

Filter Backwash Flow Control Valve

IR-470-beKU

The BERMAD Filter Backwash Flow Control Valve is a hydraulically operated, diaphragm actuated control valve that limits filter system backwash flow to a constant preset maximum. This eliminates the risk of filtration element collapse or of grains being flushed out.



Features and Benefits

- Line pressure driven Hydraulic Flow Control
 - Prevents flushing out of grains or filtration element collapse
- Servo Flow Pilot Controlled
 - Dynamic integrated needle valve
 - Very low hysteresis
 - Easy flow setting
- Advanced Globe Hydro-Efficient Design
 - Unobstructed flow path
 - Single moving part
 - High flow capacity
- Fully Supported & Balanced Diaphragm
 - Requires low opening and actuation pressure
 - Excellent low flow regulation performance
 - Progressively restrains valve closing
 - Prevents diaphragm distortion
- Hydraulic Flow Sensor (upstream installation)
 - No moving parts
 - No need for flow straightening

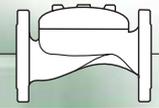


Typical Applications

- Filter Stations
- Systems Subject to Varying Supply Pressure

[1] BERMAD Model IR-470-beKU Limits system backwash flow, preventing flushing out of grains.

[2] BERMAD Filter Backwash Hydraulic Valve Model IR-3x2-350-A-1



Filter Backwash Flow Control Valve

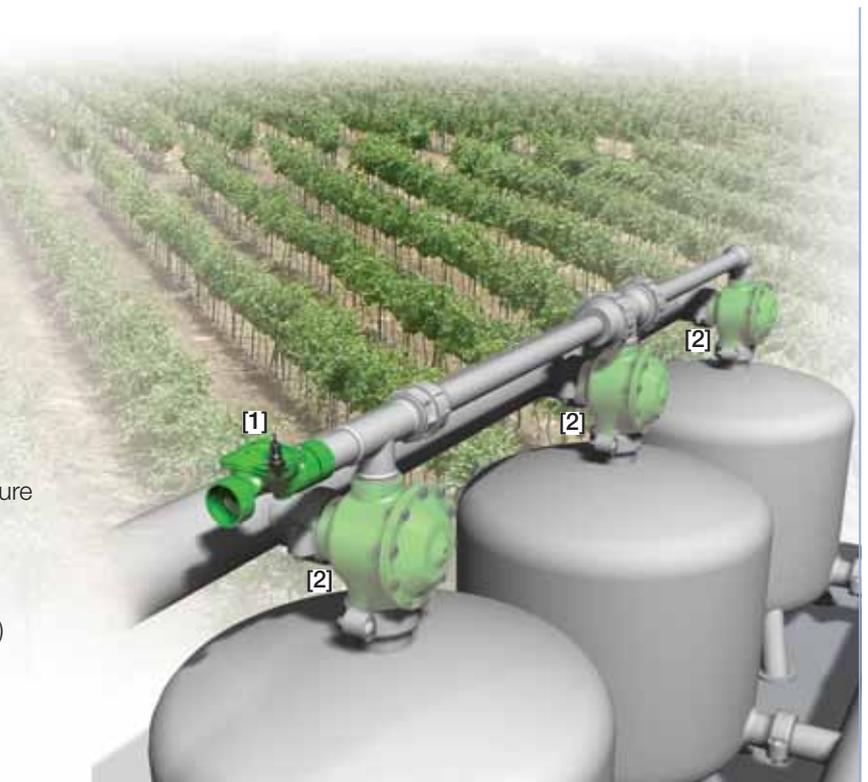
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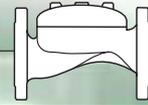
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BERMAD Irrigation



400 Series

Filter Stations

IR-470-beKU

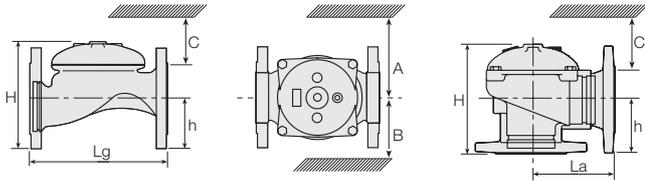
For full technical details, refer to Engineering Section.

Technical Specifications

Dimensions and Weights

Pattern	Globe						Angle						
	Connections	Threaded					Fl.	Threaded				Fl.	
Size	DN	1½"	2"	2½"	3"	3"	100	2"	2½"	3"	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.	N.A.
La	mm inch	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	86	110	110	110	160	
H	mm inch	87 3.4	114 4.5	132 5.2	140 5.5	165 6.5	242 9.5	136	180	178	184	223	
C	mm inch	52 2	68 2.7	80 3.1	84 3.3	100 3.9	145 5.7	82	108	107	110	134	
h	mm inch	29 1.1	39 1.5	45 1.8	53 2.1	55 2.2	112 4.4	61	93	91	80	112	
A; B	mm inch	130 5	130 5	130 5	140 6	175 7	312 12.3	130	130	140	175	312	
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	

The orifice assembly adds to valve length.



Technical Data

End connections:

Size		3"	4"	6"	8-16"
		DN80	DN100	DN150	DN200-400
Threaded	Globe	■			
	Angle	■			
Flanged	Globe	■	■	■	■
	Angle	■	■		
Grooved	Globe	■	■	■	
	Angle	■	■		

Pressure Rating: 10 bar; 145 psi

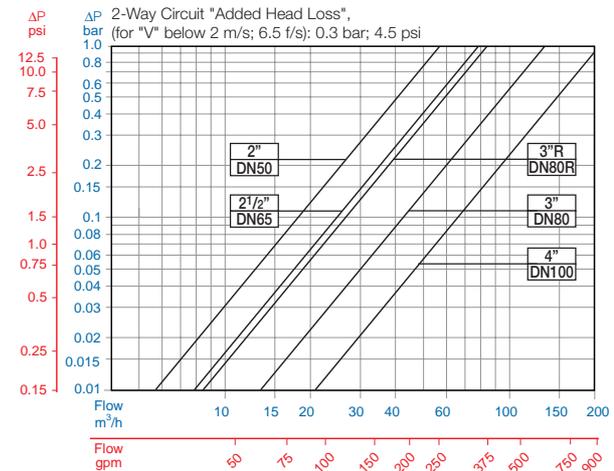
Operating Pressure Range: 0.5-10 bar; 7-145 psi

For lower pressure requirements, consult factory

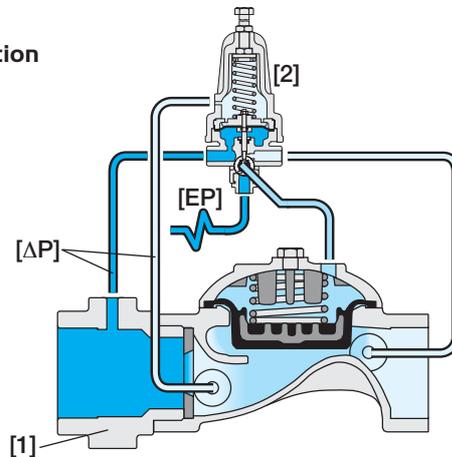
Setting Range: ±20% from valve predetermined flow

Orifice diameter is calculated in accordance with desired ΔP at predetermined flow.

Flow Chart



Operation



Pressure Differential [ΔP] across the Orifice Assembly [1] is in direct proportion to backwash flow rate.

The Flow Pilot [2] continuously senses [ΔP] and commands the Valve to throttle closed should backwash flow rate rise above pilot setting.

External Control Pressure [EP] delivered from the filtration system downstream manifold, ensures valve functioning.

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>	470	00	-	G	I	BP	PG	-	PB	beKU
		G A	BSP NPT ISO-16 ISO-10 IS 14 (ISO 10/4 Holes) ANSI-125 JIS-10 BST-D Grooved		BP NP 16 10 14 A1 J1 BD VI	Plastic Tubing & Brass Fittings Copper Tubing & Brass Fittings		PB CB		Servo External Control Pressure Plastic Control Accessories Orifice Assembly Manual Selector Valve Position Indicator ⁽¹⁾ Flow Stem ⁽¹⁾	b e K U Z I M
		I C									

Other end connections available on request.

(1) Standard Irrigation Cover & Diaphragm are unfitted to Attributes I, M.
Other attributes available on request.



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