



Pressure Reducing Pilot Valve

Model FP#2PB / FP#2PBL

The model #2PB is a direct acting, single seated spring loaded diaphragm pressure reducing pilot valve. It is actuated by a pressure responsive diaphragm, which tends to reach equilibrium with the pre-set and field adjustable spring force. It's fully balanced poppet design ensures high accuracy and stability.

When installed as a Pressure Reducing pilot valve on a BERMAD Water Control or Deluge valve, it automatically controls the main valve to reduce a higher inlet pressure to a lower constant outlet pressure, maintaining the chosen pre-set downstream pressure regardless of fluctuations in the high pressure supply line.

The model #2PBL has a larger valve seat, offering a higher flow capacity and therefore a faster regulation response.



(for Illustration Only)

Features

- Internal pressure sensing
- Fully balanced poppet for accuracy and stability
- Wide flow range
- Available with differential pressure sensing
- Optional remote sensing

Typical Applications

- 400Y pressure control deluge, sizes 1½-10" (model FP#2PBL)
- 42T pressure reducing valves, sizes 8-10" (model FP#2PBL)
- 42T Pressure reducing valves sizes 1½-6" (model FP#2PB)
- PDCV, Pressure Differential Control Valve (FP#2PB-D/2PBL-D)
- Air Pressure Regulator on BERMAD AMD-75/76 (model FP#2PB-Y)

Approvals

- UL-Listed and FM Approved when installed on BERMAD specific valve models

Technical Data

- Pressure Rating: 28 bar (400 psi)
- Working Temperature: Water up to 80°C (180°F)
- 2PB Flow Factor: Kv 0.46 (Cv 0.54)
- 2PBL Flow Factor: Kv 0.96 (Cv 1.13)

Standard Materials

- Body: Bronze ASTM B584
- Cover: Brass
- Elastomers: NBR (Buna N)
- Internals: Stainless Steel & Brass
- Spring: Stainless Steel (see table)

Optional Materials

- All Stainless Steel 316, CF8M Body
- Nickel Aluminum Bronze ASTM B148 Body
- Super Duplex 25Cr Body
- Tamper Proof Cap: Polycarbonate

Adjustment Range

| Spring | Pressure | | Application |
|--------|----------|--------|-------------------|
| | bar | psi | |
| P / W | 2-12 | 30-175 | PRV/Deluge |
| Y | 0.5-3 | 7-43 | AMD Air Regulator |

Note: * Upstream pressure is connected to valve control chamber via a restriction.

Connections

- 1- Remote sensing (optional) or pressure gauge
- 2- Downstream
- 3- Remote sensing (optional) or pressure gauge
- 4- Valve control chamber *

