



BASIC HYDRAULIC CONTROL VALVE

Model 405

The BERMAD 400 Series valves feature an advanced design with a full-bore seat and unobstructed flow path. The internal components use advanced rubber-based materials to create a solid, one-piece elastomeric assembly, including a flexible diaphragm vulcanized with a rugged radial seal disc. The diaphragm is carefully balanced and peripherally supported to prevent distortion and protect the elastomer, ensuring long life and controlled actuation even under harsh conditions. These valves comply for potable water use.



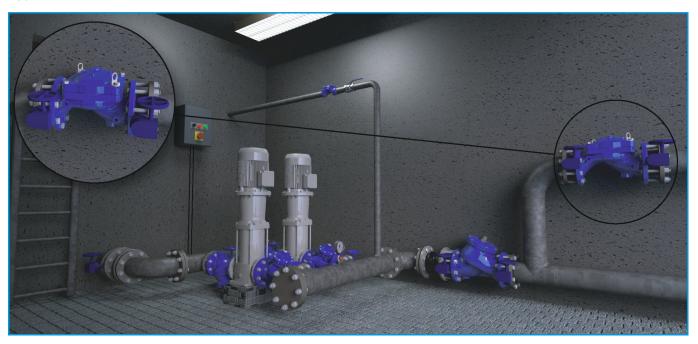
Features & Benefits

- Line pressure driven Independent operation
- Flexible design Easy addition of features
- Advanced globe hydro-efficient design
 - Unobstructed flow path
 - Single moving part
 - Non-turbulent flow
 - High flow capacity
- Fully supported & balanced diaphragm
 - Progressively restrains valve closing
 - Prevents diaphragm distortion
- In-line serviceable
 - Easy maintenance
 - Minimal down time

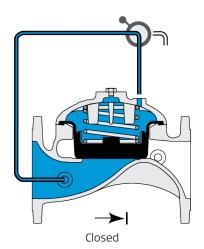
Typical Applications

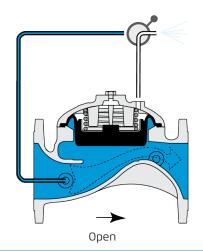
- Various applications in water systems for buildings, constructions, and municipal use
- Pressure reducing
- Level control for water reservoirs
- Pressure sustaining
- Pump circulation valve
- Pressure relief
- HVAC Systems Balancing Pressure
- On/Off service

Typical Installation









Main Valve

Size Range: 1"-12"; DN25-300

Pattern: Globe

Pressure Rating: 16 bar

End Connection: Flanged, Threaded, Grooved

Temperature Rating: 60°C

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

Notes

- Inlet Pressure, Outlet Pressure and Flow-rate are required for optimal sizing.
- Recommended maximum flow velocity: 6.0 m/sec; 20 ft/sec.
- Minimum operating pressure: 0.7 bar; 10 psi. For lower pressure requirements consult factory.

For detailed Engineering & Specification data, IOM and CAD Drawings, visit the Model Page on the BERMAD website.



www.bermad.com