

# Adjustable Direct Acting Low Flow Pressure Reducer

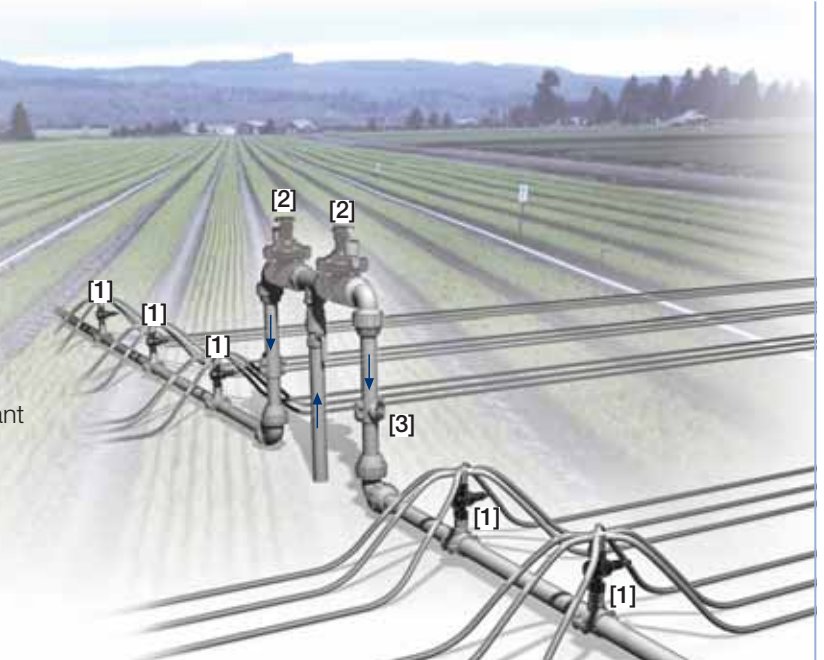
1"- PRV-05

The BERMAD Adjustable Direct Acting Low Flow Pressure Reducer is actuated by a pressure responsive diaphragm, which seeks to reach equilibrium between hydraulic and set spring force. The BERMAD Model 1"-PRV-05 is built of reinforced plastic that endows it with excellent hydraulic performance capabilities and 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.



## Features and Benefits

- Advanced Construction Materials
  - High mechanical strength
  - Proven pressure, flow and weather resistance
- Adjustable Direct Acting Pressure Reducer
  - Constant downstream pressure
  - Immediate response
  - Settable according to season and stage
- Plastic 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

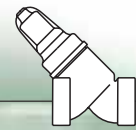
- Distribution Line Lateral Risers
- Non-Compensating Drip-Line Flow Fixation
- Lateral Final Burst Protection
- Pressure Reduction for Marginal Plots

[1] BERMAD Model 1"-PRV-05 protects laterals and compensates for line friction, ensuring dripper flow per design.

[2] BERMAD Solenoid Controlled Valve Model IR-210-N-M

[3] BERMAD Vacuum Breaker Model 1/2"-ARV

# BERMAD Irrigation



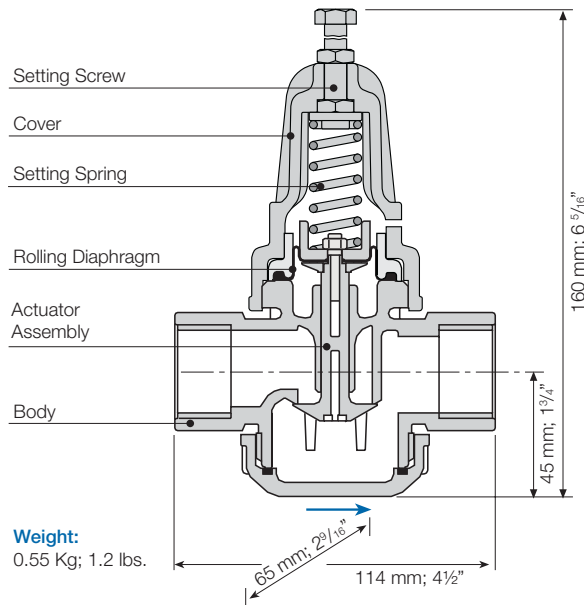
## 1"- PRV-05

For full technical details, refer to Engineering Section.

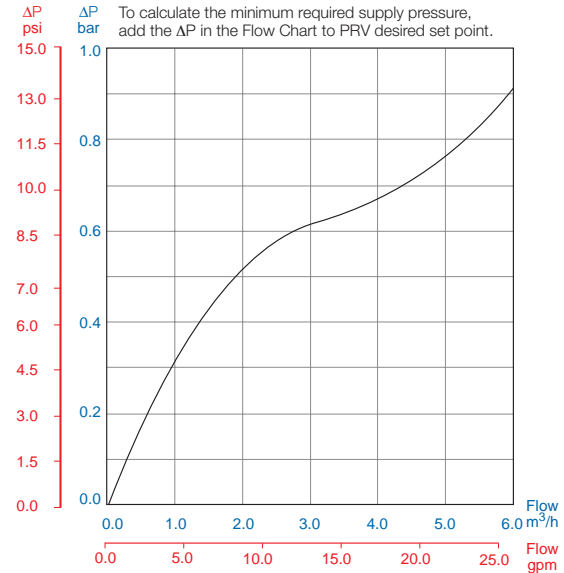
## PRV Series

Pressure Reducing

### Technical Specifications



### Flow Chart required supply pressure above setting



### Technical Data

- Size:** 1"; DN25
- End Connections:** Female Threads BSP; NPT
- Flow Range:** 0.1-7 m³/h; 0.4-31 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

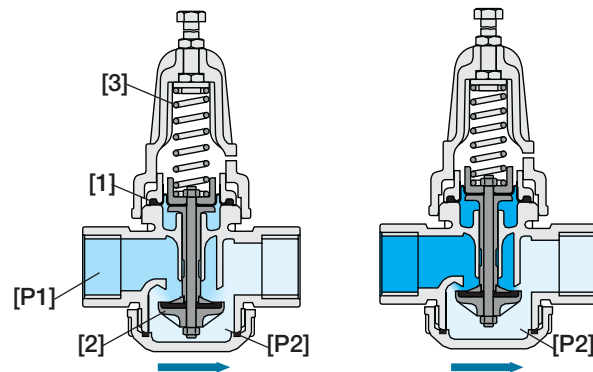
#### Materials:

- Body, 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, and reducing **[P2]** back to setting.

### How to Order

For Ordering Please Specify:

- Adjustable Direct Acting Low Flow Pressure Reducer 1", Female BSP Threads BERMAD Model: 1"-PRV-05-P-BP-FF-\_\_\_\_\*
- Adjustable Direct Acting Low Flow Pressure Reducer 1", Female NSP Threads BERMAD Model: 1"-PRV-05-P-BP-FF-\_\_\_\_\*

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



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