



Hydraulic Control Valve

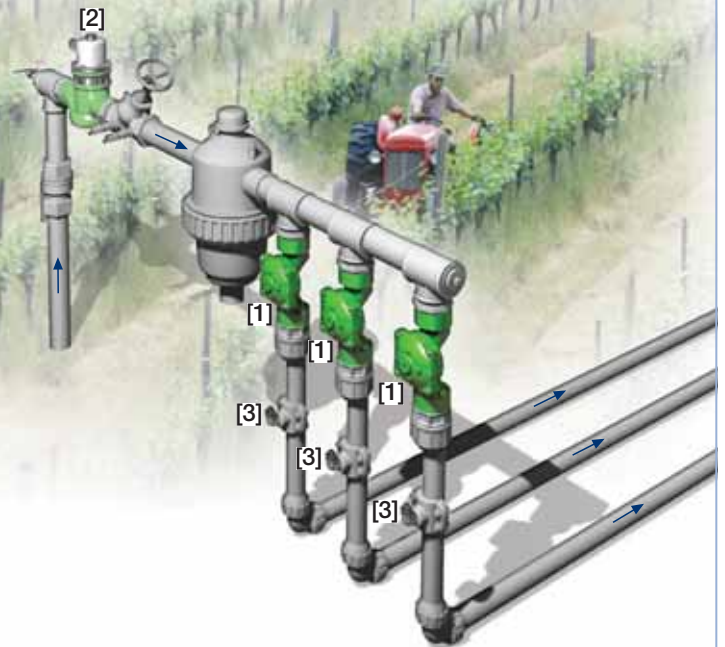
IR-405-Z

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



Features and Benefits

- Hydraulic Control Valve
 - Line pressure driven
 - Hydraulically controlled On/Off
- Advanced Globe Hydro-Efficient Design
 - Unobstructed flow path
 - Single moving part
 - High flow capacity
- Fully Supported & Balanced Diaphragm
 - Requires low opening and actuation pressure
 - Progressively restrains valve closing
 - Prevents diaphragm distortion
- User-Friendly Design
 - Simple in-line inspection
 - Easy addition of control features

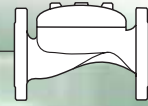


Typical Applications

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

- [1] BERMAD Models IR-405-Z open upon local manual command.
- [2] BERMAD Automatic Metering Valve Model IR-900-D0
- [3] BERMAD Vacuum Breaker Model ½"-ARV

BERMAD Irrigation



IR-405-Z

For full technical details, refer to Engineering Section.

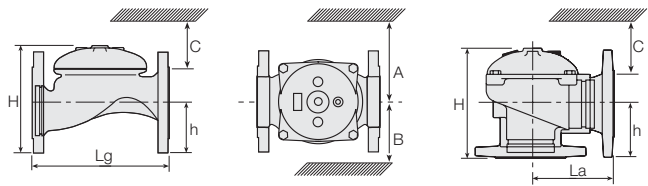
400 Series

On/Off Control

Technical Specifications

Dimensions and Weights

Pattern	Globe						Angle					
	Connections	Threaded					Fl.	Threaded				
Size	DN	40	50	65	80R	80	100	50	65	80R	80	100
	Inch	1½"	2"	2½"	3"R	3"	4"	2"	2½"	3"R	3"	4"
Lg	mm	153	180	210	210	255	320	N.A.	N.A.	N.A.	N.A.	N.A.
	inch	6	7.1	8.3	8.3	10.0	12.6	N.A.	N.A.	N.A.	N.A.	N.A.
La	mm	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	86	110	110	110	160
	inch	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	3.4	4.3	4.3	4.3	6.3
H	mm	87	114	132	140	165	242	136	180	178	184	223
	inch	3.4	4.5	5.2	5.5	6.5	9.5	5.4	7.1	7	7.2	8.8
C	mm	52	68	80	84	100	145	82	108	107	110	134
	inch	2	2.7	3.1	3.3	3.9	5.7	3.2	4.2	4.2	4.3	5.3
h	mm	29	39	45	53	55	112	61	93	91	80	112
	inch	1.1	1.5	1.8	2.1	2.2	4.4	2.4	3.7	3.6	3.1	4.4
A; B	mm	130	130	130	140	175	312	130	130	140	175	312
	inch	5	5	5	6	7	12.3	5.1	5.1	5.5	6.9	12.3
Weight	Kg	2	4	5.7	5.8	13	28	4.4	5.8	7	11	26
	lb.	4.4	8.8	12.6	12.8	28.7	61.7	9.7	12.8	15.4	24.3	57.3



Technical Data

End connections:

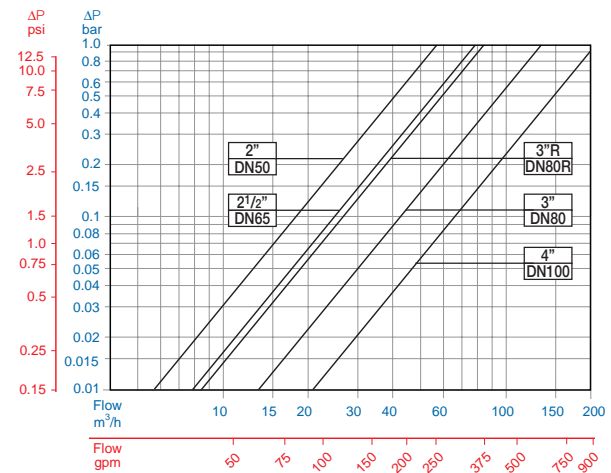
Size	1½"		2"		2½"		3"R		3"		4"	
	DN40	DN50	DN65	DN80R	DN80R	DN80	DN80	DN100	DN100	DN100	DN100	DN100
Threaded	Globe	■	■	■	■	■	■	■	■	■	■	■
	Angle	■	■	■	■	■	■	■	■	■	■	■
Flanged	Globe	■	■	■	■	■	■	■	■	■	■	■
	Angle	■	■	■	■	■	■	■	■	■	■	■
Grooved	Globe	■	■	■	■	■	■	■	■	■	■	■
	Angle	■	■	■	■	■	■	■	■	■	■	■

Pressure Rating: 16 bar; 232 psi

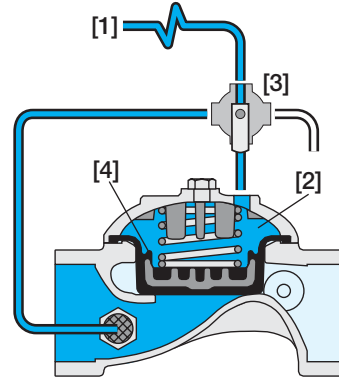
Operating Pressure Range: 0.5-16 bar; 7-232 psi

For lower pressure requirements, consult factory

Flow Chart



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 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	Additional Feature	Pattern	Construction Materials	End Connections	Coating	Voltage -Main Valve Position	Tubing & Fittings	Additional Attributes
IR	1½"-4" <small>Other sizes available on request.</small>	405	00	-	G	I	BP	PG	-	PP	Z
Globe		G	ISO-16		16	Plastic Tubing & Fittings		PP		Manual Selector	Z
Angle		A	ISO-10		10	Plastic Tubing & Brass Fittings		PB		Valve Position Indicator(1)	I
			IS 14 (ISO 10/4 Holes)		14					Flow Stem(1)	M
			ANSI-125		A1						
			JIS-10		J1						
			BST-D		BD						
			Grooved		VI						

For available end connections/sizes, see End Connections Table above.

(1) Standard Irrigation Cover & Diaphragm are unfitted to Attributes I, M. Other additional attributes are optional. Please consult full-stop.



info@bermad.com • www.bermad.com

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