

Pressure Reducing Valve

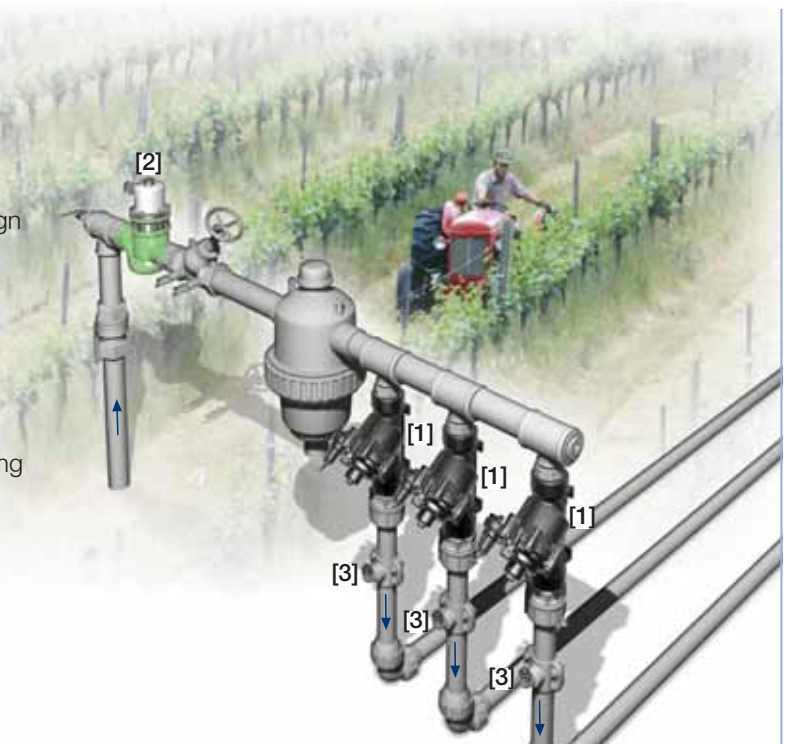
IR-120-XZ

The BERMAD Pressure Reducing Valve is a hydraulically operated, diaphragm actuated control valve that reduces higher upstream pressure to lower constant downstream pressure and opens fully upon line pressure drop.



Features and Benefits

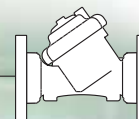
- Line pressure driven, Hydraulically Controlled
 - ▢ Protects downstream systems
 - ▢ Opens fully upon line pressure drop
- Engineered Plastic Valve with Industrial Grade Design
 - ▢ Highly durable, chemical and cavitation resistant
 - ▢ No internal bolts and nuts
- hYflow 'Y' Valve Body with "Look 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

- Pressure Reducing Stations
- Systems Subject to Varying Supply Pressure
- Energy Saving Irrigation Systems

- [1] BERMAD Model IR-120-XZ establishes reduced pressure zone, protecting laterals and distribution line.
- [2] BERMAD Automatic Metering Valve Model IR-900-DO
- [3] BERMAD Vacuum Breaker Model 1/2"-ARV



IR-I20-XZ

For full technical details, refer to Engineering Section.

100 Series hYflow

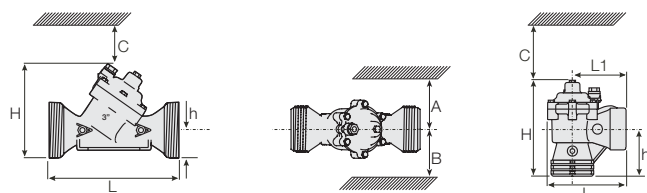
Pressure Reducing
Standard

Technical Specifications

Dimensions and Weights

Pattern Size	DN Inch	Angle 80-T 3-T	Y (Oblique)			
			50-T 2-T	65-T* 2 1/2-T*	80-T 3-T	80L-T 3L-T
L (L1)	mm	187 (130)	230	230	298	300
	inch	7.4 (5.1)	9.1	9.1	11.7	11.8
H (Hf)	mm	235 (245)	170 (185)	170 (185)	180 (195)	240
	inch	9.3 (9.6)	6.7 (7.3)	6.7 (7.3)	7.1 (7.7)	9.5
C	mm	53	140	140	140	180
	inch	2.1	6	6	6	8
h	mm	117	40	40	50	60
	inch	4.6	1.6	1.6	2.0	2.4
A; B	mm	320	135	135	190	190
	inch	12.6	6	6	8	8
Weight	Kg	1.6	1.35	1.4	1.6	3.0
	lb.	3.5	3.0	3.1	3.5	6.6

* 2 1/2"; DN65 Male Thread BSP-F, for PVC glue Unions.



Technical Data

Valve Configurations & Size:

Oblique: 2, 2 1/2, 3, 3L, 4 & 6"; DN50, 65, 80, 80L, 100 & 150

Angle: 3"; DN80

End Connections:

Threaded: 2, 2 1/2, 3 & 3"L; DN50, 65, 80 & 80L

Flanged: 3, 3L, 4, & 6"; DN80, 80L, 100 & 150

Grooved: 6"; DN150

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

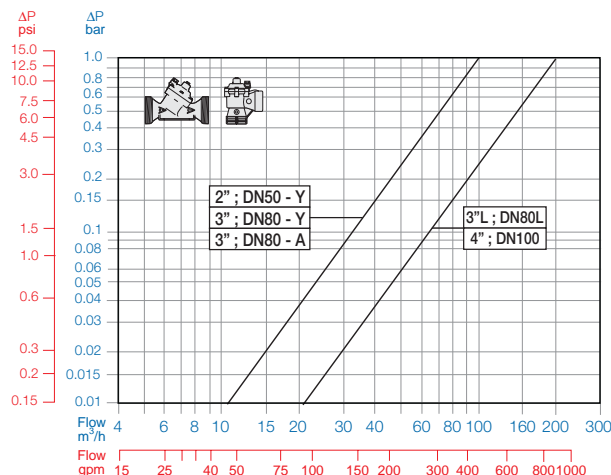
Spring: Stainless Steel

Cover Bolts: Stainless Steel

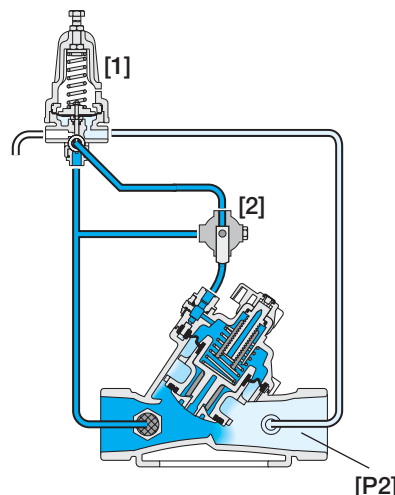
Control Accessories: Plastic

Tubing and Fittings: Plastic

Flow Chart



Operation



The Pressure Reducing Pilot [1] commands the main Valve to throttle closed should Downstream Pressure [P2] rise above pilot setting, and to open fully when it drops below pilot 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	Pattern	Construction Materials	End Connections	Control Type	Voltage -Main Valve Position	Additional Attributes
IR	2-4" <div>Other sizes available on request.</div>	120	00	Y	P	BP	3W	-	XZ
	Oblique Angle (3"; DN 80 Only)	<div>Y</div> <div>A</div>		<div>BSP</div> <div>BSP-F (Male Threads 2½"; DN65 only)</div> <div>NPT</div> <div>Plastic Flanges*</div> <div>Metal Flanges* ("Corona")</div> <div>Comply to: ISO PN10, ANSI #125/150, Jis K-10, BS-D</div>	<div>BP</div> <div>BS</div> <div>NP</div> <div>FF</div> <div>CC</div>	<div>3-Way Control</div> <div>Manual Selector</div> <div>Flow Stem</div> <div>Flow Stem with Position Indicator</div> <div>Other attributes available on request</div>	<div>X</div> <div>Z</div> <div>M</div> <div>MP</div>		



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