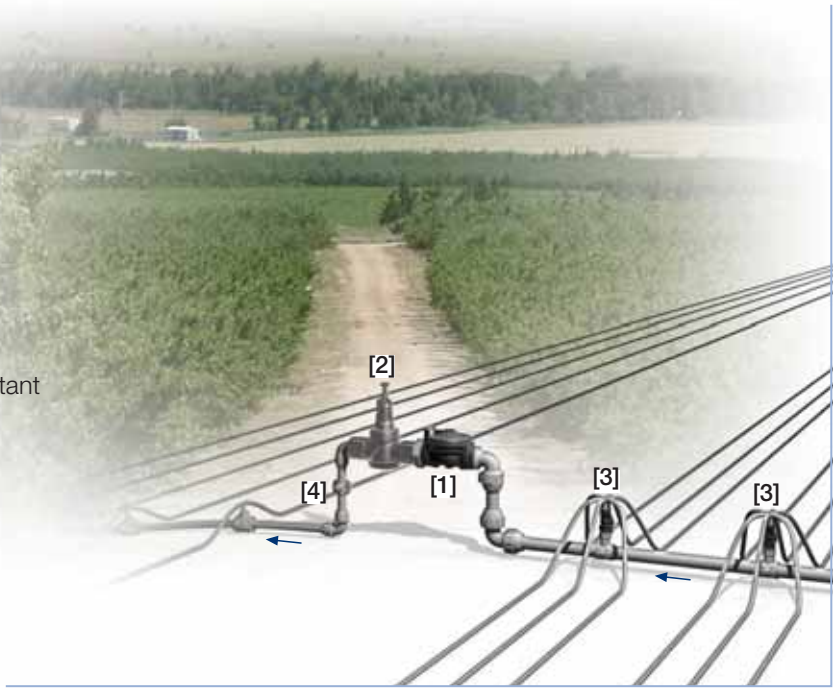
Anti-Drain Valve (ADV)

IR-205-05

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

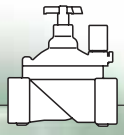
- Spring Loaded Elastomeric Valve
  - Self operated
  - Range of closing springs
- Plastic Globe Hydro-Efficient Valve
  - Unobstructed flow path
  - Single moving part
  - High flow capacity
  - Highly durable, chemical and cavitation resistant
- Flexible Balanced Diaphragm & Seal
  - Fully opening
  - 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 IR-205-05 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 ¾"-PRV
[4] BERMAD Vacuum Breaker Model ½"-ARV



IR-205-05

200 Series

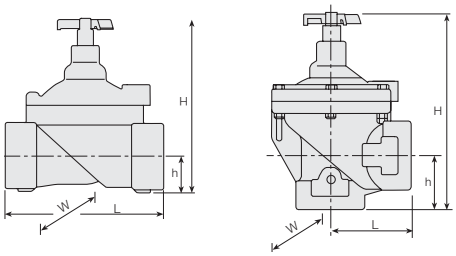
Anti-Drain

For full technical details, refer to Engineering Section.

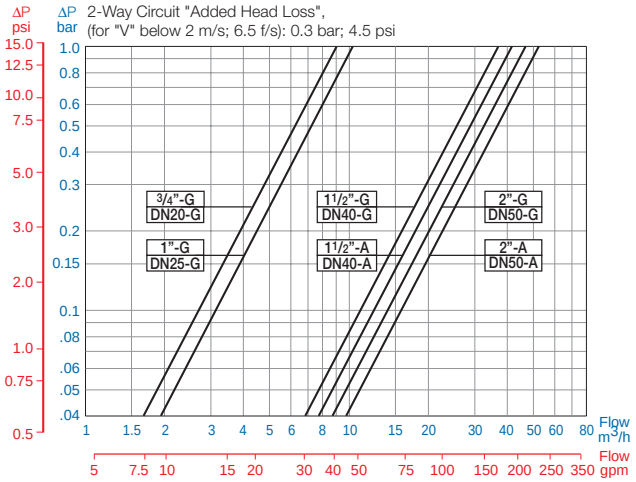
Technical Specifications

Dimensions and Weights

Pattern		Globe				Angle	
Size	DN	20	25	40	50	40	50
	inch	¾	1	1½	2	1½	2
L	mm	110	110	160	170	80	85
	inch	4.3	4..3	6.3	6.7	6.1	3.3
H	mm	115	115	180	190	190	210
	inch	4.5	4.5	7.1	7.5	7.5	8.3
h	mm	22	22	35	38	40	60
	inch	0.9	0.9	1.4	1.5	1.6	2.4
W	mm	78	78	125	125	125	125
	inch	3.1	3.1	4.9	4.9	4.9	4.9
Weight	Kg.	0.35	0.33	1	1.1	0.95	0.91
	lb.	0.77	0.73	2.2	2.4	2.1	2.0



Flow Chart

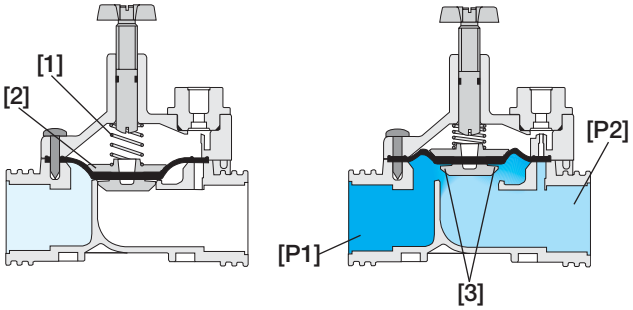


Technical Data

Sizes: ¾-2"; DN20-50
Patterns:
Globe: ¾, 1, 1½ & 2"; DN20, 25, 40 & 50
Angle: 1½ & 2"; DN40 & 50
Y (Oblique: 1"; DN25)
End Connections: Female Threads BSP or NPT
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, Cover and Plug: Reinforced Nylon
Diaphragm: NR
Seals: NBR [Buna–N] and NR
Spring: Stainless Steel
Cover Bolts: Stainless 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:

- Plastic Anti-Drain Valve, Female BSP Threads BERMAD Model: IR-____*205-05-____**BP-____***
- Plastic Anti-Drain Valve, Female NPT Threads BERMAD Model: IR-____*205-05-____**NP-____***

* Choose the desired Valve Diameter: ¾", 1", 1½" or 2"
** Choose the desired Valve Pattern: G=Globe, A=Angle (1½"& 2" only)
*** Choose the desired Valve Sealing Point (0.7 bar; 10 psi, 1.1; 16, 1.8; 26 or 2.5; 36)