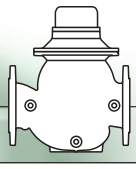


900 Series

On/Off Control

Automatic Metering Valve (AMV)

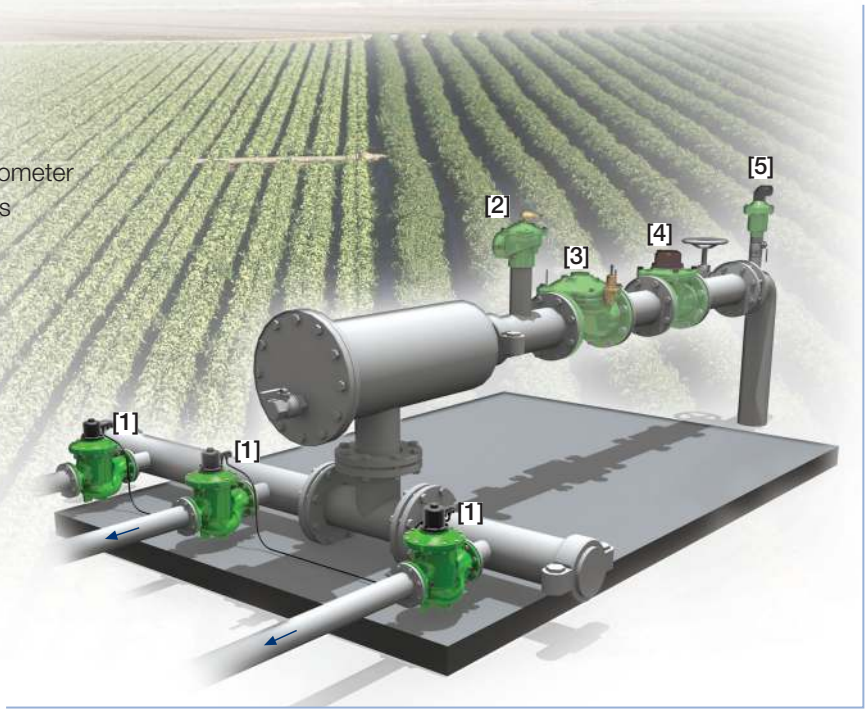
for Sequential Irrigation

IR-900-E2

The BERMAD Automatic Metering Valve for Sequential Irrigation integrates a vertical turbine Woltman-type water meter with a diaphragm actuated hydraulic control valve, equipped with a mechanical sequential shut-off pilot. The BERMAD IR-900-E2 automatically shuts itself after accurately delivering a preset quantity of water. Working in a group of manually preset AMV's connected to each other by a control tube and operating in sequence, it enables semi-automatic irrigation in non-computerized systems.

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 Batch & Sequence Control
  - Line pressure driven
  - Hydraulic irrigation shift sequencing
  - Non-computerized quantity follow-up and control
- Internal Inlet & Outlet Flow Straighteners
  - Saves on straightening distances
  - Maintains accuracy
- Integrated Flow Metering Calibration Device
  - Measurement precision to ±2%
- User-Friendly Design
  - Easy dose setting
  - Simple in-line inspection and service

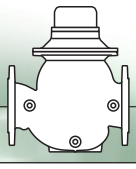


Typical Applications

- Semi-Automatic Irrigation
- Hydraulic Irrigation Shift Sequencing
- Manual Irrigation Intended for Computerization
- Remote and/or Elevated Systems
- Volumetric Irrigation Systems

[1] BERMAD Model IR-900-E2 sequences irrigation shifts.
[2] BERMAD Relief Valve Model IR-43Q-A
[3] BERMAD Pressure Reducing Valve Model IR-420-00-R
[4] BERMAD Water Meter Model WPH
[5] BERMAD Air Valve Model ARA-A-I-I

BERMAD Irrigation



IR-900-E2

900 Series

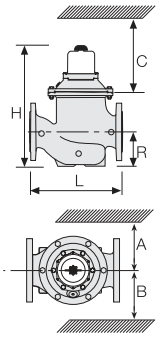
On/Off Control

For full technical details, refer to Engineering Section.

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
H	mm	405	470	625	640	640
	inch	15.9	18.5	24.6	25.2	25.2
C	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
	lb.	57.7	68.3	156.5	205	310.9



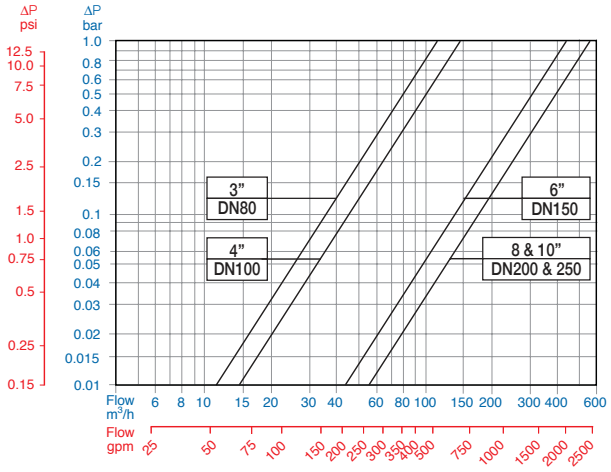
Accuracy & Flow Data

Size	Accuracy	DN inch	80 3	100 4	150 6"	200 & 250 8 & 10
Q1 Minimum Flow (AMV)	5%	m^3	3.2	4.8	10	12
		gpm	14.1	21.1	44	52.8
Qn Nominal flow	2%	m^3	40	60	150	250
		gpm	176	264	660	1100
Q3 Permanent flow	2%	m^3	100	160	250	400
		gpm	440	704	1100	1760

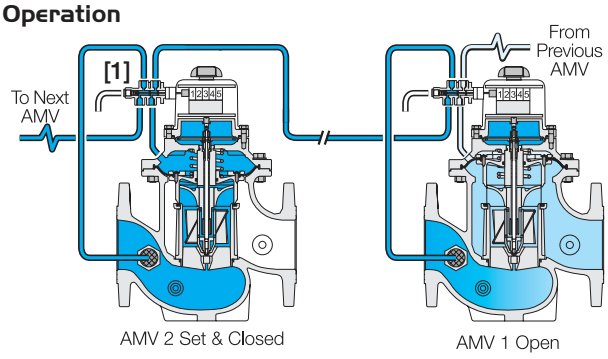
Dial Options

Capacity	Cubic Meter (m^3)												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 (m^3)													Gallon							
	1	1	2	2	5	10	10	10	20	50	100	100	100	100	1000	2,500	5,000	10,000	20,000	25,000	25,000
3"	■	■	■	■	■	■	■	■	■					■	■	■	■	■			
4"		■	■	■	■	■	■	■	■	■					■	■	■	■			
6"							■	■	■	■	■	■					■	■	■	■	
8" & 10"								■	■	■	■	■	■					■	■	■	■

Flow Chart



Operation



Each AMV is manually preset to deliver a desired quantity of water. Pressure from the previous AMV enters the current AMV control chamber through its Sequential Shut-Off Pilot (SSOP) **[1]**, closing it. The current AMV inlet pressure is transmitted to the Next AMV, closing it. When the previous AMV shuts itself, it allows the current AMV control chamber to drain through both the current and Previous AMV's SSOP's, opening the current AMV. The next AMV remains closed until AMV-2 shuts itself.

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 Rating: 16 bar; 232 psi
Minimum Operating Pressure:
0.5 bar; 7 psi
For lower pressure requirements, 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

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	Additonal Attributes
IR	3-10"	900	E2	00	G	I	16	PG	-	PB	800	NPS	-

Other sizes available on request.

Globe	G
Angle	A
120 (4"; DN100 only)	H

ISO-16	16
ISO-10	10
ISO-14 (ISO-10/4 Holes)	14
ANSI-125	A1
JIS-10	J1
BST-D	BD

Plastic Tubing & Brass Fittings	PB
Copper Tubing & Brass Fittings	CB

40 m^3	040	6,000 m^3	6K0
80 m^3	080	8,000 m^3	8K0
120 m^3	120	13,000 Gal.	1G0
150 m^3	150	50,000 Gal.	5G0
200 m^3	200	130,000 Gal.	1KG
350 m^3	350	200,000 Gal.	2KG
600 m^3	600	510,000 Gal.	5KG
800 m^3	800	875,000 Gal.	8KG
1,200 m^3	1K0	1,300,000 Gal.	1MG
2,100 m^3	2K0	2,100,000 Gal.	2MG
3,500 m^3	3K0		

Homologation Approved	L

Other attributes available on request

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