

Quick Pressure Relief Valve

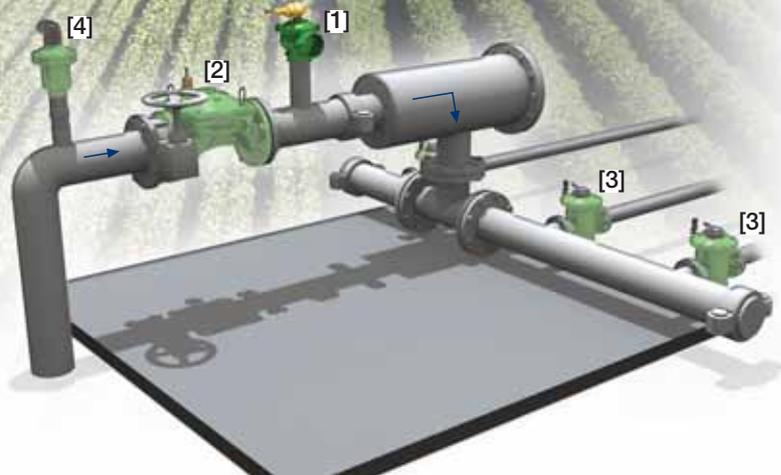
IR-43Q-R

The BERMAD Quick Pressure Relief Valve is a hydraulically operated, diaphragm actuated control valve that relieves excessive line pressure when it rises above the preset maximum. It responds to a rise in system pressure immediately, accurately and with high repeatability, by opening fully. The BERMAD Model IR-43Q-R provides smooth drip tight closing.



Features and Benefits

- Hydraulic Pressure Control
 - Line pressure driven
 - Long term drip tight sealing
 - Long term setting stability
 - Wide setting range
 - Tight setting window with minimal hysteresis
- Advanced Globe Hydro-Efficient Design
 - Unobstructed flow path
 - Single moving part
 - High flow capacity
- Fully Supported & Balanced Diaphragm
 - Requires low opening and actuation pressure
 - Progressively restrains valve closing
 - Prevents diaphragm distortion
 - Excellent low-flow regulation performance
- User-Friendly Design
 - Easy pressure setting
 - Simple in-line inspection and service

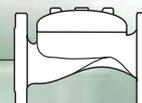


Typical Applications

- System Burst Protection
- Momentary Pressure Peak Elimination
- System Failure Visual Indication
- Filter Burst Protection

- [1] BERMAD Model IR-43Q-R protects filter and system from over pressure.
- [2] BERMAD Pressure Reducing Valve Model IR-420-R
- [3] BERMAD Hydrometer with Solenoid Control Model IR-910-M0-X
- [4] BERMAD Air Valve Model ARC-A-I-I

BERMAD Irrigation



400 Series

Pressure Relief

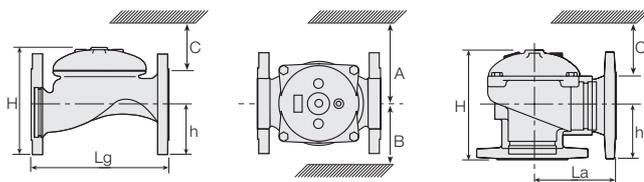
IR-43Q-R

For full technical details, refer to Engineering Section.

Technical Specifications

Dimensions and Weights

Pattern	Globe						Angle					
	Connections	Threaded					Fl.	Threaded				Fl.
Size	DN	40	50	65	80R	80	100	50	65	80R	80	100
	Inch	1½"	2"	2½"	3"R	3"	4"	2"	2½"	3"R	3"	4"
Lg	mm	153	180	210	210	255	320	N.A.	N.A.	N.A.	N.A.	N.A.
	inch	6	7.1	8.3	8.3	10.0	12.6	N.A.	N.A.	N.A.	N.A.	N.A.
La	mm	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	86	110	110	110	160
	inch	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	3.4	4.3	4.3	4.3	6.3
H	mm	87	114	132	140	165	242	136	180	178	184	223
	inch	3.4	4.5	5.2	5.5	6.5	9.5	5.4	7.1	7	7.2	8.8
C	mm	52	68	80	84	100	145	82	108	107	110	134
	inch	2	2.7	3.1	3.3	3.9	5.7	3.2	4.2	4.2	4.3	5.3
h	mm	29	39	45	53	55	112	61	93	91	80	112
	inch	1.1	1.5	1.8	2.1	2.2	4.4	2.4	3.7	3.6	3.1	4.4
A; B	mm	130	130	130	140	175	312	130	130	140	175	312
	inch	5	5	5	6	7	12.3	5.1	5.1	5.5	6.9	12.3
Weight	Kg	2	4	5.7	5.8	13	28	4.4	5.8	7	11	26
	lb.	4.4	8.8	12.6	12.8	28.7	61.7	9.7	12.8	15.4	24.3	57.3



Technical Data

Patterns and Sizes: Globe: 1½"-16"; DN40-400 Angle: 3-4"; DN80-100

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

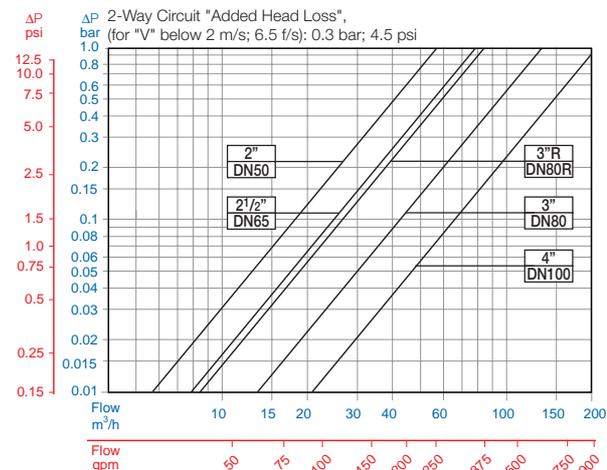
Operating Pressure Range: 0.5-16 bar; 7-232 psi

For lower pressure requirements, consult factory

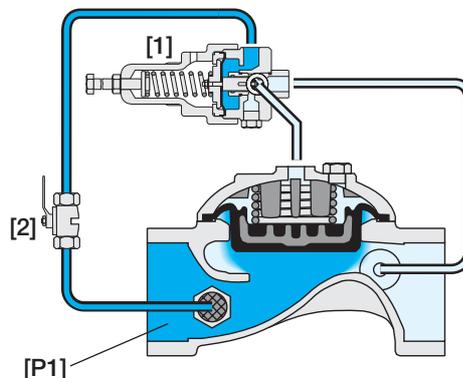
Setting Range: 1-10 bar; 15-232 psi

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

Flow Chart



Operation



The Pressure Relief Pilot [1] commands the Valve to open immediately should the Upstream Pressure [P1] abruptly rise above setting, and to close smoothly when it falls below setting.

The Vented Cock Valve [2] enables manual operating tests.

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"-16" <small>Other sizes available on request.</small>	43Q	00	-	A	I	BP	PG	-	PB	R
	Globe Angle (up to 4"; DN100)	G A	BSP (3"; DN80 only) NPT (3"; DN80 only) ISO-16 ISO-10 IS 14 (ISO 10/4 Holes) ANSI-125 ANSI-150 JIS-10 BST-D Grooved (3-6" DN80-150 only)		BP NP 16 10 14 A1 A5 J1 BD VI	Plastic Tubing & Brass Fittings Copper Tubing & Brass Fittings	PB CB			Metal Control Accessories (1) Standard Irrigation Cover & Diaphragm are unfitted to Attributes I, M. Other attributes available on request.	R
	Cast Iron (up to 8"; DN200) Ductile Iron (10"; DN250 & above)	I C									
Other end connections available on request											



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