



ADJUSTABLE DIRECT-ACTING PRESSURE REDUCER

Model 0.75-PRV

The BERMAD Adjustable Direct Acting Pressure Reducer is actuated by a pressure responsive diaphragm, which seeks to reach equilibrium between hydraulic and set spring force. It reduces higher upstream pressure to lower constant downstream pressure.



- [1] BERMAD Model $\frac{3}{4}$ "-PRV protects laterals and compensates for line friction, ensuring dripper flow per design.
- [2] Solenoid Controlled Valve Model IR-21T
- [3] Vacuum Breaker Model IR-ARV
- [4] Combination Air Valve IR-C10

Features & Benefits

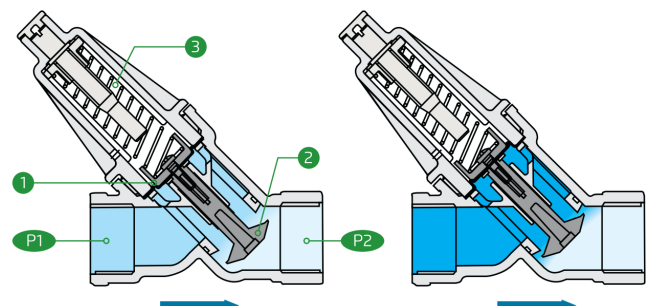
- Advanced Construction Materials
 - High mechanical strength
 - Proven pressure, flow and weather resistance
- Adjustable Direct Acting Pressure Reducer
 - Constant downstream pressure
 - Immediate response
 - Adjustable according to season and stage
- Composite Body and Trim
 - Highly durable, chemical and cavitation resistant
 - Minimizes friction
- Unitized Rolling Diaphragm and Guided Plug
 - Accurate and stable regulation
 - Prevents diaphragm distortion
- User-Friendly Design
 - Can be installed at any orientation
 - Simple in-line inspection and service

Typical Applications

- Distribution Line Lateral Risers
- Non-Compensating Drip-Line Flow Fixation
- Lateral Final Burst Protection
- Pressure Reduction for Marginal Plots
- Irrigation Machine Sprinkler Flow Control
- Single Sprinkler Flow Fixation

Operation:

The Upstream Pressure [P1] applies balanced opening and closing hydraulic forces under the Diaphragm [1] and above the Plug [2]. The Downstream Pressure [P2] applies hydraulic closing force under the plug, which seeks to reach equilibrium with the Set Spring [3] force. Should [P2] rise above setting, the hydraulic closing forces rise above the mechanical force of the spring, pushing the plug to modulate closed, and reducing [P2] back to setting.





0.75-PRV

Technical Data

Pressure Rating:
10 bar

Operating Pressure Range:
0.7-9 bar

Temperature:
Water up to 60°C

Flow Range:
0.8-5 m³/h (¾"-PRV)

Materials

Body & Cover:
Polyamide 6 & 30% GF

Diaphragm:
NR, Nylon fabric reinforced
& NBR

Spring:
Stainless Steel

Setting Springs Selection Table:

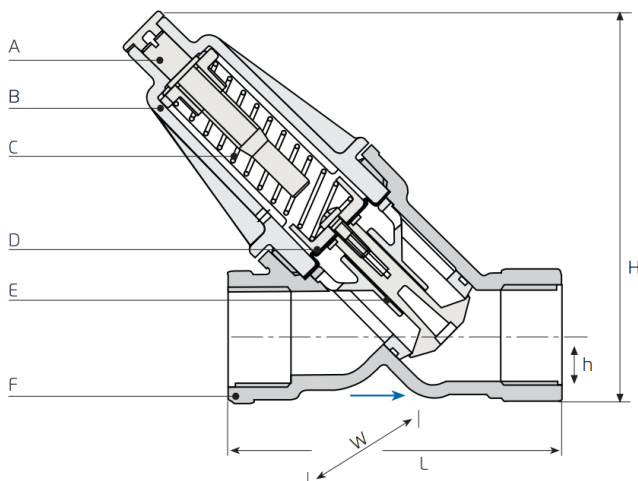
Spring	Spring Color	Setting range
B	White	0.8-2.5 bar
C	Red	2-4 bar

Technical Specifications

For other patterns and end connection types,
Please refer to [BERMAD](#) full engineering page.

Size (DN)	Model	End Connection	Weight (Kg)	L (mm)	H (mm)	h (mm)	W	KV
¾" ; 20	¾"-PRV	Threaded	0.13	88	100	17	45	4.0

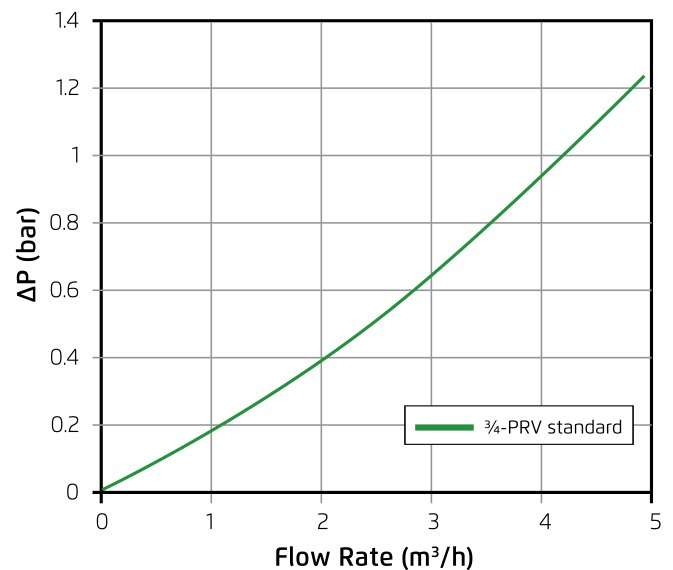
• Inlet Threaded: Female BSP; NPT •Outlet Theaded: Female BSP; NPT or Male BSPT; NPT



0.75-PRV Cross Section

Part	Description
A	Setting Screw
B	Cover
C	Setting Spring
D	Rolling Diaphragm
E	Actuator Assembly
F	Body

Flow Chart



P1 Minimum = P2 Setting + ΔP in Flow Chart

** For flow lower than 0.2 m³/h, use LF Model PRV-05*

Differential Pressure & Flow Calculation

$$\Delta P = \left(\frac{Q}{K_v} \right)^2$$

$K_v = \text{m}^3/\text{h} @ \Delta P \text{ of } 1 \text{ bar}$
 $Q = \text{m}^3/\text{h}$
 $\Delta P = \text{bar}$