



SOLENOID CONTROLLED VALVE

Model IR-210-3W-X

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

*This valve is designated for irrigation use only and not for other uses! Manufacturer warranty is limited to the permitted use only.



- [1] BERMAD Model IR-210-3W-X opens in response to electric signal.
- [2] Water Meter
- [3] Combination Air Valve Model IR-C10
- [4] Vacuum Breaker
- [5] RTU-Remote Terminal Unit

Features & Benefits

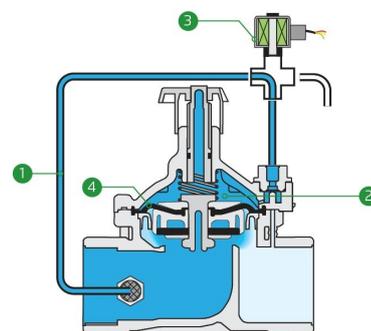
- Line Pressure Drive, Hydraulically Controlled
 - Hydraulic pressure control by solenoid
 - Line pressure driven
 - Electrically controlled On/Off
 - Suitable also for remote and/or elevated systems
- Composite Hydro-Efficient Globe Valve
 - Unobstructed flow path
 - Single moving part
 - High flow capacity
 - Highly durable, chemical and cavitation resistant
- Unitized Flexible Diaphragm and Guided Plug
 - Excellent low flow regulation performances
 - Prevents diaphragm erosion and distortion
- Fully Supported & Balanced Diaphragm
 - Requires low actuation pressure
- User-Friendly Design
 - Simple in-line inspection and service

Typical Applications

- Automated Irrigation Systems
- Distribution Centers
- Landscape
- Low Supplied Pressure Irrigation Systems

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] toward a closed position. Closing the solenoid causes it to discharge pressure from the control chamber, thereby opening the valve.





Technical Data

Pressure Rating:
150 psi

Operating Pressure Range:
10-150 psi

Materials

Body & Cover:
Polyamide 6 & 30% GF

Diaphragm:
NBR

Spring:
Stainless Steel

Control Loop Accessories

Tubing and Fittings:
Polyethylene and
Polypropylene

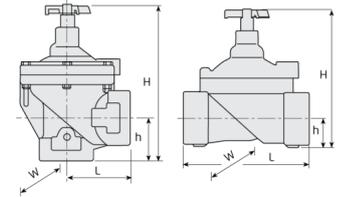
**For other solenoids please
consult [BERMAD](#)*

AC solenoid:
S-390-T-3W

DC latch solenoid:
S-392-T-3W P.B
S-390-T-3W

Technical Specifications

For other end connection types,
Please refer to [BERMAD](#) full engineering page.



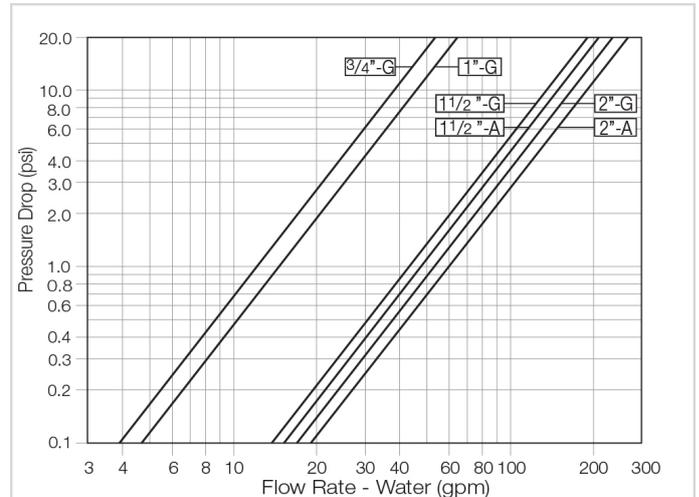
Size	Pattern	End Connection	Weight (Lb)	L (In)	H (In)	h (In)	W	CCDV (Gal)	CV
¾" ; DN20	Globe	Threaded	0.8	4¾	4¾	¾	3¾	0.003	10
1" ; DN25	Globe	Threaded	0.7	4¾	4¾	¾	3¾	0.003	10
1½" ; DN40	Globe	Threaded	2.2	6¾	7¾	1¾	5	0.016	43
1½" ; DN40	Angle	Threaded	2.1	3¾	7½	1¾	5	0.016	47
2" ; DN50	Globe	Threaded	2.4	6¾	12¾	1½	5	0.016	54
2" ; DN50	Angle	Threaded	2	3¾	8¾	2¾	5	0.016	60

CCDV = Control Chamber Displacement Volume

Additional Features

Code	Description	Size Range
M	Flow Stem	1½"-2"
5	Plastic Test Point	1½"-2"
Z	Manual Selector	1½"-2"

Flow Chart



Differential Pressure & Flow Calculation

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

$CV = \text{gpm @ } \Delta P \text{ of 1 psi}$
 $Q = \text{gpm}$
 $\Delta P = \text{psi}$