	390 15.4	415 16.3
Weight	Kg lb.	23 57.7	31 68.3	71 156.5	93 205	141 310.9



Accuracy & Flow Data (ISO 4064-I, Class A)

Size	Accuracy	DN inch	80 3	100 4	150 6"	200 & 250 8 & 10
Q min (Minimum flow)	5%	m³ gpm	3.2 14.1	4.8 21.1	10 44	12 52.8
Qn, ISO 4064-1 (Nominal flow)	2%	m³ gpm	40 176	60 264	150 660	250 1100
Qper=Q3 (Permanent flow)	2%	m³ gpm	100 440	160 704	250 1100	400 1760

Dial Options

Capacity	Cubic Meter (m³)										1000 Gallon										
	40	80	120	150	200	350	600	800	1,200	2,100	3,500	6,000	8,000	13	50	130	200	500	870	1,300	2,000
Graduation	Cubic Meter (m³)										Gallon										
	1	1	2	2	5	10	10	20	50	100	100	100	100	100	1000	2,500	5,000	10,000	20,000	25,000	25,000
3"	■	■												■	■						
4"		■	■	■	■	■	■	■	■	■	■	■	■		■	■	■	■	■	■	■
6"			■	■	■	■	■	■	■	■	■	■	■				■	■	■	■	■
8" & 10"							■	■	■	■	■	■	■					■	■	■	■

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: 1-16 bar; 15-232 psi

Setting ranges vary according to specific pilot spring. Please consult factory.

Materials:

Body and Cover:

Polyester Coated Cast or Ductile Iron

Internals:

St. St. & Glass Fiber Reinforced Nylon

Impeller: Polypropylene

Elastomers: Reinforced NR & NBR

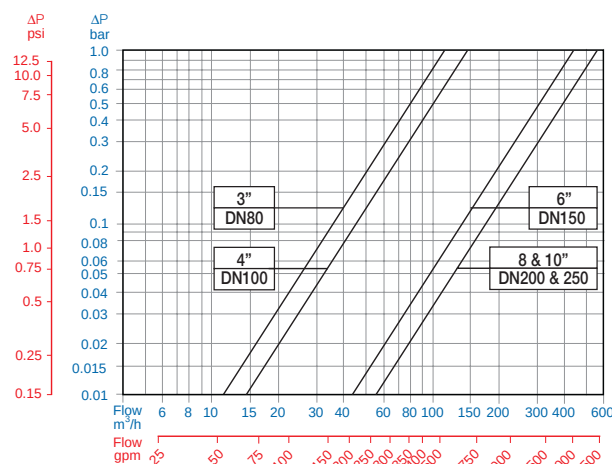
Pivots and Bearings: Tungsten Carbide

Control Accessories: Brass

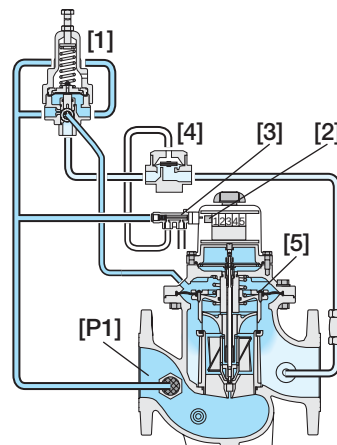
Tubing and Fittings:

Reinforced Plastic and Brass

Flow Chart



Operation



The Pressure Sustaining pilot [1] commands the AMV to throttle closed should Upstream Pressure [P1] drop below pilot setting, and to modulate open when it rises above pilot setting. Upon delivering the preset quantity of water, the AMV manually preset Control Head Mechanism [2] shifts the Shut-Off Pilot [3], which closes the Hydraulic Relay Valve [4]. This pressurizes the Control Chamber [5], causing the AMV to shut.

How to Order

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

Sector	Size	Primary Feature	Control Categories	Additional Feature	Pattern	Construction Materials	End Connections	Coating	Voltage & Position	Tubing & Fittings	Dial Capacity	Pulse Rate	Additional Attributes
IR	3-10"	930	D2	00	G	I	16	PG	-	PB	800	NPS	R
Other sizes available on request.													
Globe		G											
Angle		A											
120° (4"; DN100 only)		H											
Plastic Tubing & Brass Fittings Copper Tubing & Brass Fittings													
ISO-16			16										
ISO-10			10										
ISO-14 (ISO-10/4 Holes)			14										
ANSI-125			A1										
JIS-10			J1										
BST-D			BD										
Metal Control Accessories Homologation Approved Other attributes available on request													
40 m³							040		6,000 m³	6K0			
80 m³							080		8,000 m³	8K0			
120 m³							120		13,000 Gal.	1G0			
150 m³							150		50,000 Gal.	5G0			
200 m³							200		130,000 Gal.	1KG			
350 m³							350		200,000 Gal.	2KG			
600 m³							600		510,000 Gal.	5KG			
800 m³							800		875,000 Gal.	8KG			
1,200 m³							1K0		1,300,000 Gal.	1MG			
2,100 m³							2K0		2,100,000 Gal.	2MG			
3,500 m³							3K0						



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