

Hydraulic Control Valve

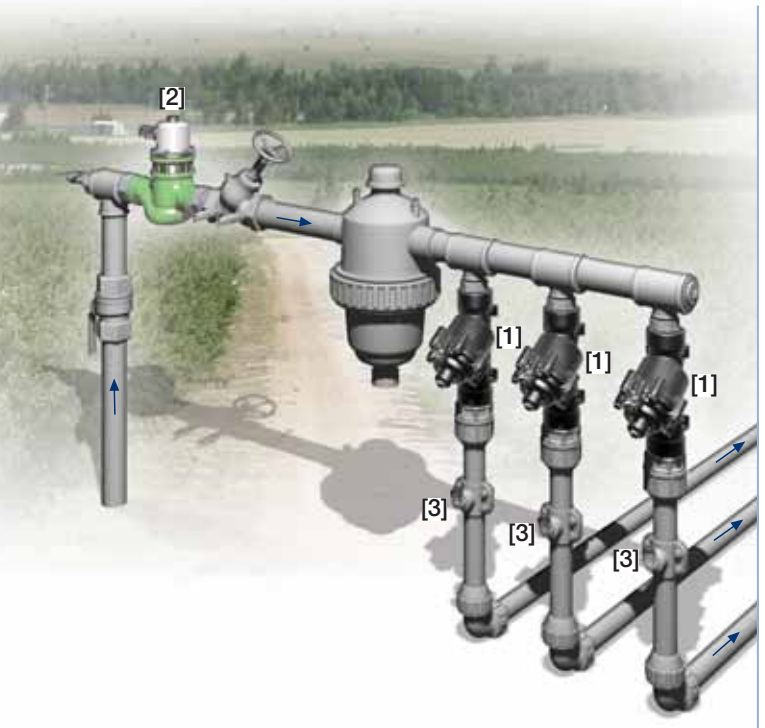
IR-105-Z

The BERMAD Hydraulic Control Valve is a hydraulically operated, diaphragm actuated control valve that opens and shuts in response to a local or remote pressure command.



Features and Benefits

- Hydraulic Control Valve
 - Line pressure driven
 - Hydraulically controlled On/Off
- Engineered Plastic Valve with Industrial Grade Design
 - Highly durable, chemical and cavitation resistant
 - No internal bolts and nuts
- hYflow 'Y' Valve Body with "Look Through" Design
 - Ultra-high flow capacity – Low pressure loss
- Unitized Flexible Super Travel (FST) Diaphragm and Guided Plug
 - Smooth closing
 - Requires low opening and actuation pressure
 - Prevents diaphragm erosion and distortion
- Simple In-Line Inspection and Service

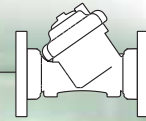


Typical Applications

- Computerized Irrigation Systems
- Distribution Centers
- Low Supplied Pressure Irrigation Systems
- Energy Saving Irrigation Systems

- [1] BERMAD Model IR-105-Z opens upon local manual command.
- [2] BERMAD Automatic Metering Valve Model IR-900-D0
- [3] BERMAD Vacuum Breaker Model 1/2"-ARV

BERMAD Irrigation



IR-105-Z

For full technical details, refer to Engineering Section.

100 Series hYflow

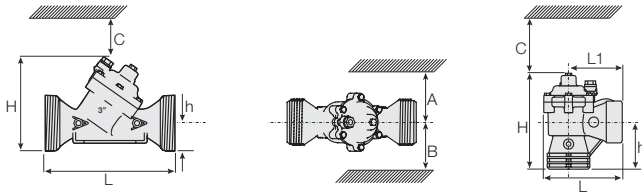
On/Off Control

Technical Specifications

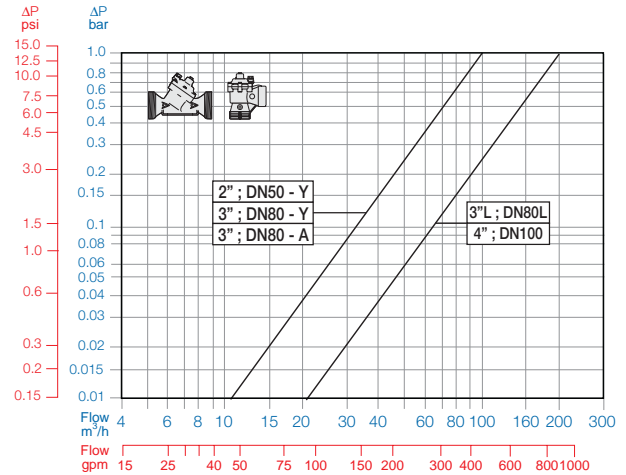
Dimensions and Weights

Pattern	DN Inch	Angle 80-T 3-T	Y (Oblique)			
			50-T 2-T	65-T* 2 1/2-T*	80-T 3-T	80L-T 3L-T
L (L1)	mm	187 (130)	230	230	298	300
	inch	7.4 (5.1)	9.1	9.1	11.7	11.8
H (Hf)	mm	235 (245)	170 (185)	170 (185)	180 (195)	240
	inch	9.3 (9.6)	6.7 (7.3)	6.7 (7.3)	7.1 (7.7)	9.5
C	mm	53	140	140	140	180
	inch	2.1	6	6	6	8
h	mm	117	40	40	50	60
	inch	4.6	1.6	1.6	2.0	2.4
A; B	mm	320	135	135	190	190
	inch	12.6	6	6	8	8
Weight	Kg	1.6	1.35	1.4	1.6	3.0
	lb.	3.5	3.0	3.1	3.5	6.6

* 2 1/2"; DN65 Male Thread BSP-F, for PVC glue Unions.



Flow Chart



Technical Data

Valve Configurations & Size:

Oblique: 2, 2 1/2, 3, 3L, 4 & 6"; DN50, 65, 80, 80L, 100 & 150
Angle: 3"; DN80

End Connections:

Threaded: 2, 2 1/2, 3 & 3"L; DN50, 65, 80 & 80L
Flanged: 3, 3L, 4, & 6"; DN80, 80L, 100 & 150
Grooved: 6"; DN150

Pressure Rating: 10 bar; 145 psi

Operating Pressure Range: 0.35-10 bar; 5-145 psi

Materials:

Body, Cover and Plug: Glass-Filled Nylon

Diaphragm: NR, Nylon fabric reinforced

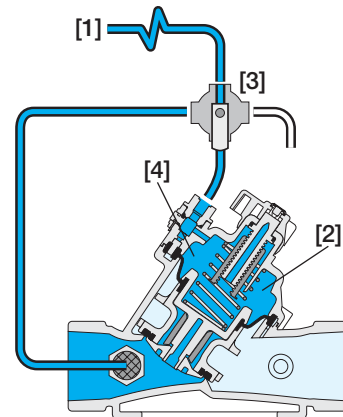
Seals: NR

Spring: Stainless Steel

Control Accessories: Plastic

Tubing and Fittings: Plastic

Operation



Hydraulic Command [1] is applied to the Control Chamber [2] through the Manual Selector [3]. This creates superior closing force that moves the Diaphragm Assembly [4] to a closed position. Discharging of pressure from the control chamber, by turning the manual selector, causes the line pressure acting on the lower side of the diaphragm assembly to move the valve to an open position.

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	Construction Materials	End Connections	Control Type	Voltage -Main Valve Position	Additional Attributes
IR	2-4" <small>Other sizes available on request.</small>	105	00	Y	P	BP	3W	-	Z
	Oblique Angle (3"; DN 80 Only)	Y A		BSP BSP-F (Male Threads 2 1/2"; DN65 only) NPT Plastic Flanges* Metal Flanges* ("Corona")		BP BS NP FF CC	Manual Selector Flow Stem Flow Stem with Position Indicator <small>Other attributes available on request</small>		Z M MP

Comply to: ISO PN10, ANSI #125/150, Jis K-10, BS-D



info@bermad.com • www.bermad.com

The information herein is subject to change without notice. BERMAD shall not be held liable for any errors. All rights reserved. © Copyright by BERMAD.

PC1AE05 05