

PRESSURE REDUCING VALVE

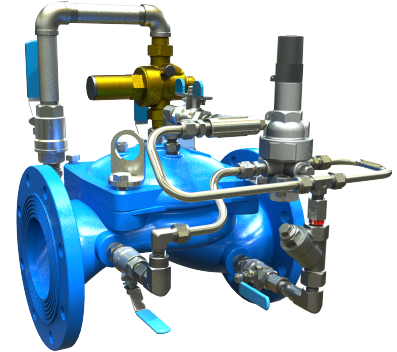
with Low Flow By-Pass

Model 420-2B

Hydraulically operated, diaphragm actuated pressure reducing control valve that reduces a high upstream pressure to a lower constant downstream pressure, regardless of fluctuating demand or varying upstream pressure.

The model includes a low flow bypass regulated with a Direct Acting Pressure Reducing valve mounted on the valve body.

The BERMAD 400 Series valves have an advanced design with a full-bore seat and unobstructed flow path. Their one-piece elastomeric assembly ensures long life and reliable actuation in harsh conditions.



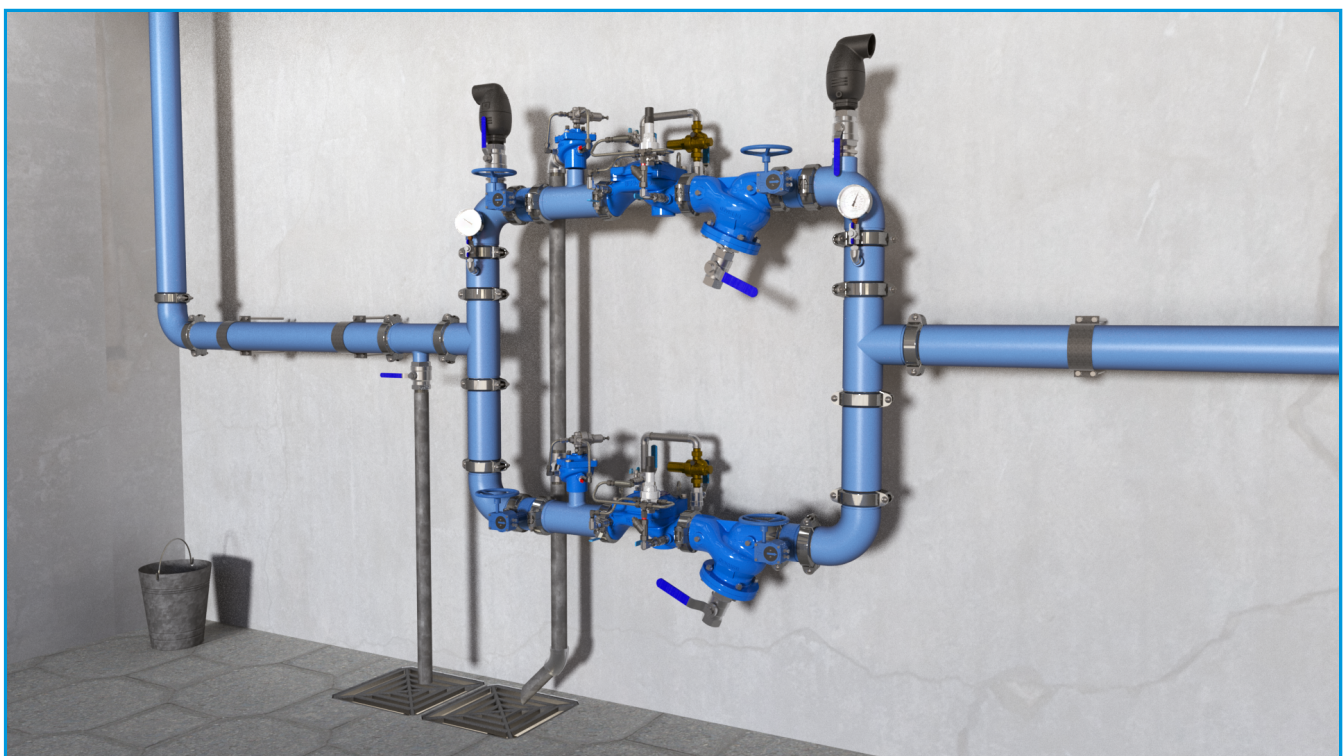
Features & Benefits

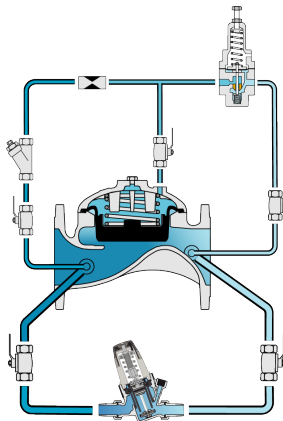
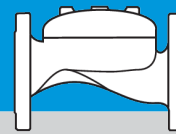
- Line pressure driven – Independent operation
- Low flow bypass
 - Near zero flow operation
 - Extended main valve lifespan
- High performance control trim
 - High stability and accuracy at wide flow range
 - Drip tight sealing
- Fully supported & balanced diaphragm
 - Excellent low flow regulation performance
 - Progressively restrains valve closing
 - Prevents diaphragm distortion
- In-line serviceable

Typical Applications

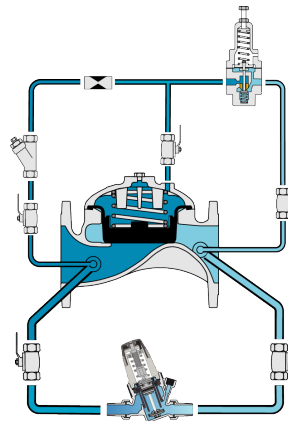
- Highrise and midrise office and residential buildings - Reducing pressure at the pressure zone inlet
- Where low-flow and no-flow conditions occur

Typical Installation

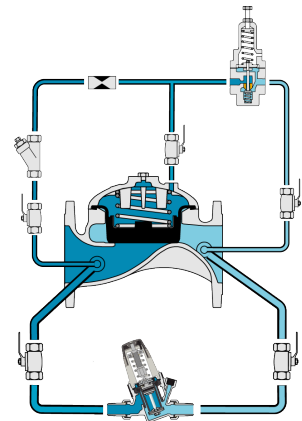




High Flow



Low Flow



No Flow

This drawing refers to 2 – 8"; 50-200 mm sized valves only. For other sizes please refer to the Model's IOM.

Main Valve

Size Range: 2-12"; DN50-300

Pattern: Globe

Pressure Rating: 250 psi

End Connection: Flanged, Threaded, Grooved

Temperature Rating: 140°F

Optional higher temperature: Consult BERMAD

Standard Materials:

Body & Cover: Ductile Iron

Cover Bolts: Steel

Diaphragm: Reinforced EPDM with vulcanized radial seal disk

Spring: St. St. 302

Coating: Dark blue Fusion bonded epoxy

For other materials contact BERMAD

Control System

Standard Materials:

Accessories: Stainless Steel, Bronze & Brass

Tubing: Stainless Steel or Copper

Fittings: Stainless Steel or Brass

Pilot standard materials:

Body: Stainless Steel, Bronze & Brass

Elastomers: Synthetic Rubber

Internals and Spring: Stainless Steel

Pilot Options:

Various pilots and calibration springs are available. Select according to valve size and operating conditions. For more details check relevant pilots product pages.

Low Flow By-Pass:

Body: Brass

Elastomers : Synthetic Rubber

Notes

- Outlet pressure range: 1-6 bar; 15-90 psi.

For detailed Engineering & Specification data, IOM and CAD Drawings, visit the Model Page on the [BERMAD](https://www.bermad.com) website.