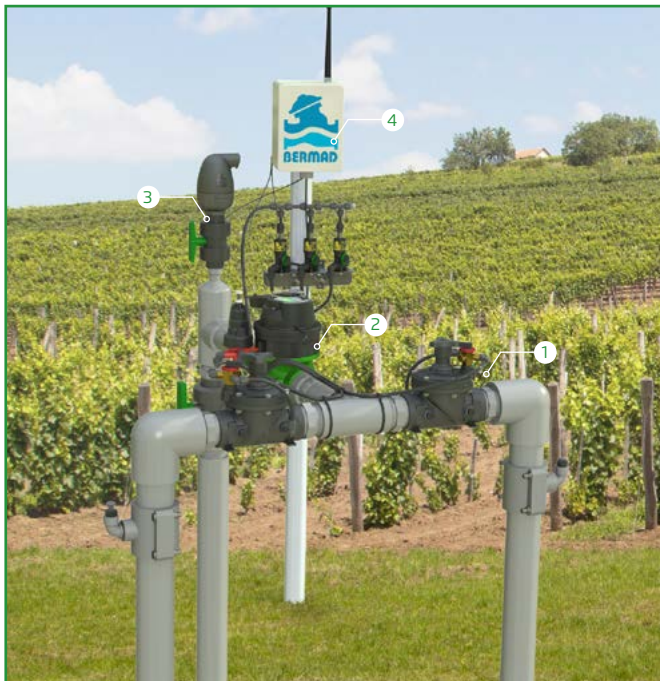# HYDRAULIC CONTROL VALVE

Model IR-205-Z

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

[1] BERMAD Model IR-205-Z open upon local munal command.
[2] BERMAD Pressure Reducing Hydrometer Model IR-920-M0-KXZ
[3] BERMAD Combination Air Valve Model IR-C10
[4] RTU

Features & Benefits

- Line Pressure Driven, Hydraulically Controlled
  - Hydraulically controlled On/Off
- Plastic Globe Hydro-Efficient 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 performance
  - Prevents diaphragm erosion and distortion
- Fully Supported & Balanced Diaphragm
  - Requires low actuation pressure
- User-Friendly Design
 - Simple in-line inspection and service

Typical Applications

- Computerized Irrigation Systems
- Distribution Centers
- Systems Subject to Varying Supply Pressure
- Landscape

Operation:

Hydraulic Command ❶ is applied to the Control Chamber ❷ through the Manual Selector ❸. This creates superior closing force that moves the Diaphragm Assembly ❹ to a closed position. Discharging of 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.

All images in this catalog are for illustration only
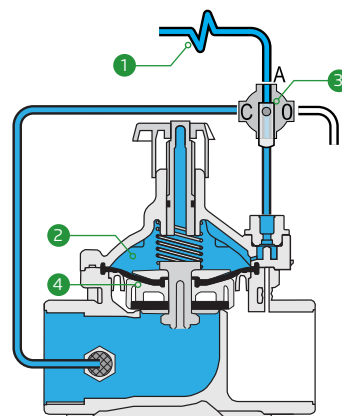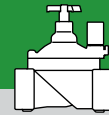
Technical Data

Pressure Rating:
10 bar; 145 psi

Operating Pressure Range:
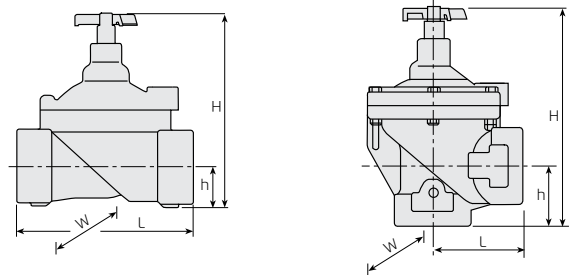0.5-10 bar; 7-145 psi

Materials:

Body, Cover and Plug:
Polyamid 6 & 30% GF

Diaphragm: NBR

Seals: NBR

Spring: Stainless Steel

Cover Bolts: Stainless Steel

Control Accessories:

Tubing and Fittings:
Plastic

Technical Specifications

Dimensions & Weights

For more details of BERMAD 200 series
Please see our full engineering page.

Sizes Inch ; DN	¾" ; 20	1" ; 25	1½" ; 40		2" ; 50	
Pattern	Globe	Globe	Globe	Angle	Globe	Angle
L (mm)	110	110	160	80	170	85
H (mm)	115	115	180	190	190	210
W (mm)	78	78	125	125	125	125
h (mm)	22	22	35	40	38	60
Weight (kg)	0.35	0.33	1	0.95	1.1	0.91

Flow Properties

Sizes	Inch DN	1½" 40	1½" 40	2" 50	2" 50
Pattern		G	A	G	A
KV		37	41	47	52

Valve Flow Coefficient

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

Kv = m³/h @ ΔP of 1 bar
Q = m³/h
ΔP = bar

Flow Chart

2-Way circuit "Added Head Loss" (for "V" below 2 m/s): 0.3 bar

G & A Pattern

1½"-G   2"-G

1½"-A   2"-A

Pressure Loss (bar) vs Flow Rate (m³/h)