

## Automatic Metering Valve (AMV)

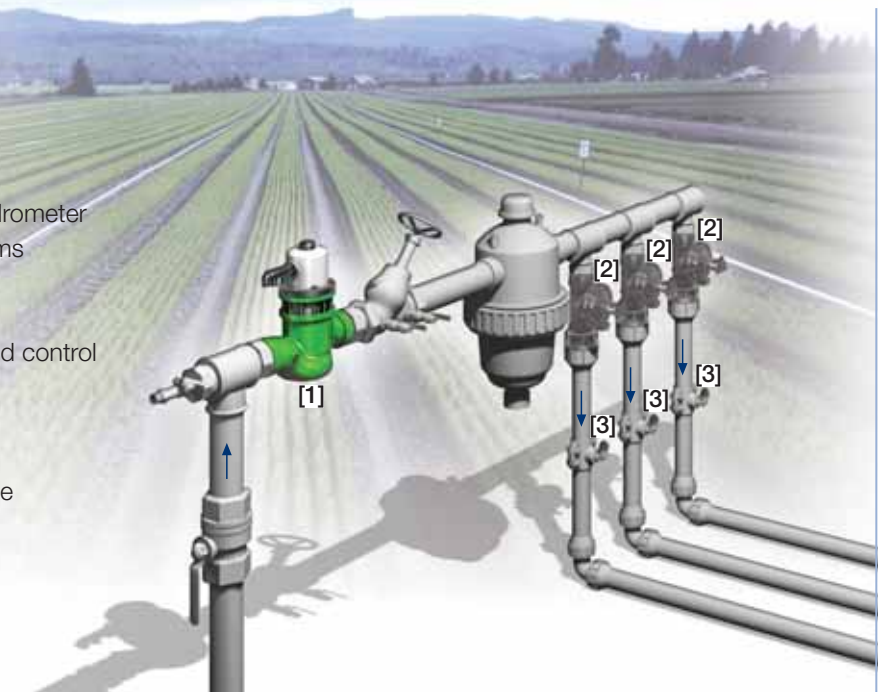
IR-900-D0

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



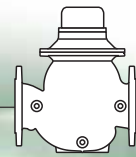
### Typical Applications

- 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

Automatic shutt-off valve. [Click here for ordering](#)

# BERMAD Irrigation



## IR-900-D0

For full technical details, refer to Engineering Section.

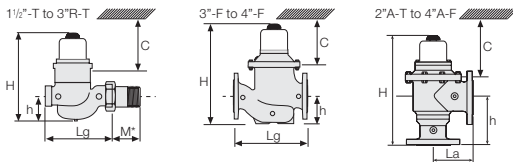
## 900 Series

On/Off Control

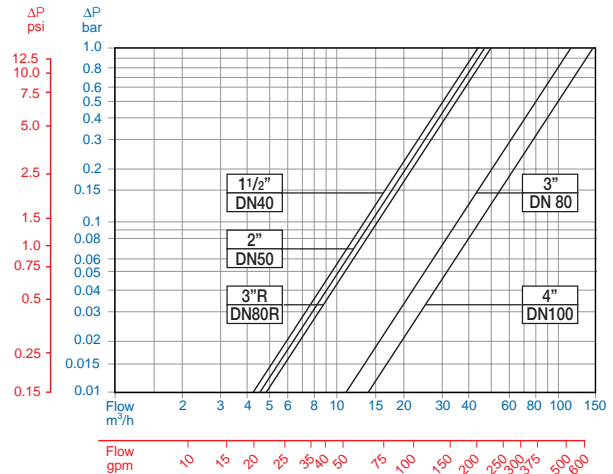
### Technical Specifications

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



#### Flow Chart



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

Size	Accuracy	DN inch	40 1 1/2	50 2	80 3R	80 3	100 4
Q min (Minimum flow)	5%	m³ gpm	0.8 3.5	0.2 3.5	1.2 5.3	1.2 5.3	1.8 7.9
Qn, ISO 4064-1 (Nominal flow)	2%	m³ gpm	15 66	15 66	17 75	40 176	60 264
Qper=Q3 (Permanent flow)	2%	m³ gpm	25 110	40 176	40 176	100 440	160 704

#### Dial Options

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

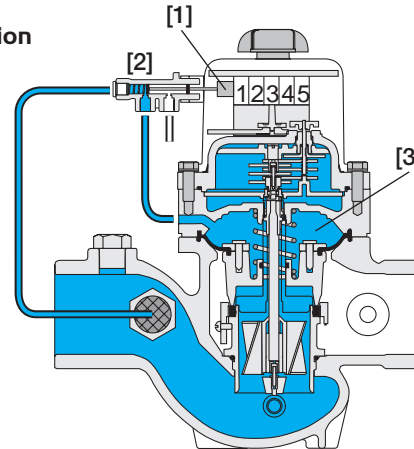
For lower pressure requirements, consult factory

### 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	D0	00	G	I	BP	PG	-	PP	120	NPS	-																																	
Other sizes available on request.																																														
Globe	Angle 90°	120° (2 1/2" & 4" only)	G	A	H	Plastic Tubing & Fittings	Plastic Tubing & Brass Fittings	PP	PB	40 m³	80 m³	120 m³	150 m³	200 m³	350 m³	600 m³	800 m³	1,200 m³	040	080	120	150	200	350	600	800	1K0	2,100 m³	3,500 m³	13,000 Gal.	50,000 Gal.	130,000 Gal.	200,000 Gal.	510,000 Gal.	875,000 Gal.	2K0	3K0	1G0	5G0	1KG	2KG	5KG	8KG	Homologation Approved	Other attributes available on request	L
BSP (1 1/2, 2 & 3"R only)	NPT (1 1/2, 2 & 3"R only)	ISO-16	ISO-10	ISO-14 (ISO-10/4 Holes)	ANSI-125	JIS-10	BST-D	BP	NP	16	10	14	A1	J1	BD																															

#### 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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Volumetric Auto shutt-off valves.  
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