BERMAD Irrigation

Pressure Relief/ Sustaining Valve

with Solenoid Control

IR-130-55

The BERMAD Pressure Relief/Sustaining Valve with Solenoid Control is a hydraulically operated, diaphragm actuated control valve that sustains minimum preset upstream (back) pressure regardless of fluctuating flow or varying downstream pressure. It either opens or shuts in response to an electric signal.

When installed offline, the BERMAD Model IR-130-50 relieves line pressure in excess of preset pressure.

100 Series h**Y**flow

Pressure Sustaining

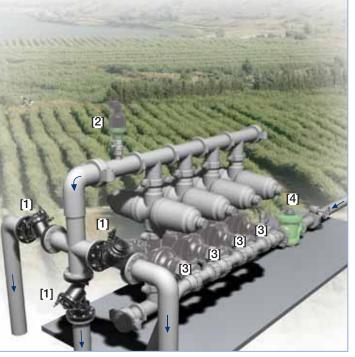


Features and Benefits

- Line Pressure Driven, Electrically Controlled On/Off
 - Line pressure driven
 - Sustains upstream line pressure controlling system fill-up
 - Relieves excess pressure protecting pump & system
- Engineered Plastic Valve with Industrial Grade Design
 - Adaptable on-site to a wide range of end connection sizes and types
 - Articulated flange connections eliminate mechanical and hydraulic stresses
- Highly durable, chemical and cavitation resistant
- hYflow 'Y' Valve Body with "Look Through" Design
 - Ultra-high flow capacity Low pressure loss
- Unitized "Flexible Super Travel" (FST) Diaphragm and Guided Plug
 - Accurate and stable regulation with smooth closing
 - Requires low opening and actuation pressure
 - Prevents diaphragm erosion and distortion
- Simple In-Line Inspection and Service

Typical Applications

- Computerized Irrigation Systems
- Pressure Zone Prioritizing
- Line Fill-up Control
- Line Emptying Prevention
- Filter Systems
- Energy Saving Irrigation Systems



- [1] BERMAD Model IR-130-55 opens in response to an electric signal, sustains filter back flush pressure and controls system fill-up.
- [2] BERMAD Air Valve Model ARC-A-P-I
- [3] BERMAD Backwash Valve Model IR-3x3-350-S-P
- [4] BERMAD N.C. Hydrometer Model IR-900-M0-54-R



BERMAD Irrigation

IR-130-55

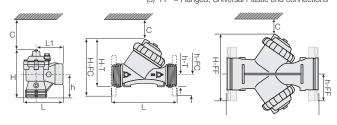
For full technical details, refer to Engineering Section.

Technical Specifications

Dimensions and Weights

Pattern		Angle		Y "Boxer"					
Size	DN Inch	80-T ⁽¹⁾ 3-T ⁽¹⁾	80-T ⁽¹⁾ 3-T ⁽¹⁾	80-FC ⁽²⁾ 3-FC ⁽²⁾	80L-FC ⁽²⁾ 3L-FC ⁽²⁾	100-FC ⁽²⁾ 4-FC ⁽²⁾	150-FF ⁽³⁾ 6-FF ⁽³⁾		
L (L1)	mm	187 (130)	298	308	310	350	480		
	inch	7.4 (5.1)	11.7	12.1	12.2	13.8	18.9		
H (Hf)	mm	235 (245)	180 (195)	240 (255)	280	294	285		
	inch	9.3 (9.6)	7.1 (7.7)	9.4 (10)	11	11.6	11.2		
С	mm	53	53	600	600	600	600		
	inch	2.1	2.1	4	4	23.6	23.6		
h	mm	117	50	100	100	112	145		
	inch	4.6	2	3.9	3.9	4.4	5.7		
Weight	Kg	1.6	1.6	4.4	5.9	7.6	12.5		
	ib.	3.5	3.5	9.7	13	16.7	27.6		
(1) "T" = Threaded end connections (2) "FC" = Flanged, Corona (Metal) end connections									

(2) "FC" = Flanged, Corona (Metal) end connections (3) "FF" = Flanged, Universal Plastic end connections



Technical Data

Sizes: 3, 3L, 4 & 6"; DN80, 80L, 100 & 150 Patterns: Oblique: 3, 3L, 4 & 6"; DN80, 80L, 100 & 150 Angle: 3"; DN80 End Connections: Threaded: 3 & 3"L; DN80 & 80L Flanged: 3, 3L, 4 & 6"; DN80, 80L, 100 & 150 Pressure Rating: 10 bar; 145 psi Operating Pressure Range: 0.35-10 bar; 5-145 psi Setting Range: 1-7 bar; 15-100 psi Setting ranges vary according to specific pilot spring. Please consult factory. Materials: Body, Cover and Plug: Glass-Filled Nylon Diaphragm: NR, Nylon fabric reinforced Seals: NR Spring: Stainless Steel Control Accessories: Plastic

Tubing and Fittings: Reinforced Plastic

Solenoid Voltage Range:

S-390 & S-400: 24 VAC, 24 VDC S-392 & S-402: 9-20 VDC Latch S-982 & S-985: 12-50 VDC, Latch Other voltages availale

How to Order

Please spec	ify the requeste	ed valve	e in the following sequence	e: (for more o	ptions, refer to Or	rdering Guide.)				
Sector	Size	Prim Feat		Pattern	Construction Materials	End Connections	Control Type	Voltage -Main Valve Position	Additonal Attributes	
IR	3-6" Other sizes available on request.	1	30 55	Y	P	FF	2W	4AC	-	
Oblique Angle (3"; DN	80 Only)	A Th Pla Me	Threaded BSP (Female) Threaded NPT (Female) Plastic Flanges* Metal Flanges* ("Corona") Grooved (6"; DN150 Only)	BP NP FF CC VI	9VDC - 12VDC- 24VDC- 24VDC- 24VAC-	Latch 9DS Latch 1DS N.C. 4DC N.O. 4DC N.C. 4AC	OS Plastic Pr OC Other attrib	Low Preset Pressure (below 2 bar) Plastic Pressure Test Point Other attributes available on request		
			* Comply to: ISO PN10, ANSI # Jis K-10, BS-D	125/150,	24VAC – 24VAC, Lightning 24VAC, Lightning		RC			

Other electrical ratings available on request.

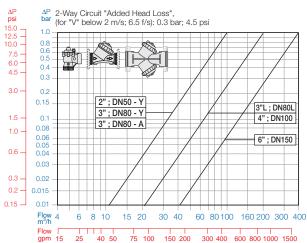
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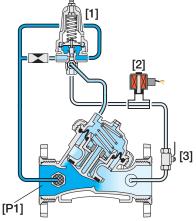
100 Series hyflow

Pressure Sustaining

Flow Chart



Operation



The Pressure Sustaining Pilot [1] commands the Valve to throttle closed should Upstream Pressure [P1] drop below pilot setting, and modulate open when it rises above pilot setting. Closing the Solenoid [2] causes the main Valve to shut. The downstream Cock Valve [3] enables manual closing.

