

# Pressure Reducing Valve

For Drip-Tape Applications

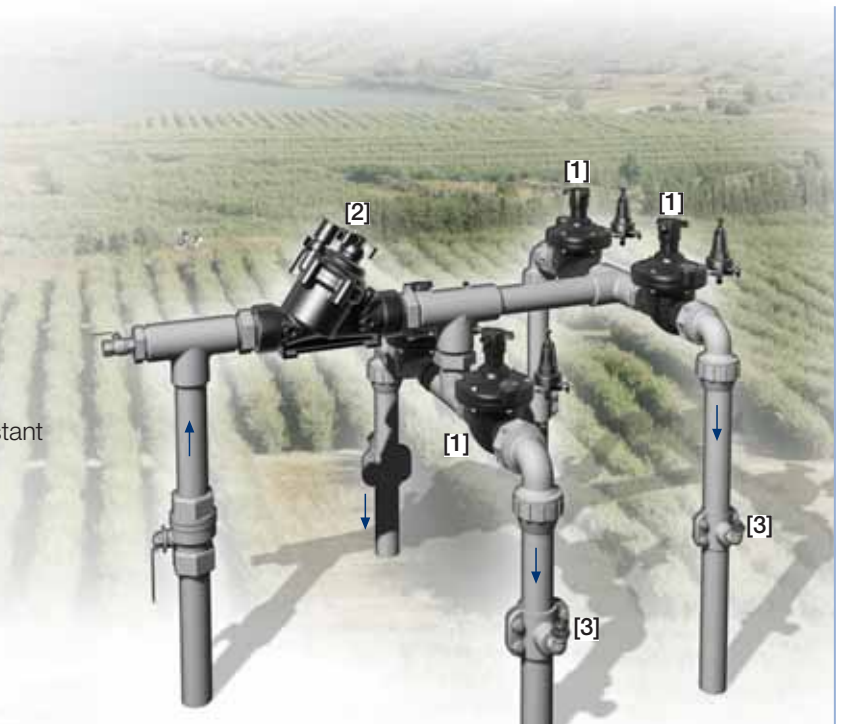
IR-220-bZ

The BERMAD Pressure Reducing Valve is a hydraulically operated, diaphragm actuated control valve that accurately reduces higher upstream pressure to very low and stable preset downstream pressure regardless of fluctuating demand or varying upstream pressure.



## Features and Benefits

- Line Pressure Driven, Hydraulically Controlled
  - Protects downstream systems
- Pressure Reducing Servo Pilot Controlled
  - Dynamic integrated needle valve
  - Easily settable to 0.5 bar; 7 psi
  - Very low hysteresis
- 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

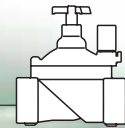
- Drip-Tape Systems
- Low Set Pressure Applications
- Low Supplied Pressure Irrigation Systems
- Energy Saving Irrigation Systems

[1] BERMAD Model IR-220-bZ establishes a reduced pressure zone, protecting laterals and distribution line.

[2] BERMAD Solenoid Controlled Valve Model IR-110-N1

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

# BERMAD Irrigation



## IR-220-bZ

For full technical details, refer to Engineering Section.

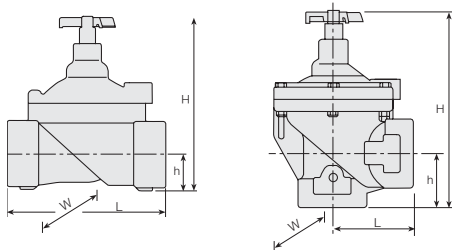
## 200 Series

Pressure Reducing

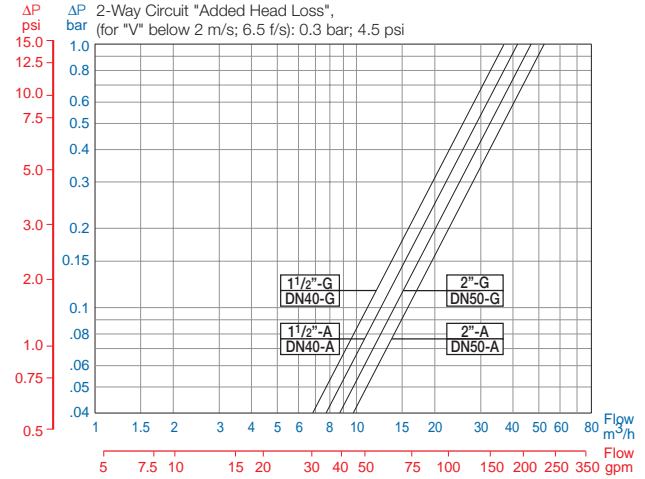
### Technical Specifications

#### Dimensions and Weights

Pattern	Globe		Angle		
	DN	40	50	40	50
Size	inch	1½	2	1½	2
	mm	160	170	80	85
L	mm	6.3	6.7	6.1	3.3
	inch	180	190	190	210
H	mm	7.1	7.5	7.5	8.3
	inch	35	38	40	60
h	mm	1.4	1.5	1.6	2.4
	inch	125	125	125	125
W	mm	4.9	4.9	4.9	4.9
	inch	1	1.1	0.95	0.91
Weight	Kg.	2.2	2.4	2.1	2.0
	lb.				



#### Flow Chart



### Technical Data

**Sizes:** 1½-2"; DN40-50

**Patterns:**

Globe: 1½ & 2"; DN40 & 50

Angle: 1½ & 2"; DN40 & 50

**End Connections:** Female Threads BSP; NPT

**Pressure Rating:** 10 bar; 145 psi

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

**Setting Range:** 0.5-1.7 bar; 7-25 psi

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

**Materials:**

**Body, Cover and Plug:** Reinforced Nylon

**Diaphragm:** NR

**Seals:** NBR [Buna-N] and NR

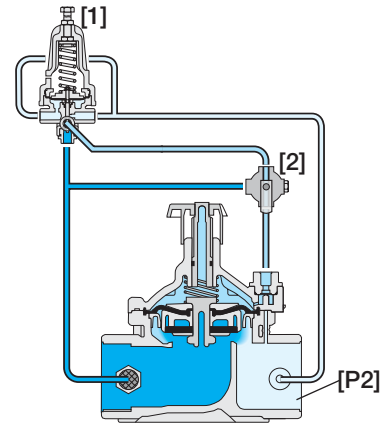
**Spring:** Stainless Steel

**Cover Bolts:** Stainless Steel

**Control Accessories:** Plastic

**Tubing and Fittings:** Plastic

#### Operation



The Pressure Reducing Servo Pilot [1] commands the Valve to throttle closed, preventing Downstream Pressure [P2] from rising above pilot setting, and to modulate open when [P2] drops below pilot setting. The Manual Selector [2] enables local manual closing.

### 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	Pattern	Construction Materials	End Connections	Control Type	Additional Attributes	Voltage -Main Valve Position
IR	1½-2"	220	00	G	P	BP	2W/3W	bZ	-
	Globe Angle		G A	BSP NPT		BP NP	Servo Manual Selector	b Z	

Other attributes available on request



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