

Hydraulic Control Valve

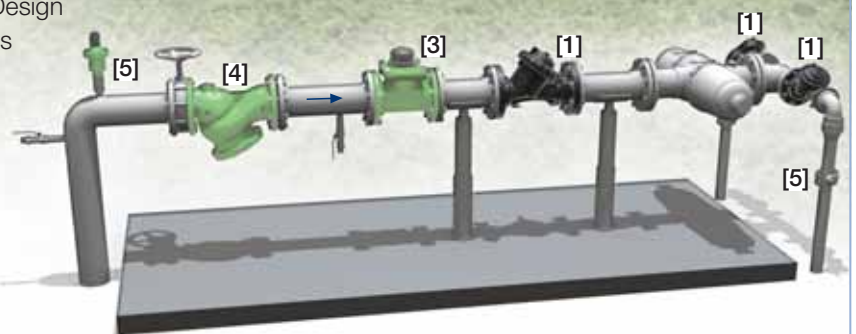
IR-105-Z

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



Features and Benefits

- Hydraulic Control Valve
 - Line pressure driven
 - Hydraulically controlled On/Off
- Engineered Plastic Valve with Industrial Grade Design
 - Adaptable on-site to a wide range of end connection sizes and types
 - Articulated flange connections eliminate mechanical and hydraulic stresses
 - Highly durable, chemical and cavitation resistant
- 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 actuation pressure
 - Prevents diaphragm erosion and distortion
- User-Friendly Design
 - 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 Water Meter Model WPH
- [3] BERMAD Strainer Model 70F
- [4] BERMAD Air Valve Model ARC-A-I-I
- [5] BERMAD Vacuum Breaker Model 1/2" - ARV



IR-105-Z

For full technical details, refer to Engineering Section.

100 Series hYflow

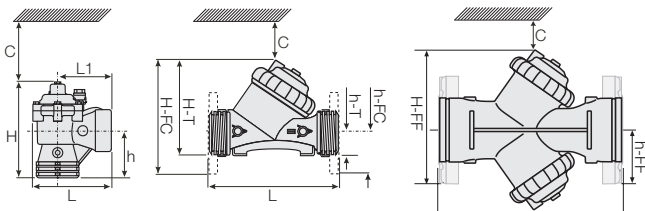
On/Off Control

Technical Specifications

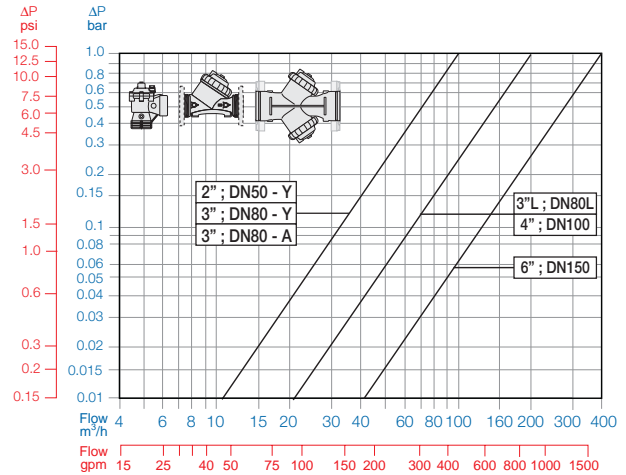
Dimensions and Weights

Pattern	Angle	Y (Oblique)						Y "Boxer"
		80-T ⁽¹⁾ 3-T ⁽¹⁾	80-T ⁽¹⁾ 3-T ⁽¹⁾	80-FC ⁽²⁾ 3-FC ⁽²⁾	80L-FC ⁽²⁾ 3L-FC ⁽²⁾	100-FC ⁽²⁾ 4-FC ⁽²⁾	150-FF ⁽³⁾ 6-FF ⁽³⁾	
L (L1)	mm	187 (130)	298	308	310	350	480	
	inch	7.4 (5.1)	11.7	12.1	12.2	13.8	18.9	
H (Hf)	mm	235 (245)	180 (195)	240 (255)	280	294	285	
	inch	9.3 (9.6)	7.1 (7.7)	9.4 (10)	11	11.6	11.2	
C	mm	53	53	600	600	600	600	
	inch	2.1	2.1	4	4	23.6	23.6	
h	mm	117	50	100	100	112	145	
	inch	4.6	2	3.9	3.9	4.4	5.7	
Weight	Kg	1.6	1.6	4.4	5.9	7.6	12.5	
	lb.	3.5	3.5	9.7	13	16.7	27.6	

(1) "T" = Threaded end connections (2) "FC" = Flanged, Corona (Metal) end connections
(3) "FF" = Flanged, Universal Plastic end connections



Flow Chart



Technical Data

Sizes: 3, 3L, 4 & 6"; DN80, 80L, 100 & 150

Patterns:

Oblique: 3, 3L, 4 & 6"; DN80, 80L, 100 & 150

Angle: 3"; DN80

End Connections:

Threaded: 3 & 3"L; DN80 & 80L

Flanged: 3, 3L, 4 & 6"; DN80, 80L, 100 & 150

Pressure Rating: 10 bar; 145 psi

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

Materials:

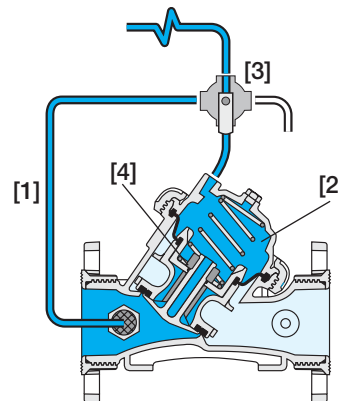
Body, Cover and Plug: Glass-Filled Nylon

Diaphragm: NR, Nylon fabric reinforced

Seals: NR

Spring: Stainless Steel

Operation



Line Pressure [1] is applied to the Control Chamber [2] through the Manual Selector [3]. This creates superior closing force that moves the Diaphragm Assembly [4] toward a closed position. The discharge of pressure from the control chamber causes the line pressure acting on 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	3-6" <small>Other sizes available on request.</small>	105 Oblique Angle (3"; DN80 Only)	00 Y A	Y	P Threaded BSP (Female) Threaded NPT (Female) Plastic Flanges* Metal Flanges* ("Corona") Grooved (6"; DN150 Only)	FF BP NP FF CC VI	3W	- Manual Selector Other attributes available on request	Z Z

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



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