



SOLENOID CONTROLLED VALVE

With 2-Way Internal Control & Trio Solenoid

Model IR-11T-N6

The BERMAD 2-Way Solenoid Controlled Valve is a hydraulically operated, diaphragm actuated control valve with external & internal feed & internal bleed control loop. The BERMAD Model IR-11T-N6 opens and closes drip-tight in response to an electric signal, which causes the solenoid to open or close the valve's internal hydraulic loop.



[1] The BERMAD Model IR-11T-N5-2W opens and closes drip-tight in response to an electric signal, which causes the solenoid to open or close the valve's internal hydraulic loop.

Features & Benefits

- Hydraulic Control Valve
 - Line pressure driven
 - Hydraulically controlled On/Off
- Engineered Composite Valve with Industrial Grade Design
 - Adaptable on-site to a wide range of end connection
 - Highly durable, chemical and cavitation resistant
- hYflow 'Y' Valve Body with "Look Through" Design
 - Ultra-high flow capacity at low pressure loss
- Unitized "Flexible Super Travel" (FST) Diaphragm and Guided Plug
 - Accurate and stable regulation with smooth closing
 - Requires low actuation pressure
 - Prevents diaphragm erosion and distortion
 - Simple in-line inspection and service

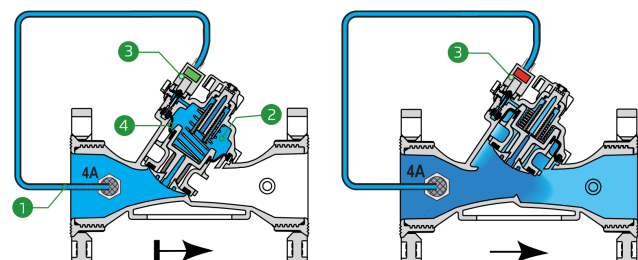
Typical Applications

- Automated Irrigation Systems
- Greenhouses Irrigation
- Low Supplied Pressure Irrigation Systems
- Energy Saving Irrigation Systems
- Landscape - Municipal & Domestic
- Turf-Golf Courses & Stadiums

Operation:

Closed Position: Line Pressure [1] is applied to the Control Chamber [2] through the opened 3-Way Solenoid actuator [3]. This creates superior closing force that moves the Diaphragm Assembly [4] toward a closed position.

Opened Position: Electric command to the solenoid causes it to switch position, discharging pressure from the control chamber Through internal passage in the valve and thereby opening the valve.





IR-11T-N6

Technical Data

Pressure Rating:
150 psi

Operating Pressure Range:
7-150 psi

Materials

Body & Cover:
Polyamide 6 & 30% GF

Diaphragm:
NR, Nylon fabric reinforced

Spring:
Stainless Steel

Control Loop Accessories

Tubing and Fittings:
Polyethylene and
Polypropylene

**For other solenoids please
consult BERMAD*

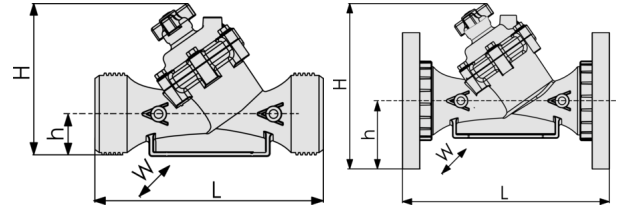
AC solenoid:
S-390-T-2W

DC solenoid:
S-390-T-2W

DC latch solenoid:
S-392-T-2W

Technical Specifications

For other patterns and end connection types,
Please refer to BERMAD full engineering page.



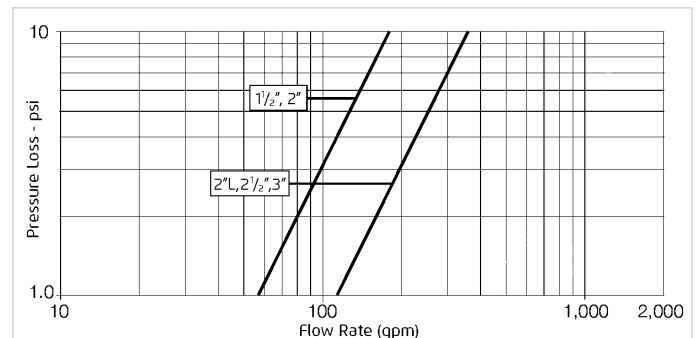
Size	Pattern	End Connection	Weight (Lb)	L (In)	H (In)	h (In)	w	CCDV (Gal)	CV
1½" ; DN40	Oblique	Threaded	2.4	7%	6%	1%	3%	0.026	58
2" ; DN50	Oblique	Threaded	2.7	9%	6%	1%	3%	0.026	58
2"L ; DN50L	Oblique	Threaded	3	9%	7%	1%	5%	0.033	116
2½" ; DN65	Oblique	Threaded	3	9%	7%	1%	5%	0.033	116
3" ; DN80	Oblique	Threaded	4	11%	7%	2%	5%	0.033	116
3" ; DN80	Oblique	Plastic Flanges	6	12%	9%	4	7%	0.033	116
3" ; DN80	Oblique	Metal Flanges	10	12%	9%	4	7%	0.033	116

CCDV = Control Chamber Displacement Volume • **Threaded** = BSP & NPT are available. External thread is available for 2" and 2½" only. • Other End Connections are available on request. For dimensions and weights of adapters or valves with adapters please consult with customer service.

Optional Features

Code	Description	Size Range
M	Flow Stem	2½"-3"
V3	Victaulic PVC Adaptors 3"	3"
V4	Victaulic PVC Adaptors 4"	4"

Flow Chart



2-Way circuit "Added Head Loss" (for "V" below 6.5 f/s): 4.5 psi

Differential Pressure & Flow Calculation

$$\Delta P = \left(\frac{Q}{CV} \right)^2$$

CV = gpm @ ΔP of 1 psi
Q = gpm
ΔP = psi