# ADJUSTABLE DIRECT-ACTING LOW-FLOW PRESSURE REDUCING

# Model 0.75-PRV-05

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. The low flow version model IR-3/4" PRV-05 provide superior solution under conditions of near zero demand.





- [1] BERMAD Model ¾"-PRV-05 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

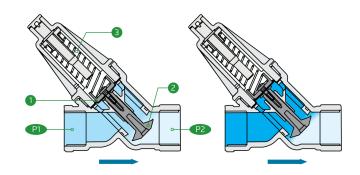
- Advanced Construction Materials
  - High mechanical strength
  - Proven pressure, flow and weather resistance
- Adjustable Direct Acting Pressure Reducer
  - Constant downstream pressure
  - Immediate response
  - Adjustable according to season and stage
- Composite Body and Trim
  - Highly durable, 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

# 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.



# **Technical Data**

Pressure Rating:

145 psi

Operating Pressure Range:

10-130 psi

Temperature:

Water up to 140°F

Flow Range:

0.04-13 gpm (¾"-PRV-05)

### Materials

Body & Cover:

Polyamide 6 & 30% GF

Diaphragm:

NR, Nylon fabric reinforced & NBR

Spring:

Stainless Steel

# **Setting Springs Selection Table:**

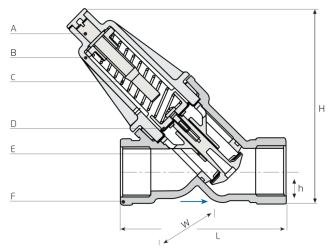
Spring	Spring Color	Setting range
В	White	12-36 psi
С	Red	29-58 psi

# **Technical Specifications**

For other patterns and end connection types, Please refer to **BERMAD** full engineering page.

Size (DN)	Model	End Connection	Weight (Lb)	L (In)	H (In)	h (In)	W	cv
3/4" ; 20	3/4"-PRV-05 (Low Flow)	Threaded	0.29	31/2	3%	5∕8	1¾	4.2

<sup>•</sup> Inlet Threaded: Female BSP; NPT •Outlet Theaded: Female BSP; NPT or Male BSPT; NPT



# 0.75-PRV-05 Cross Section

Part	Description
Α	Setting Screw
В	Cover
C	Setting Spring
D	Rolling Diaphragm
E	Actuator Assembly
F	Body

