

Quick Pressure Relief Valve

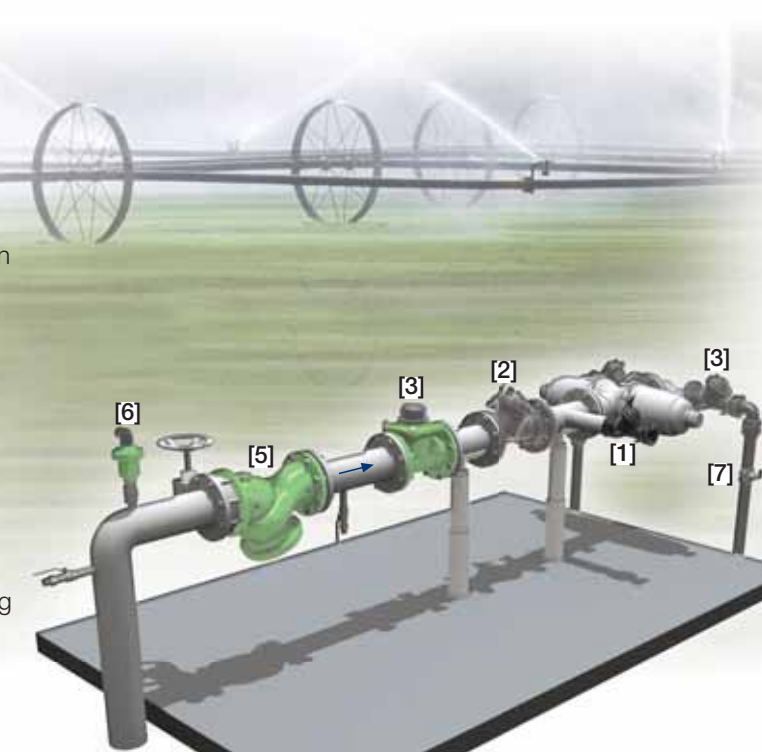
IR-13Q

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 rises in system pressure immediately, accurately and with high repeatability, by opening fully. The BERMAD Model IR-13Q 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
- 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 a Guided Plug
 - Accurate and stable regulation with smooth closing
 - Requires low opening and actuation pressure
 - Prevents diaphragm erosion and distortion
- 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-13Q protects filter and system from over pressure.
- [2] BERMAD Pressure Reducing Valve Model IR-120
- [3] BERMAD On/Off Valve Model IR-105-Z
- [4] BERMAD Water Meter Model WPH
- [5] BERMAD Strainer Model 70F
- [6] BERMAD Air Valve Model ARC-A-I-I
- [7] BERMAD Vacuum Breaker Model 1/2" ARV

BERMAD Irrigation



IR-13Q

For full technical details, refer to Engineering Section.

100 Series hYflow

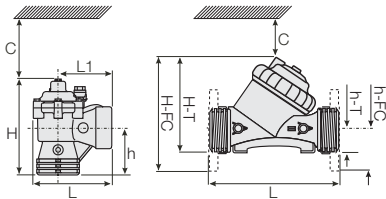
Pressure Relief

Technical Specifications

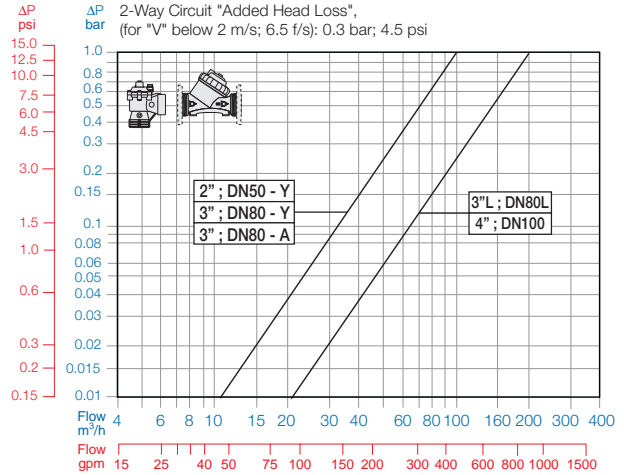
Dimensions and Weights

Pattern Size	Angle	Y (Oblique)				
		80-T ⁽¹⁾ 3-T ⁽¹⁾	80-FC ⁽²⁾ 3-FC ⁽²⁾	80L-FC ⁽²⁾ 3L-FC ⁽²⁾	100-FC ⁽²⁾ 4-FC ⁽²⁾	
L (L1)	mm	187 (130)	298	308	310	350
	inch	7.4 (5.1)	11.7	12.1	12.2	13.8
H (Hf)	mm	235 (245)	180 (195)	240 (255)	280	294
	inch	9.3 (9.6)	7.1 (7.7)	9.4 (10)	11	11.6
C	mm	53	53	600	600	600
	inch	2.1	2.1	4	4	23.6
h	mm	117	50	100	100	112
	inch	4.6	2	3.9	3.9	4.4
Weight	Kg	1.6	1.6	4.4	5.9	7.6
	lb.	3.5	3.5	9.7	13	16.7

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



Flow Chart



Technical Data

Sizes: 3, 3L & 4"; DN80, 80L & 100

Patterns:

Oblique: 3, 3L & 4"; DN80, 80L & 100

Angle: 3"; DN80

End Connections:

Threaded: 3 & 3"L; DN80 & 80L

Flanged: 3, 3L & 4"; DN80, 80L & 100

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: NBR (Buna-N), Nylon fabric reinforced

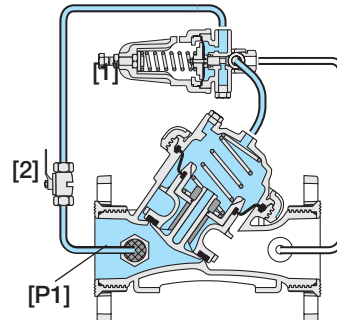
Seals: NBR (Buna-N)

Spring: Stainless Steel

Control Accessories: Plastic

Tubing and Fittings: Plastic

Operation



The Pressure Relief pilot [1] commands the Valve to open immediately should the upstream pressure [P1] abruptly rise above pilot setting, and to close smoothly when it falls below pilot setting. The Vented Cock Valve [2] enables manual operating test.

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	Pattern	Construction Materials	End Connections	Control Type	Voltage -Main Valve Position	Additional Attributes
IR	2-4"	13Q	00	Y	P	BP	2W	-	-
	Other sizes available on request.	Oblique Angle (3"; DN80 Only)	Y A	Threaded BSP (Female) Threaded NPT (Female) Plastic Flanges* Metal Flanges* ("Corona")		BP NP FF CC	Low Preset Pressure (below 2 bar) Other attributes available on request		2

* Comply to: ISO PN10, ANSI #125/150, Jis K-10, BS-D



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