

Solenoid Controlled Valve

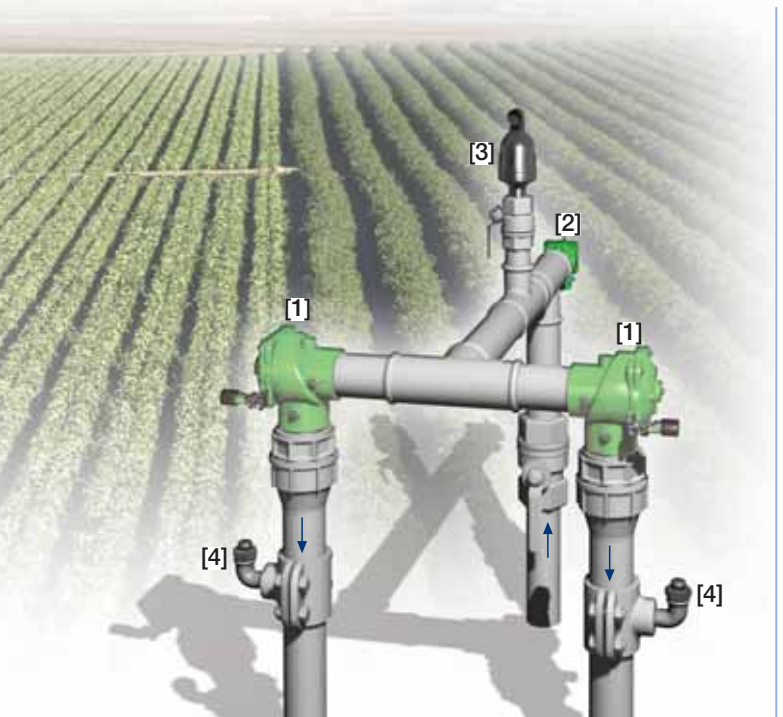
IR-410-KX

The BERMAD Solenoid Controlled Valve is a hydraulically operated, diaphragm actuated control valve that opens and shuts in response to an electric signal.



Features and Benefits

- Hydraulic Control Valve with Solenoid Control
 - Line pressure driven
 - Electrically controlled On/Off
 - Suitable also for remote and/or elevated systems
- 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
- Remote/Elevated Systems
- Distribution Centers
- Low Supplied Pressure Irrigation Systems

[1] BERMAD Model IR-410-KX opens in response to electric signal.

[2] BERMAD Relief Valve Model IR-43Q-K

[3] BERMAD Air Valve Model ARA-A-P-P

[4] BERMAD Vacuum Breaker Model 1/2"-ARV

BERMAD Irrigation



400 Series

On/Off Control

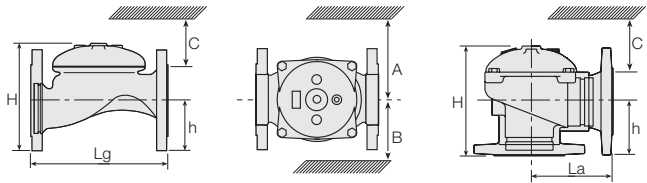
IR-4IO-KX

For full technical details, refer to Engineering Section.

Technical Specifications

Dimensions and Weights

Pattern	Globe						Angle					
	Threaded						Fl.	Threaded				Fl.
Connections	Threaded						Fl.	Threaded				Fl.
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	DN80	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

Solenoid Voltage Range:

S-390 & S-400: 24 VAC, 24 VDC

S-392 & S-402: 9-20 VDC, Latch

S-982 & S-985: 12-50 VDC, Latch

Other Voltages available.

For full electric data, refer to Accessories Section.

How to Order

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

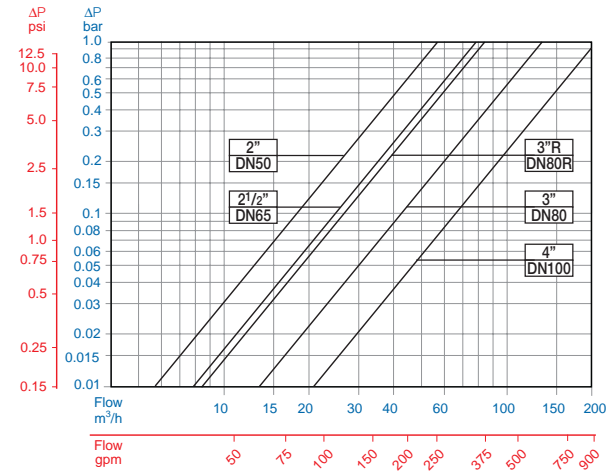
Sector	Size	Primary Feature	Additional Feature	Additional Feature	Pattern	Construction Materials	End Connections	Coating	Voltage -Main Valve Position	Tubing & Fittings	Additional Attributes
IR	1½"-4" <small>Other sizes available on request.</small>	410	00	-	G	I	BP	PG	4AC	PP	KX
Globe		G	ISO-16		16	9VDC -	Latch	9DS	Plastic Tubing & Fittings		PP
Angle		A	ISO-10		10	12VDC -	Latch	1DS	Plastic Tubing & Brass Fittings		PB
			IS 14 (ISO 10/4 Holes)		14	24VDC -	N.C.	4DC			
			ANSI-125		A1	24VDC -	N.O.	4DC			
			JIS-10		J1	24VAC -	N.C.	4AC	Plastic Control Accessories		K
			BST-D		BD	24VAC -	N.O.	4AO	3-Way Control		X
			Grooved		VI	24VAC, Lightning Proof - N.C.		4RC	Valve Position Indicator ⁽¹⁾		I
						24VAC, Lightning Proof - N.O.		4RO	Flow Stem ⁽¹⁾		M

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

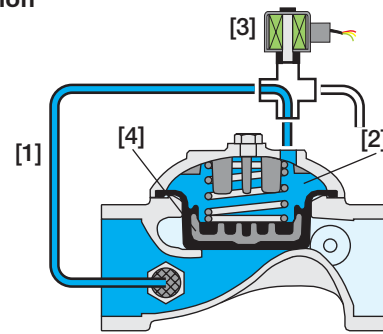
Other electrical ratings are available.

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

Flow Chart



Operation



Line Pressure [1] is applied to the Control Chamber [2], through the opened 3-Way Solenoid [3]. This creates superior closing force that moves the Diaphragm Assembly [4] to a closed position. Closing the Solenoid causes it to switch, discharging pressure from the control chamber and thereby opening the main Valve.



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