PRESSURE RELIEF/ SUSTAINING VALVE

Model IR-230-2W

The BERMAD Pressure Relief/Sustaining Valve is a hydraulically operated, diaphragm actuated control valve that sustains minimum preset upstream (back) pressure. It either opens or shuts in response to a remote pressure command. When installed offline, the BERMAD Model IR-230-2W relieves line pressure in excess of preset pressure..





- [1] BERMAD Model IR-230 protects pump from overload and cavitation, prevents main line emptying, and controls system fill-up
- [2] BERMAD Plastic Back Wash Valve
- [3] BERMAD Combination Air Valve Model IR-C10
- [4] BERMAD Vacuum Breaker

Features & Benefits

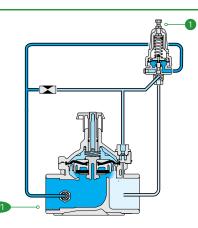
- Line Pressure Driven, Hydraulically Controlled
 - Sustains upstream line pressure controlling system fill-up
 - Relieves excess pressure protecting pump & system
- Plastic Globe Hydro-Efficient Valve
 - Unobstructed flow path
 - Single moving part
 - High flow capacity
- Highly durable, chemical and 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
- Pressure Zone Prioritizing
- Greenhouses
- Control of Fertilization Systems
- Filter Stations

Operation:

The Pressure Sustaining Pilot ① commands the Valve to throttle closed should Upstream Pressure ④ drop below pilot setting, and to modulate open when it rises above pilot setting.



Irrigation



Technical Data

IR-230-2W

Pressure Rating: 10 bar; 145 psi

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

Setting Range: 1-7 bar; 15-100 psi

Setting ranges vary according to specific pilot spring. Please consult factory

Technical Specifications

Dimensions & Weights

For more details of <u>BERMAD</u> 200 series Please see our full engineering page.

Materials:

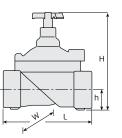
Body, Cover and Plug: Polyamid 6 & 30% GF Diaphragm: NBR Seals: NBR Spring: Stainless Steel Cover Bolts: Stainless Steel

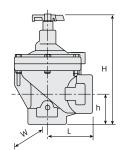
Control Accessories:

Tubing and Fittings: Plastic

Pilot Spring Range:

Spring	Spring color	Setting Range
J	Green	0.2-1.7 bar
K	Gray	0.5-3.0 bar
Ν	Colorless	0.8-6.5 bar





Sizes Inch ; DN	11/2″	; 40	2" ; 50	
Pattern	Globe	Angle	Globe	Angle
L (mm)	160	80	170	85
H (mm)	180	190	190	210
W (mm)	125	125	125	125
h (mm)	35	40	38	60
Weight (kg)	1	0.95	1.1	0.91

Flow Properties

Sizes Inch DN	1½″ 40	1½″ 40	2″ 50	2″ 50
Pattern	G	А	G	А
KV	37	41	47	52

Valve Flow Coefficient

$$\Delta \mathsf{P} = \left(\frac{\mathsf{Q}}{\mathsf{K}\mathsf{v}}\right)^2$$

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

Flow Chart

