PRV Series
Pressure Reducing

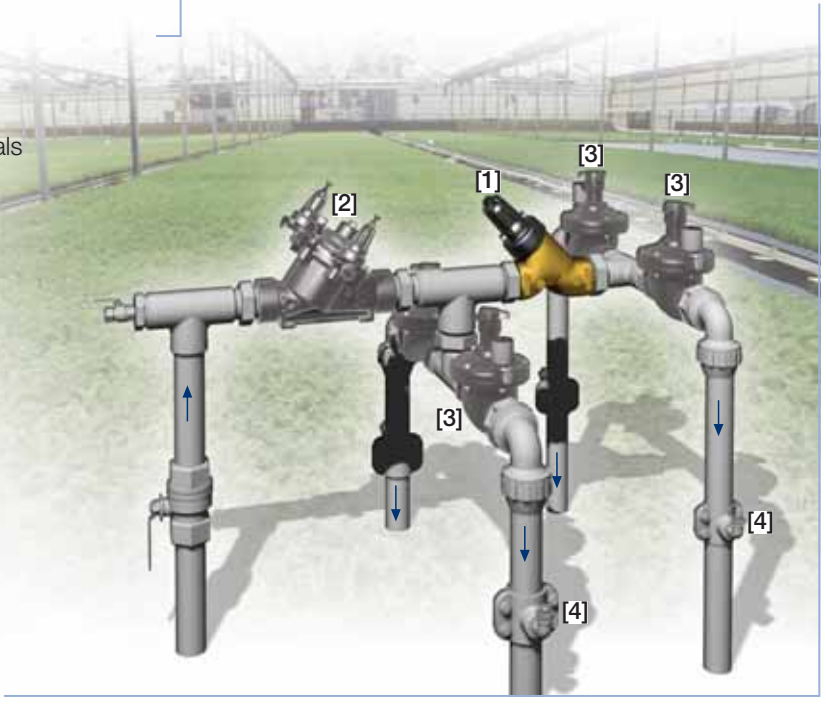
Adjustable Direct Acting Pressure Reducer

1½"- 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. The BERMAD Model 1½"-PRV brass body and reinforced plastic actuator assembly endow it with excellent hydraulic performance capabilities and particularly high mechanical strength. Supplied with a special throttling plug and elastomeric seal, it reduces higher upstream pressure to lower constant downstream pressure even under conditions of near zero demand, and seals drip-tight under no-flow conditions.

Features and Benefits

- Metal Body and Advanced Construction Materials
  - Suitable for metal piping installations
  - Rigid construction, high stress resistance
  - Proven pressure, flow and weather resistance
- Adjustable Direct Acting Pressure Reducer
  - Constant downstream pressure
  - Immediate response
  - Settable according to season and stage
- Throttling Plug and Elastomeric Seal
  - Accurate and stable low-flow regulation
  - Drip-tight sealing under no-flow conditions
- Unitized Rolling Diaphragm and Guided Plug
  - Smooth and repeatable operation
  - Prevents diaphragm distortion
- User-Friendly Design
  - Can be installed at any orientation
  - Simple in-line inspection and service

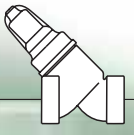


Typical Applications

- Primary PRV for High ΔP Pressure Reducing Systems
- Pressure Zoning in Topographic Areas
- Secondary Protection of Sensitive Lines
- Lateral Final Burst Protection
- Pressure Reduction for Marginal Plots

[1] BERMAD Model 1½"-PRV establishes a reduced pressure zone for lower elevation plots protecting laterals and distribution line.
[2] BERMAD Pressure Sustaining & Reducing Valve Model IR-123-X
[3] BERMAD Solenoid Controlled Valve Model IR-210-N-M
[4] BERMAD Vacuum Breaker Model ½"-ARV

BERMAD Irrigation



1 ½"- PRV

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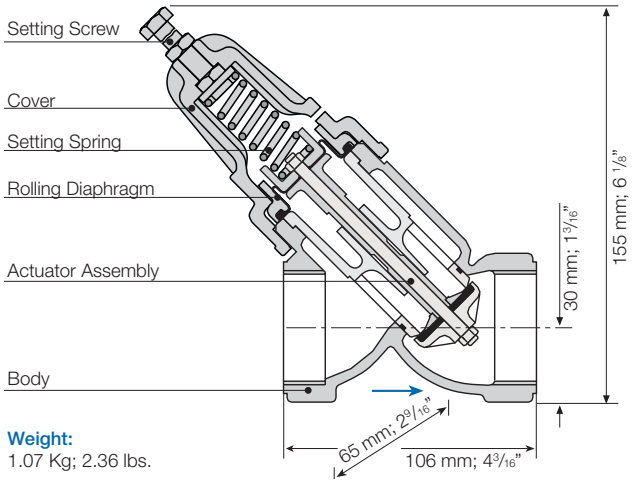
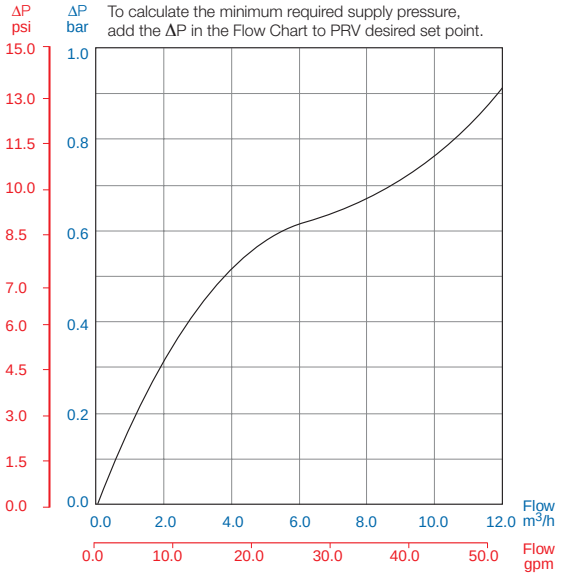
For full technical details, refer to Engineering Section.

Technical Specifications



Weight:
1.07 Kg; 2.36 lbs.

Flow Chart
required supply pressure above setting



Technical Data

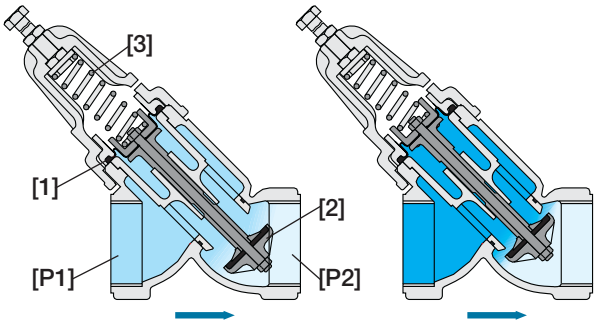
Size: 1½"; DN40
End Connections: Female Threads BSP; NPT
Flow Range: 0.45-18 m3/h; 2-80 gpm
Pressure Ratings: 9 bar; 130 psi
Operating Pressure Range: 0.7-9 bar; 10-130 psi
Temperature: Water up to 50°C; 122°F

Materials:
Body: Brass
Cover and Actuator Assembly: Glass-Filled Nylon
Diaphragm: NBR (Buna-N), Nylon fabric reinforced
Spring: Stainless Steel

Setting Springs Selection Table

Setting Range bar; psi	Spring Color	Spring Name
0.5-1.2; 7-18	White	B
1.0-2.0; 14-29	Red	C
1.5-3.5; 22-51	Black	D
3.0-5.5; 44-80	Brown	Q

Operation



The Upstream Pressure **[P1]** applies balanced opening and closing hydraulic forces under the Diaphragm **[1]** and above the Plug **[2]**. 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, reducing **[P2]** back to setting, and eventually shutting drip-tight.

How to Order

For Ordering Please Specify:

- Adjustable Direct Acting Pressure Reducer 1½", Female BSP Threads BERMAD Model: 1½"-PRV-R-BP-FF-____*
- Adjustable Direct Acting Pressure Reducer 1½", Female NPT Threads BERMAD Model: 1½"-PRV-R-NP-FF-____*

* Choose the desired spring and mark B, C, D or Q according to "Setting Springs Selection Table"

info@bermad.com • www.bermad.com