

Flush-'n-Stop Valve

IR-300-eLMO

The BERMAD Model IR-300-eLMO is a double chambered, hydraulically operated, diaphragm actuated control valve suitable for automatic flushing of distribution lines at the beginning and the end of each irrigation cycle. Equipped with an auxiliary opening spring and a flow stem, it enables automatic opening when the system reaches closure pressure and settable opening rate, ensuring line pressure build-up for secure closing.



Features and Benefits

- Line Pressure Driven
- Double Chambered Design
 - Requires low actuation pressure
 - High closing force
 - Protected diaphragm
 - Spring isolated from water
- Control Pressure Source Remote from Valve
 - Low sensitivity to water quality
 - Secure closing pressure
- Metal Body
 - Rigid construction, high stress resistance
- User-Friendly Design
 - Simple structure and maintenance



Typical Applications

- Distribution Line Flush-'n-Stop
- Drip Systems
- Sprinklers & Micro-Sprinklers
- Greenhouses
- Distribution Line Flush-'n-Stop
- Flooding Tables Drainage (with External Pressure)
- Irrigation Machine Line Flush-'n-Stop

[1] BERMAD Model IR-300-eLMO opens when the system reaches closure pressure flushing dirt and sediment out, and shuts off upon line pressure build-up when irrigation begins.

[2] Control Pressure Inlet

[3] BERMAD Model 3/4-PRV

BERMAD Irrigation



IR-300-eLMO

For full technical details, refer to Engineering Section.

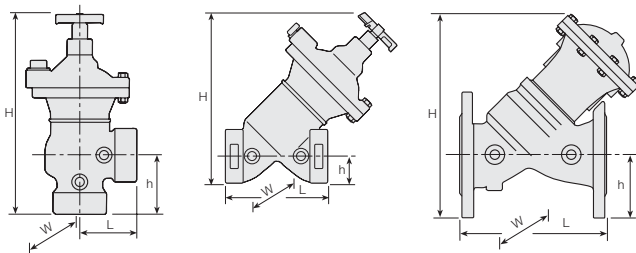
300 Series

Flush-n-Stop

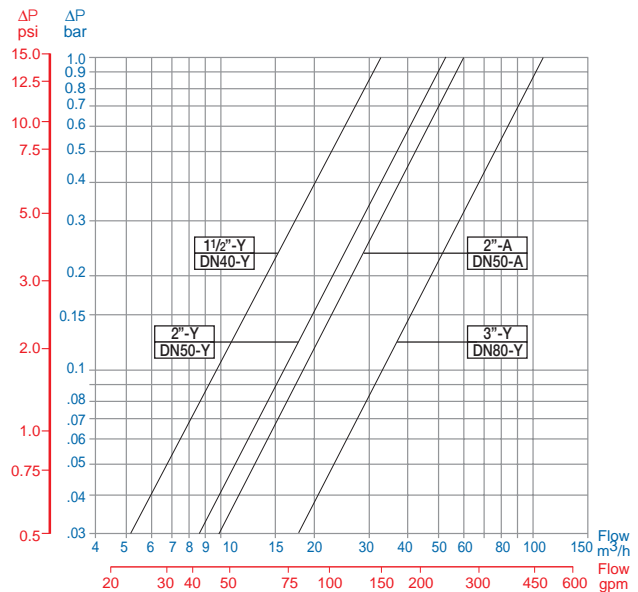
Technical Specifications

Dimensions and Weights

Pattern	DN	Oblique "Y"					Angle
		40-T	50-T	80-T	80-F	50-T	
Size	inch	1½-T	2-T	3-T	3-F	2-T	
L	mm	112	124	210	235	71	
	inch	4.4	4.9	8.3	9.3	2.8	
H	mm	175	215	275	325	256	
	inch	6.9	8.5	10.8	12.8	10.1	
h	mm	30	40	58	98	75	
	inch	1.2	1.6	2.3	3.9	3	
W	mm	105	125	160	200	135	
	inch	4.1	4.9	6.3	7.9	5.3	
Weight	Kg.	1.3	2	14.7	7.4	2.3	
	lb.	2.8	4.4	16.3	32.4	5	



Flow Chart



Technical Data

Valve Available Sizes: 1½, 2 & 3"; DN40, 50 & 80

Valve patterns: Y; Angled (2"; 50 only)

End Connections: Threaded 1½ & 2 & 3"; DN40 50 & 80
Flanged: 3; DN80

Pressure Rating: 10 bar; 145 psi

Operating Pressure Range: 0-10 bar; 0-145 psi

Opening Pressure: Below 0.7bar; 10 psi

Closing Pressure: Above 1.2 bar; 17 psi

Materials:

Valve Body: Brass or Ductile Iron (3"; DN80 Valve)

Separating Partition: Polyamide 6-30GF

Cover: Polyamide 6-30GF

Diaphragm: NR

Seal, O-Rings: NBR

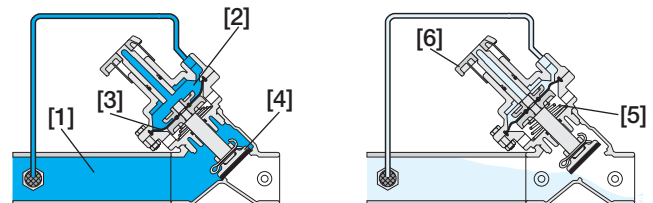
Spring: Stainless Steel

Shaft: Stainless Steel

Seal Disk: Brass

Bolts, Studs & Nuts: Stainless Steel

Operation



Irrigation Line Pressure [1] pressurizes the Upper Control Chamber [2], forcing the Diaphragm [3] actuated Plug [4] to move towards the closed position, thereby shutting the Valve. When irrigation stops, system pressure drops, allowing the Spring [5] opening force to overpower the hydraulic closing force. The spring force then pushes the diaphragm, thereby opening the Valve, which remains open. When irrigation starts again, a water stream flushes the line through the opened Valve. Valve resistance enables pressure to build up and rise until the pressure in the control chamber creates hydraulic closing force higher than the spring opening force, and the valve shuts off. The Flow Stem [6] enables regulation of flushing rate.

How to Order

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

Sector	Size	Primary Feature	Additional Feature	Pattern	Cover Materials	End Connections	Control Type	Pilot Material	Additional Attributes	Voltage - Main Valve Position
IR	1½-3"	300	00	Y	P	BP	-	-	eLMO	-
		Oblique Angled (2";DN50 only)	Y A	BSP NPT ISO-10/4 holes (3";DN80 only) ANSI-125 (3";DN80 only)	BP NP 14 A1	External Control Pressure Lifting Spring Flow Stem Flow Over-the-Seat	e L M O			

Other end connections available on request



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