BERMAD Irrigation



PRV Series

Pressure Reducing

Adjustable Direct Acting Low Flow Pressure Reducer

3/4"- 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 ¾"-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.

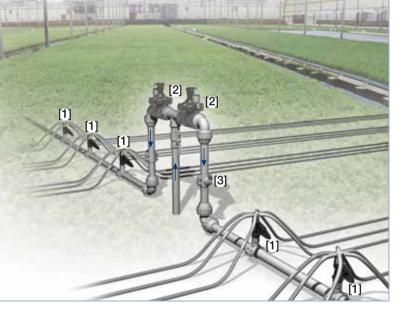


Features and Benefits

- 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 ¾"-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



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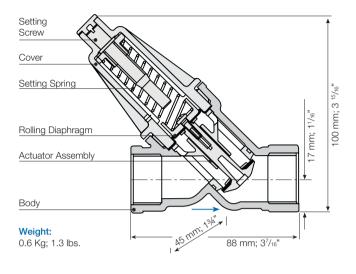


3/4"- PRV-05

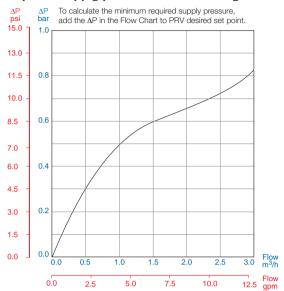
For full technical details, refer to Engineering Section.

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Pressure Reducing

Technical Specifications



Flow Chart required supply pressure above setting



Technical Data

Size: 3/4"; DN20

End Connections: Threaded Inlet: Female BSP; NPT

Outlet: Female BSP; NPT or Male BSPT; NPT Flow Range: 0.01-3 m3/h; 0.04-13 gpm Pressure Ratings: 9 bar; 130 psi Operating Pressure Range: 0.7-9 bar; 10-130 psi

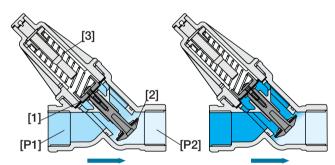
Temperature: Water up to 50°C; 122°F

Materials:

Body, Cover and Actuator Assembly: Glass-Filled Nylon Diaphragm: NBR (Buna-N), Nylon fabric reinforced

Spring: Stainless Steel

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.

Setting Springs Selection Table

Setting Range bar; psi	Spring Color	Spring Name
0.5-1.2; 7-18	Yellow	А
0.8-2.5; 12-36	White	В
2.0-4.0; 29-58	Red	С
3.5-6.0; 50-87	Black	D

How to Order

For Ordering Please Specify:

■ Adjustable Direct Acting Pressure Reducer ¾", Female BSP Threads BERMAD Model:	%"-PRV-P-BP-FF*
■ Adjustable Direct Acting Pressure Reducer ¾", Female NPT Threads BERMAD Model:	34"-PRV-P-NP-FF*
■ Adjustable Direct Acting Pressure Reducer ¾", Male BSPT Outlet Thread BERMAD Model:	34"-PRV-P-BP-MF*
■ Adjustable Direct Acting Pressure Reducer ¾", Male NPT Outlet Thread BERMAD Model:	34"-PRV-P-NP-MF*

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

