



Anti-Drain Valve (ADV)

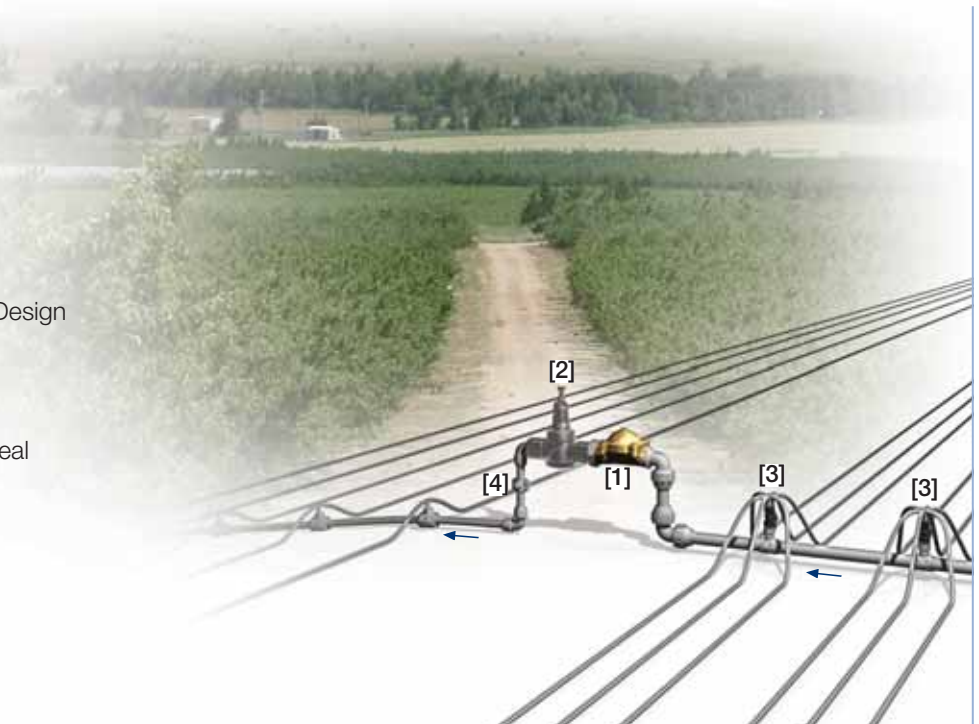
GR-405-05

The BERMAD Anti-Drain Valve is a spring loaded diaphragm actuated valve that opens upon pressurizing the irrigation system and shuts off drip-tight when the system reaches closure pressure. The BERMAD ADV maintains the main distribution line under low pressure, preventing damage caused by line emptying or fill-up, and enables plot's irrigation to simultaneously start/stop, thereby contributing to irrigation uniformity.



Features and Benefits

- Spring Loaded Elastomeric Valve
 - Self operated
 - Range of closing springs
- Advanced Globe Hydro-Efficient Design
 - Unobstructed flow path
 - Single moving part
 - High flow capacity
- Flexible Balanced Diaphragm & Seal
 - Fully opening
 - Secured drip-tight closing
- User-Friendly Design
 - Simple in-line inspection



Typical Applications

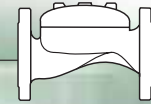
- Plain Plots with Sloppy Margins
- Downhill Sprinkler Lines
- Hillside Irrigation Machines

[1] BERMAD Model GR-405-05 opens upon start of irrigation and shuts off drip-tight when irrigation stops, maintaining main distribution line under low pressure, and preventing damage caused by line emptying or fill-up.

[2] BERMAD Model 1" PRV

[3] BERMAD Model 3/4" -PRV

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



GR-405-05

For full technical details, refer to Engineering Section.

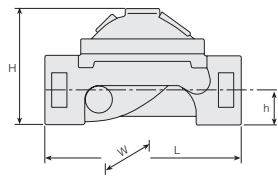
400 Series

Anti-Drain

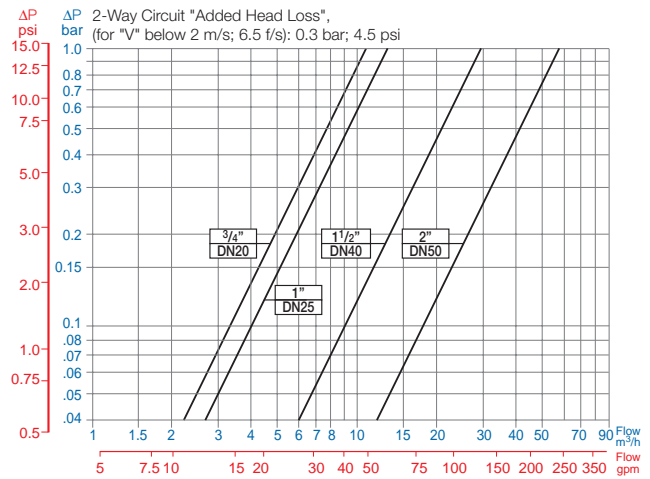
Technical Specifications

Dimensions and Weights

Size	DN	20	25	40	50
	inch	¾	1	1½	2
L	mm	112	112	150	180
	inch	4.4	4.4	5.9	7.1
H	mm	68	68	83	110
	inch	2.7	2.7	3.3	4.3
h	mm	20	20	28	38
	inch	0.8	0.8	1.1	1.5
W	mm	72	72	90	120
	inch	2.8	2.8	3.5	4.7
Weight	Kg.	0.95	0.95	1.5	4
	lb.	2.1	2.1	3.3	8.8



Flow Chart



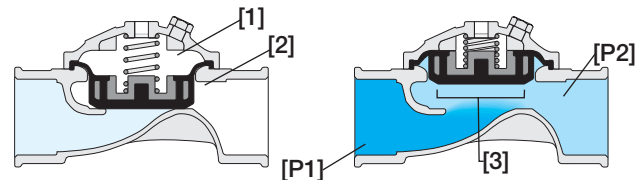
Technical Data

Valve Available Sizes: ¾, 1, 1½ & 2"; DN20, 25, 40 & 50
End Connections: Threaded ¾, 1, 1½ & 2"; DN20, 25, 40 & 50
Pressure Rating: 10 bar; 145 psi
Operating Pressure Range: 0.5-10 bar; 7-145 psi
Setting Range: 0.7-2.5 bar; 10-36 psi
 Setting ranges vary according to specific spring. Please consult factory.

Materials:

Body and Cover: Brass
Spring: Stainless Steel
Diaphragm: NR
Bolts, Studs and Nuts: Zinc-Cobalt Plated Steel

Operation



The Closing Spring [1] applies the desired closing force to the Diaphragm Assembly [2], which holds the Valve in a closed position. When Upstream Pressure [P1] rises, it increases the hydraulic force acting on the Seal Area [3] causing it to rise above the closing spring force. This partially opens the Valve, thereby allowing Downstream Pressure [P2] to build-up. [P2] is then applied to the lower area of the diaphragm assembly, causing it to move the Valve to a fully open position.

How to Order

For Ordering Please Specify:

- Brass Anti-Drain Valve, Female BSP Threads BERMAD Model: GR-___*405-05-BP-___**
- Brass Anti-Drain Valve, Female NPT Threads BERMAD Model: GR-___*405-05-NP-___**

* Choose the desired Valve Diameter (¾", 1", 1½" or 2")
 ** Choose the desired Valve Sealing Point (0.7 bar; 10 psi, 1.1; 16, 1.8; 26 or 2.5; 36)

