

# Pressure Reducing Valve

For Drip-Tape Applications

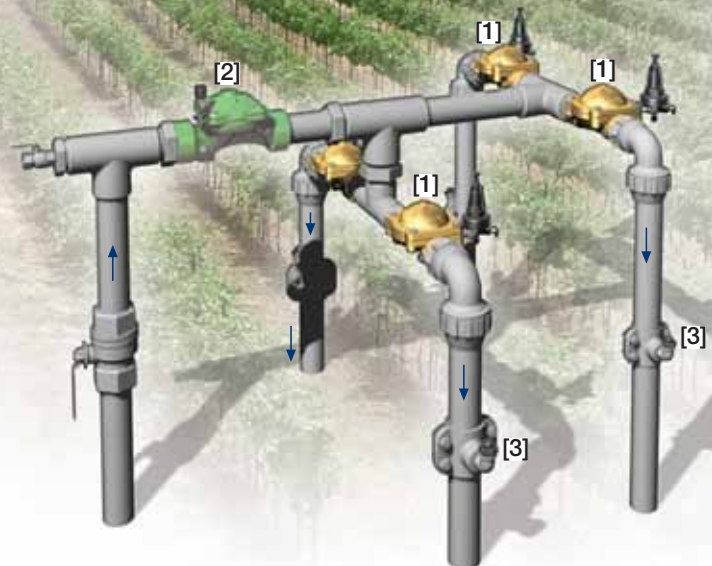
**GR-420-bKZ**

The BERMAD Pressure Reducing Valve is a hydraulically operated, diaphragm actuated control valve that 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
- Pressure Reducing Servo Pilot Controlled
  - Progressive needle valve
  - Settable to 0.5 bar; 7 psi
  - Very low hysteresis
- Advanced Globe Hydro-Efficient Design
  - Unobstructed flow path
  - Single moving part
  - High flow capacity
- Fully Supported & Balanced Diaphragm
  - Requires low opening and actuation pressure
  - Excellent low flow regulation performances
  - Progressively restrains valve closing
  - Prevents diaphragm distortion
- User-Friendly Design
  - Easy pressure setting
  - Simple in-line inspection and service



## Typical Applications

- Drip-Tape Systems
- Low Set Pressure Applications
- Pressure Reducing Stations
- Low Supplied Pressure Irrigation Systems

[1] BERMAD Model GR-420-bKZ establishes a reduced pressure zone, protecting laterals and distribution line.

[2] BERMAD Solenoid Controlled Valve Model IR-410-K

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

# BERMAD Irrigation



**400 Series**

Pressure Reducing

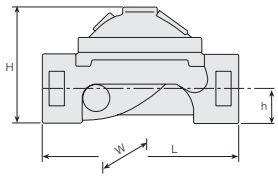
## GR-420-bKZ

For full technical details, refer to Engineering Section.

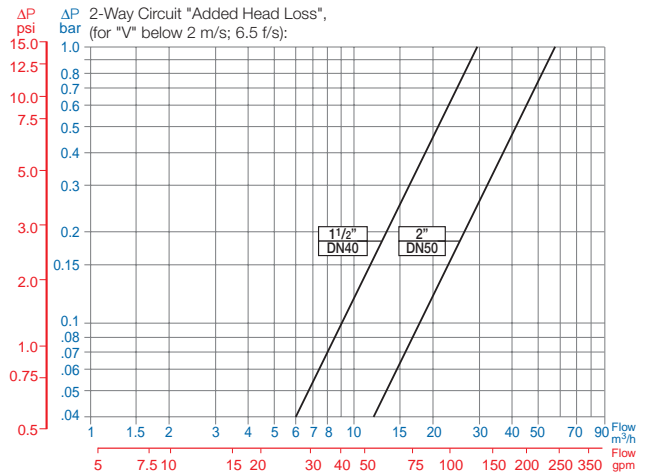
### Technical Specifications

#### Dimensions and Weights

Size	DN	40	50
	inch	1½	2
L	mm	150	180
	inch	5.9	7.1
H	mm	83	110
	inch	3.3	4.3
h	mm	28	38
	inch	1.1	1.5
W	mm	90	120
	inch	3.5	4.7
Weight	Kg.	1.5	4
	lb.	3.3	8.8



#### Flow Chart



### Technical Data

**Valve Available Sizes:** 1½ & 2"; DN40 & 50

**End Connections:** Threaded 1½ & 2"; DN40 & 50

**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 and Cover:** Brass

**Spring:** Stainless Steel

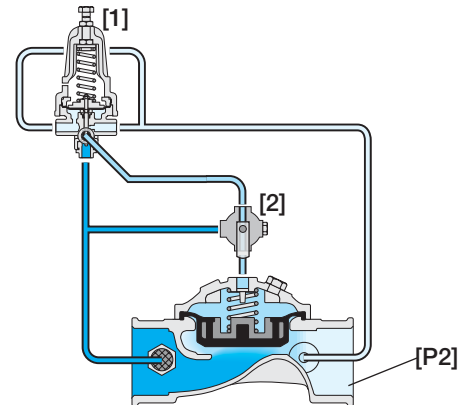
**Diaphragm:** NR

**Bolts, Studs and Nuts:** Zinc-Cobalt Plated Steel

**Control Accessories:** Plastic

**Tubing and Fittings:** Plastic

### Operation



The Pressure Reducing Servo Pilot [1] commands the main Valve to throttle closed preventing downstream pressure [P2] from rising above pilot setting, and to modulate open when it 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	Pilot Material	Additional Attributes	Voltage -Main Valve Position
GR	1½-2"	420	00	G	R	BP	2W/3W	PCP	bKZ	-
Globe		G	BSP NPT Other end connections available on request		BP NP	Plastic Brass	PCP PCM	Servo Plastic Control Accessories Manual Selector		b K Z



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