

Sprinkler Pressure Relief Valve / Pilot Line Relief Valve

Model: FP-3PB-0

The BERMAD model FP-3PB-0 is a direct acting, spring loaded, diaphragm type relief valve. The single port is held closed buy the force of the adjustable spring located above the pressure sensing diaphragm. When the force of the pressure sensed under the diaphragm exceeds the force of the spring the valve will open to relieve pressure and will close tight when pressure falls below the pre-set value.

This UL Listed and FM Approved valve is well suited for use in protecting wet pipe Systems, pilot lines and Fusible sprinkler lines from overpressure occurring from temperature fluctuations, pump start up spikes and other.



(for Illustration Only)

Features

- Fast immediate response to pressure rise
- Easy in-field pressure setting adjustment
- Tight closing and accurate pressure control
- UL/FM Approved
- Available in corrosion resistant materials
- Tamper proof cap for adjustable screw

Typical Applications

- Wet sprinkler piping safety relief
- Wet Fusible plugs line safety relief
- Thermal release for piping systems
- Dry Fusible plugs line safety relief

The BERMAD FP-3PB-0 direct pressure relief valve will accurately relieve pressure above a pre-set value and will seal drip tight when pressure falls below the set pressure.

Typical installations of the BERMAD FP-3PB-0 include pressure build up prevention in pilot lines and wet pipe sprinkler systems caused by thermal expansion or pump start ups.



FP-3PB-0 - Overpressure protection in a Fusible Plug pilot line



FP-3PB-0 Protection against pressure build-up in Automatic Sprinkler piping







Installation

The valve can be installed in any orientation, vertical or horizontal and at any point of shared pressure of the line

Be sure not to install the valve at any low point or at the bottom of the piping, where accumulated debris might enter the valve and hamper correct functioning.

The valve will occasionally open to release over pressure from the system piping, expelling small amounts of water into the atmosphere. Where relevant install piping to direct any expelled water to a preferred point.

Use the below table for an approximate in-field adjustment of the relief pressure setting.

| Spring Range (bar) | 1 Turn of adjusting screw = approx | | |
|-----------------------|---------------------------------------|--|--|
| 1 - 16 | 2.3 bar / 31.3 psi | | |
| 7 - 25 | 2.0 bar / 30.7 psi | | |

Technical Data

■ Process connection: ½" NPT (M) ■ Release port: ¼" NPT (F) Pressure rating: 25 bar (365 psi)

■ Flow factor: Kv 0.48 (Cv 0.56)

■ Working temperature: Water up to 80°C (180°F)

Materials of Construction

■ **Body:** Bronze ASTM C83600

Cover: Forged Brass ■ Elastomers: NBR

■ Internals: S. steel & Brass Spring: Stainless Steel 302

Optional Materials of Construction

All Stainless Steel 316, CF8M Body

■ Nickel Aluminum Bronze

Super Duplex S.S.

Model Data

| Model | Body Material | Pressure setting range | | Weight | |
|----------------|---------------|------------------------|---------|--------|-----|
| | | barg | psig | kg | lbs |
| FP-3PB-0-P-0-B | Bronze | 1 - 16 | 15-235 | 1.5 | 3.3 |
| FP-3PB-0-P-0-N | AISI 316 | | | 1.4 | 3.0 |
| FP-3PB-0-P-0-U | Ni.Al.Bronze | | | 1.4 | 3.0 |
| FP-3PB-0-Z-0-B | Bronze | 7-25 | 100-365 | 1.7 | 3.7 |
| FP-3PB-0-Z-0-N | AISI 316 | | | 1.6 | 3.5 |
| FP-3PB-0-Z-0-U | Ni.Al.Bronze | | | 1.6 | 3.5 |



