

Automatic Metering Valve (AMV)

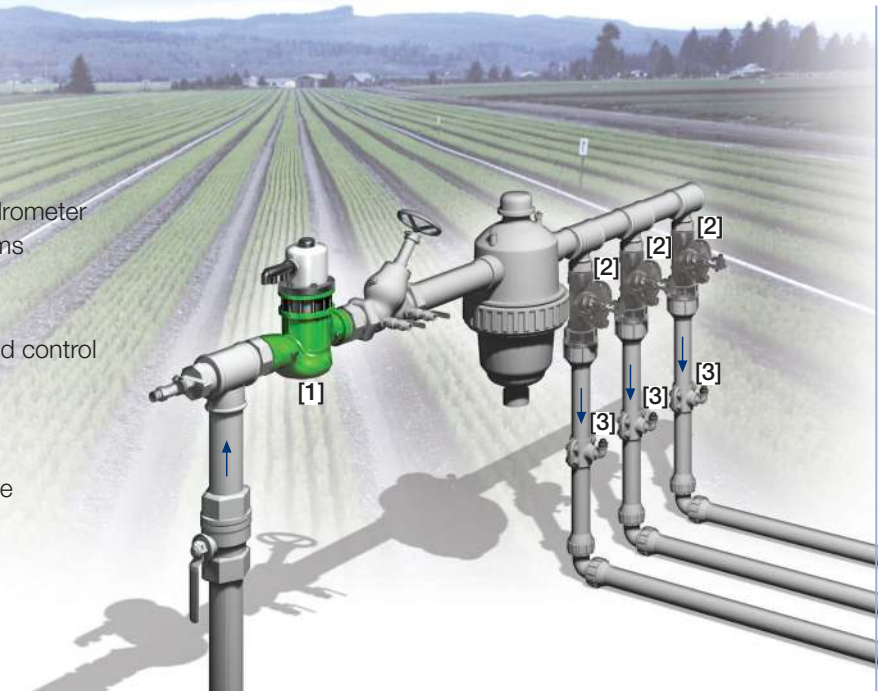
IR-900-D0

The BERMAD Automatic Metering Valve integrates a vertical turbine Woltman-type water meter with a diaphragm actuated hydraulic control valve. Equipped with a Mechanical Shut-Off Pilot, the BERMAD IR-900-D0 enables volumetric irrigation in non-computerized systems. The AMV automatically shuts itself after accurately delivering a manually 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 Batch Control
 - Line pressure driven
 - 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 $\pm 2\%$
- User-Friendly Design
 - Easy dose setting
 - Simple in-line inspection and service

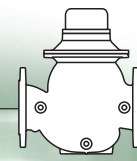


Typical Applications

- Semi-Automatic Irrigation Systems
- Manual Irrigation - Intended for Computerization
- Distanced and/or Elevated Plots
- Volumetric Irrigation Systems

- [1] BERMAD Model IR-900-D0 delivers precise water quantity.
- [2] BERMAD Pressure Reducing Valve Model IR-220-bKZ
- [3] BERMAD Vacuum Breaker Model 1/2" -ARV

BERMAD Irrigation



IR-900-DO

For full technical details, refer to Engineering Section.

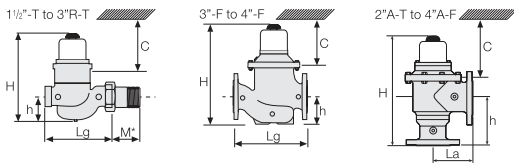
900 Series

On/Off Control

Technical Specifications

Dimensions and Weights

Size	DN Inch	40-T 1 1/2-T	50-T 2-T	50A-T 2A-T	80R-T 3R-T	80R-F 4R-F	80-F 3-F	80A-F 3A-F	100-F 4-F	100A-F 4A-F
Lg	mm inch	250 9.8	250 9.8	N.A. N.A.	250 9.8	310 12.2	300 11.8	N.A. N.A.	350 13.8	N.A. N.A.
La	mm inch	N.A. N.A.	N.A. N.A.	120 4.7	N.A. N.A.	N.A. N.A.	N.A. N.A.	150 5.9	N.A. N.A.	180 7.1
H	mm inch	293 11.5	300 11.8	322 12.7	300 11.8	298 11.7	405 15.9	425 16.7	470 18.5	500 19.7
C	mm inch	210 9	210 9	210 9	210 9	225 9	285 11	285 11	365 15	365 15
h	mm inch	95 3.7	95 3.7	125 4.9	79 3.1	100 3.9	123 4.8	196 7.7	137 5.4	225 8.9
M*	mm inch	67 2.6	77 3.0	N.A. N.A.	N.A. N.A.	N.A. N.A.	N.A. N.A.	N.A. N.A.	N.A. N.A.	N.A. N.A.
Weight	Kg lb.	6.8 15	8.8 19.4	8.1 17.4	7.3 16.1	16 35.3	26.0 57.3	25.8 56.2	37.0 81.6	36.1 78.9



Accuracy & Flow Data

Size	Accuracy	DN inch	40 1 1/2	50 2	3"R 80R	80 3	100 4
Q1							
Minimum Flow (AMV)	5%	m ³ gpm	1.5 6.5	2.0 8.8	3.2 14.1	3.2 14.1	4.8 21.1
Qn							
Nominal flow	2%	m ³ gpm	15 66	15 66	17 75	40 176	60 264
Q3							
Permanent flow	2%	m ³ gpm	25 110	40 176	40 176	100 440	160 704

Dial Options

Capacity	Cubic Meter (m ³)								1000 Gallon							
	40	80	120	150	200	350	600	800	1,200	2,100	13	50	130	200	500	870
Graduation	Cubic Meter (m ³)								Gallon							
1 1/2" & 2"	1	1	2	2	5	10	10	10	20	50	100	1000	2,500	5,000	10,000	20,000
3"R																
3"																
4"																

Technical Data

End Connections:

Threaded: 1 1/2, 2 & 3"R; DN40, 50 & 80R

Flanged: 3R, 3 & 4"; DN80R, 80 & 100

Pressure Rating: 10 bar; 145 psi

Minimum Operating Pressure: 0.5 bar; 7 psi

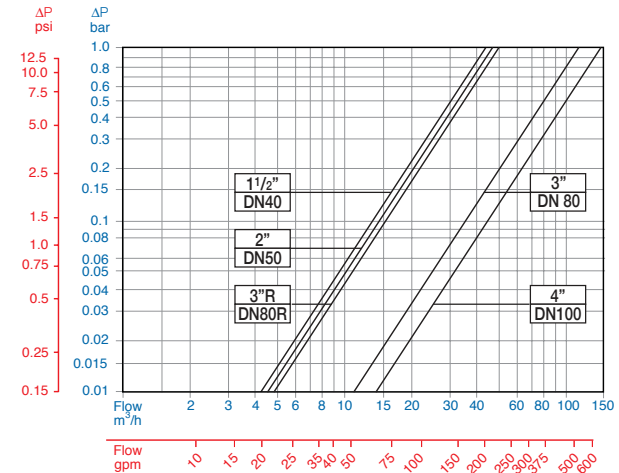
For lower pressure requirements, consult factory

How to Order

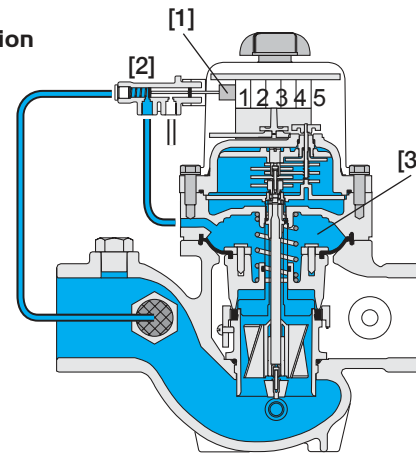
Please specify the requested valve in the following sequence: (for more options, refer to Ordering Guide.)

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	1 1/2-4"	900	DO	00	G	I	BP	PG	-	PP	120	NPS	-
Other sizes available on request.													
Globe	Angle 90°	G											
	120° (2 1/2 & 4" only)	A											
		H											
BSP (1 1/2, 2 & 3"R only)			BP										
NPT (1 1/2, 2 & 3"R only)			NP										
ISO-16			16										
ISO-10			10										
ISO-14 (ISO-10/4 Holes)			14										
ANSI-125			A1										
JIS-10			J1										
BST-D			BD										
				Plastic Tubing & Fittings		PP							
				Plastic Tubing & Brass Fittings		PB							
							40 m ³	040	2,100 m ³	2K0			Homologation Approved
							80 m ³	080	3,500 m ³	3K0			Other attributes available on request
							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					

Flow Chart



Operation



Upon delivering the preset water quantity, the AMV manually preset Control Head Mechanism [1] mechanically shifts the Shut-Off Pilot [2], which directs line pressure into the AMV Control Chamber [3] thereby shutting the AMV, and stopping the flow of water.



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