

## Pressure Sustaining Valve

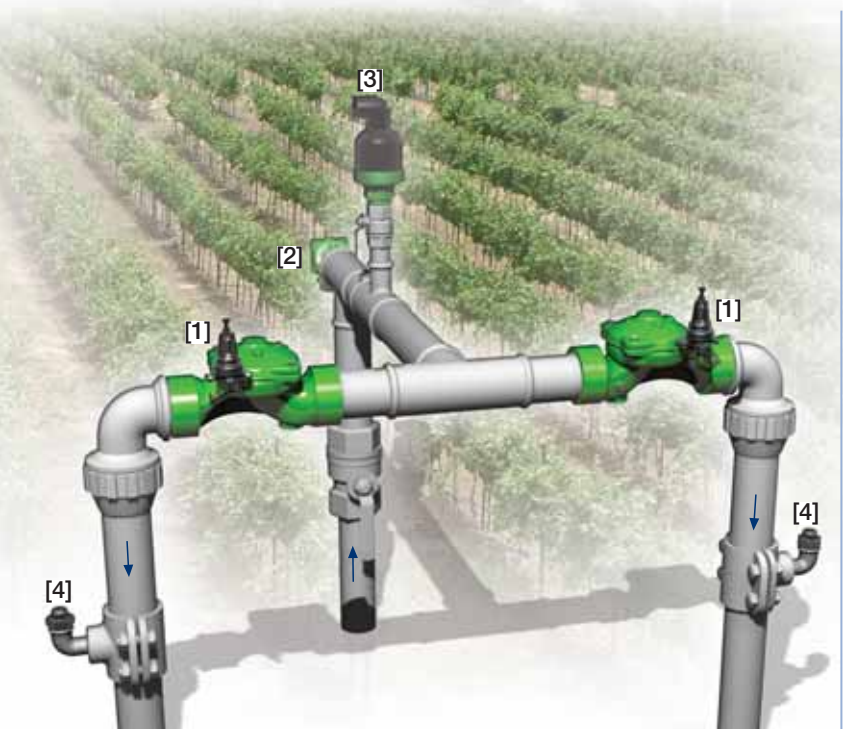
IR-430-KXZ

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
- 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
- User-Friendly Design
  - Easy pressure setting
  - 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

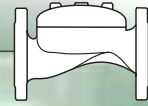
[1] BERMAD Model IR-430-KXZ sustains supply system pressure preventing emptying, and controls laterals and distribution line fill-up.

[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-KXZ

For full technical details, refer to Engineering Section.

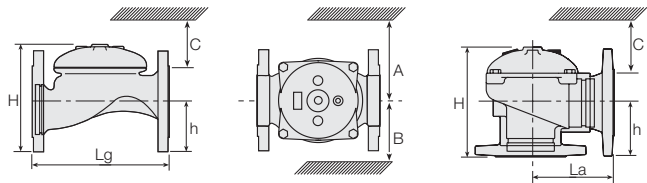
## 400 Series

Pressure Sustaining

### Technical Specifications

#### Dimensions and Weights

Pattern	Connections	Globe						Angle				
		Threaded						Fl.				
Size	DN Inch	40 1½"	50 2"	65 2½"	80R 3"R	80 3"	100 4"	50 2"	65 2½"	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.
La	mm inch	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
H	mm inch	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
C	mm inch	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 inch	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 inch	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: 10 bar; 145 psi

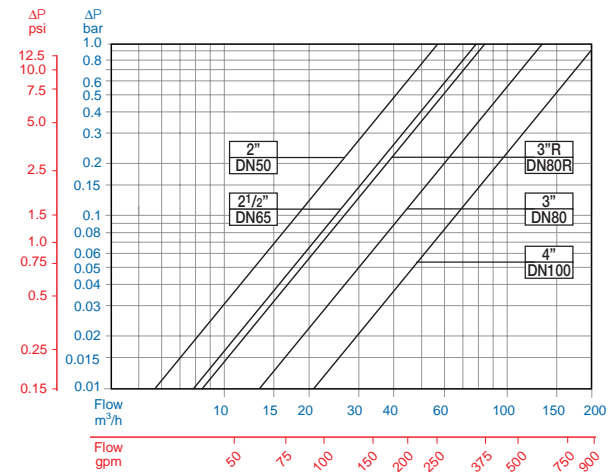
Operating Pressure Range: 0.5-10 bar; 7-145 psi

For lower pressure requirements, consult factory

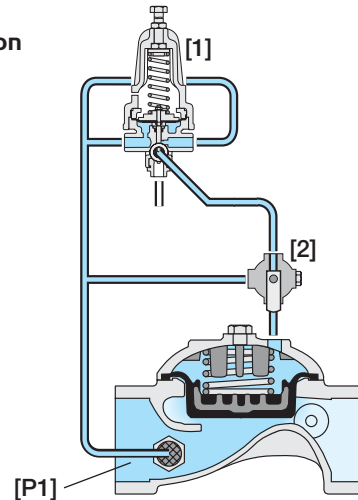
Setting Range: 1-7 bar; 15-100 psi

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.)

Sector	Size	Primary Feature	Additional Feature	Additional Feature	Pattern	Construction Materials	End Connections	Coating	Voltage -Main Valve Position	Tubing & Fittings	Additional Attributes
IR	1½"-4" <small>Other sizes available on request.</small>	430	00	-	G	I	BP	PG	-	PP	KXZ
Globe		G	BSP		BP	Plastic Tubing & Fittings		PP		Plastic Control Accessories	K
Angle		A	NPT		NP	Plastic Tubing & Brass Fittings		PB		3-Way Control	X
			ISO-16		16					Manual Selector	Z
			ISO-10		10					Valve Position Indicator <sup>(1)</sup>	I
			IS 14 (ISO 10/4 Holes)		14					Flow Stem <sup>(1)</sup>	M
			ANSI-125		A1						
			JIS-10		J1						
			BST-D		BD						
			Grooved		VI						

For available end connections/sizes, see End Connections Table above.

(1) Standard Irrigation Cover & Diaphragm are unfitted to Attributes I, M.

Other additional attributes are optional. Please consult full-stop.



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