## **BERMAD** Irrigation



#### IOO Series h¥flow Pressure Reducing Standard

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## Pressure Reducing Valve

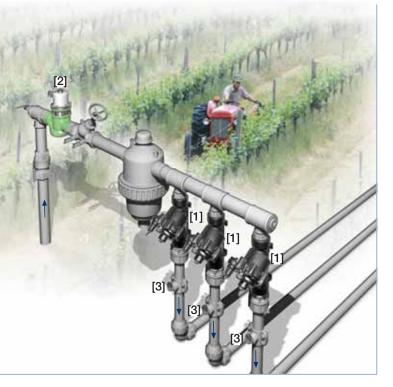
## IR-120-XZ

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-D0
- [3] BERMAD Vacuum Breaker Model 1/2"-ARV



## **BERMAD** Irrigation

#### **IR-I20-XZ**

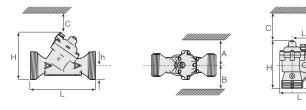
For full technical details, refer to Engineering Section.

## **Technical Specifications**

#### **Dimensions and Weights**

Pattern		Angle	Y (Oblique)				
Size	DN	80-T	50-T	65-T*	80-T	80L-T	
	Inch	3-T	2-T	21/2-T*	3-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	
С	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	
А; В	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	
	ib.	3.5	3.0	3.1	3.5	6.6	

\* 21/2"; DN65 Male Thread BSP-F, for PVC glue Unions.



## **Technical Data**

#### Valve Configurations & Size:

Oblique: 2, 21/2, 3, 3L, 4 & 6"; DN50, 65, 80, 80L, 100 & 150 Angle: 3"; DN80

End Connections: Threaded: 2, 21/2, 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 ∆P psi ∆P bar 15.0 -12.5 -10.0 -1.0 0.8 0.6 0.5 7.5 -6.0 -0.4 4.5 0.3 3.0 -0.2 2"; DN50 - Y 0.15 3" ; DN80 - Y 3" ; DN80 - A 3"L; DN80L 1.5 0.1 4"; DN100 0.08 1.0 0.06 0.05 0.04 0.6 0.03 0.3 0.02 0.2 0.015

Operation

0.15 🖵

[P2]

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	Additonal Attributes
IR	2-4" Other sizes	120	00	Υ	Р	BP	3W	-	XZ
	available on request.	V				↓			•
	Oblique Angle (3"; DN 80 Only)	) Y A		BSP BSP-F (Male Threads 2½"; DN65 only)		BP BS	3-Way Control Manual Selector		X Z
				astic Flanges*	n,	NP FF CC	Flow Stem Flow Stem	with Position Indicate	M or MP
				Metal Flanges* ("Corona") Comply to: ISO PN10, ANSI #125/150, Jis K-10			Other attributes available on request		st

## Bermad Hydraulic pressure reducer, Order here from: irrigationglobal.com

#### 100 Series hyflow Pressure Reducing Standard

