Direct Acting Pressure Reducer

with Manual Closure

2"- PRV

The BERMAD Direct Acting Pressure Reducer is actuated by a pressure responsive piston, which seeks to reach equilibrium between hydraulic and set spring force. The BERMAD Model 2"-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, 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.

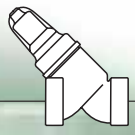
Features and Benefits

- Metal Body and Advanced Construction Materials
  - Suitable for metal piping installations
  - Rigid construction, high stress resistance
  - Proven pressure, flow and weather resistance
- Direct Acting Pressure Reducer with Manual Closure
  - Protects downstream
  - Immediate response
  - Enables local manual closing
- Throttling Plug with Nitril Seal Disk
  - Accurate and stable low-flow regulation
  - Drip-tight sealing under no-flow conditions
- Piston and Guided Plug Actuated
  - Accurate and repeatable operation
- User-Friendly Design
  - Can be installed at any orientation
  - Simple in-line inspection and service

Typical Applications

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

[1] BERMAD Model 2"-PRV establishes a reduced pressure zone for lower elevation plots, protecting laterals and distribution line.
[2] BERMAD Solenoid Controlled Valve Model IR-110-N1
[3] BERMAD Solenoid Controlled Valve Model IR-210-N-M
[4] BERMAD Vacuum Breaker Model ½"-ARV

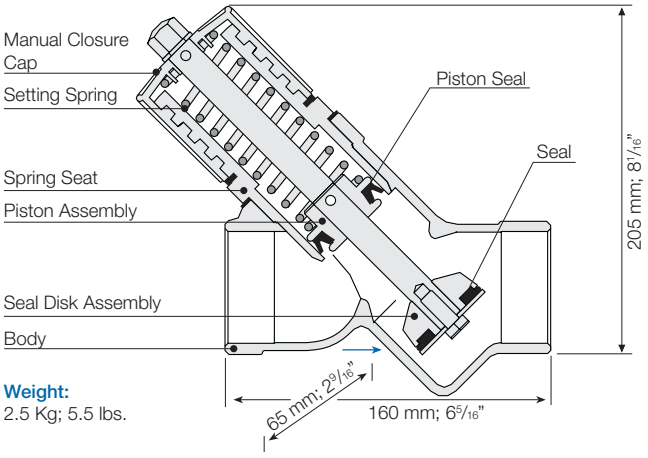


2" - PRV

PRV Series
Pressure Reducing

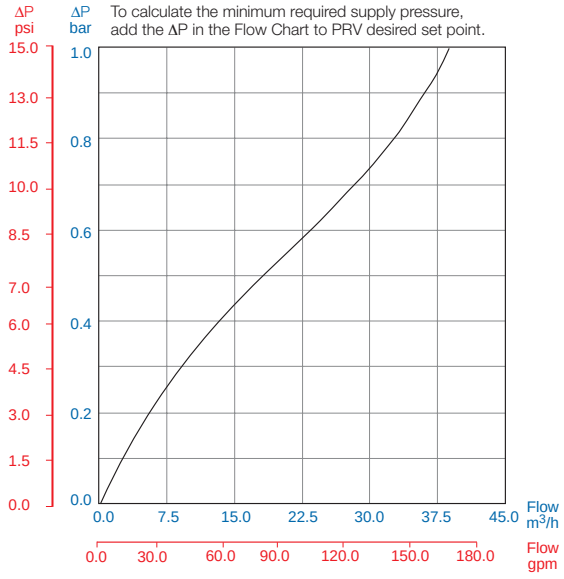
For full technical details, refer to Engineering Section.

Technical Specifications



Weight:
2.5 Kg; 5.5 lbs.

Flow Chart
required supply pressure above setting



Technical Data

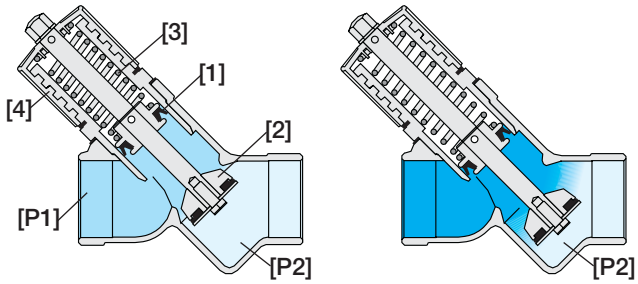
Size: 2"; DN50
End Connections: Female Threads BSP; NPT
Flow Range: 4-25 m3/h; 18-110 gpm
Pressure Ratings: 8 bar; 115 psi
Operating Pressure Range: 2-8 bar; 30-115 psi
Temperature: Water up to 50°C; 122°F

Materials:
Body: Brass
Manual Closure Cup and Spring Seat: Polyacetal
Internals: Stainless Steel and Nitril
Piston Seal: NBR (Buna-N), Nylon fabric reinforced
Spring: Stainless Steel

Setting Springs Selection Table

Spring Color	Downstream Pressure bar; psi		
	Nominal	Minimum	Maximum
Red	2.0; 29	2.0; 29	2.6; 38
Yellow	4.0; 58	3.8; 55	4.6; 67
Green	6.0; 87	5.8; 84	6.6; 96

Operation



The Upstream Pressure **[P1]** applies balanced opening and closing hydraulic forces under the Piston **[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.
The Manual Closure Cap **[4]** features local manual closing by turning counter-clockwise. The manual closure cap position does not effect the PRV setting, which is determined only by the chosen set spring.

How to Order

For Ordering Please Specify:

- Adjustable Direct Acting Pressure Reducer 2", Female BSP Threads BERMAD Model: 2"-PRV-P-BP-FF-____*
- Adjustable Direct Acting Pressure Reducer 2", Female NPT Threads BERMAD Model: 2"-PRV-P-NP-FF-____*

* Choose the desired spring and mark Red, Yellow or Green according to "Setting Springs Selection Table"