# **BERMAD** Irrigation



400 Series

Pressure Sustaining

# Pressure Sustaining Valve

with Metal Accessories

#### **IR-430-RXZ**

The BERMAD Pressure Sustaining Valve is a hydraulically operated, diaphragm actuated control valve that sustains minimum preset upstream (back) pressure and opens fully when line pressure is in excess of setting.



### Features and Benefits

- Line Pressure Driven, Hydraulically Controlled
  - Prioritizes pressure zones
  - Controls system fill-up
  - Opens fully upon line pressure rise
- Metal Control Accessories
  - Damage resistant
  - High pressure rating
- Advanced Globe Hydro-Efficient Design
  - Unobstructed flow path
  - Single moving part
  - High flow capacity
- Fully Supported & Balanced Diaphragm
  - Requires low actuation pressure
  - Excellent low flow regulation performance
  - Progressively restrains valve closing
  - Prevents diaphragm distortion
- Simple In-Line Inspection and Service



# **Typical Applications**

- Line Fill-Up Control Solutions
- Line Emptying Prevention
- Infield Filters Backwash Pressure Sustaining
- Systems Subject to Varying Supply Pressure
- [1] BERMAD Model IR-430-RXZ sustains supply system pressure preventing emptying, and controls laterals and distribution line fill-up.
- [2] BERMAD Relief Valve Model IR-43Q-R
- [3] BERMAD Air Valve Model ARA-A-P-P
- [4] BERMAD Vacuum Breaker Model 1/2"-ARV



# **BERMAD** Irrigation



#### **IR-430-RXZ**

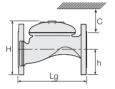
For full technical details, refer to Engineering Section.

400 Series
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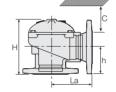
# **Technical Specifications**

## Dimensions and Weights

Pattern		Globe						Angle				
Connections		Threaded					FI.	Threaded Fl.				FI.
	DN nch	40 1½"	50 2"	65 2 <sup>1</sup> / <sub>2</sub> "	80R 3"R	80 3"	100 4"	50 2"	65 2 <sup>1</sup> / <sub>2</sub> "	80R 3"R	80 3"	100 4"
Lg	mm inch	153 6	180 7.1	210 8.3	210 8.3	255 10.0	320 12.6	N.A. N.A.	N.A. N.A.	N.A. N.A.	N.A. N.A.	N.A. N.A.
La	mm inch	N.A. N.A.	N.A. N.A.	N.A. N.A.	N.A. N.A.	N.A. N.A.	N.A. N.A.	86 3.4	110 4.3	110 4.3	110 4.3	160 6.3
Н	mm	87 3.4	114 4.5	132 5.2	140 5.5	165 6.5	242 9.5	136 5.4	180 7.1	178 7	184 7.2	223 8.8
С	mm	52 2	68 2.7	80 3.1	84 3.3	100 3.9	145 5.7	82 3.2	108 4.2	107 4.2	110 4.3	134 5.3
h	mm	29 1.1	39 1.5	45 1.8	53 2.1	55 2.2	112 4.4	61 2.4	93 3.7	91 3.6	80 3.1	112 4.4
A; B	mm	130 5	130 5	130 5	140 6	175 7	312 12.3	130 5.1	130 5.1	140 5.5	175 6.9	312 12.3
Weight	Kg lb.	2 4.4	4 8.8	5.7 12.6	5.8 12.8	13 28.7	28 61.7	4.4 9.7	5.8 12.8	7 15.4	11 24.3	26 57.3







# **Technical Data**

#### End connections:

Size		1½"	2"	2½"	3"R	3"	4"
		DN40	DN50	DN65	DN80R	DN80	DN100
Threaded	Globe			•	•		
	Angle		•	•		•	
Flanged	Globe		•	•	•		•
	Angle						
Grooved	Globe					•	•
	Angle						

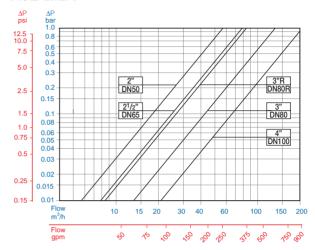
Pressure Rating: 16 bar; 232 psi

**Operating Pressure Range:** 0.5-16 bar; 7-232 psi For lower pressure requirements, consult factory

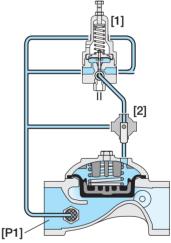
Setting Range: 1-10 bar; 15-145 psi

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

#### Flow Chart



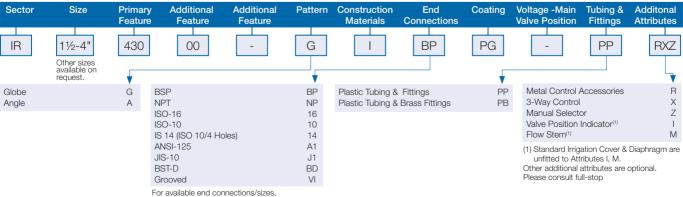
#### Operation



The Pressure Sustaining Pilot [1] commands the main Valve to throttle closed should Upstream Pressure [P1] drop below setting, and to open fully when [P1] rises above 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.)





see End Connections Table above