

DIFFERENTIAL PRESSURE SUSTAINING VALVE

Model 436

Hydraulically operated, differential pressure-sustaining control valve that sustains minimum pre-set differential pressure between two local or remote points, regardless of fluctuating flow or varying upstream pressure.

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.



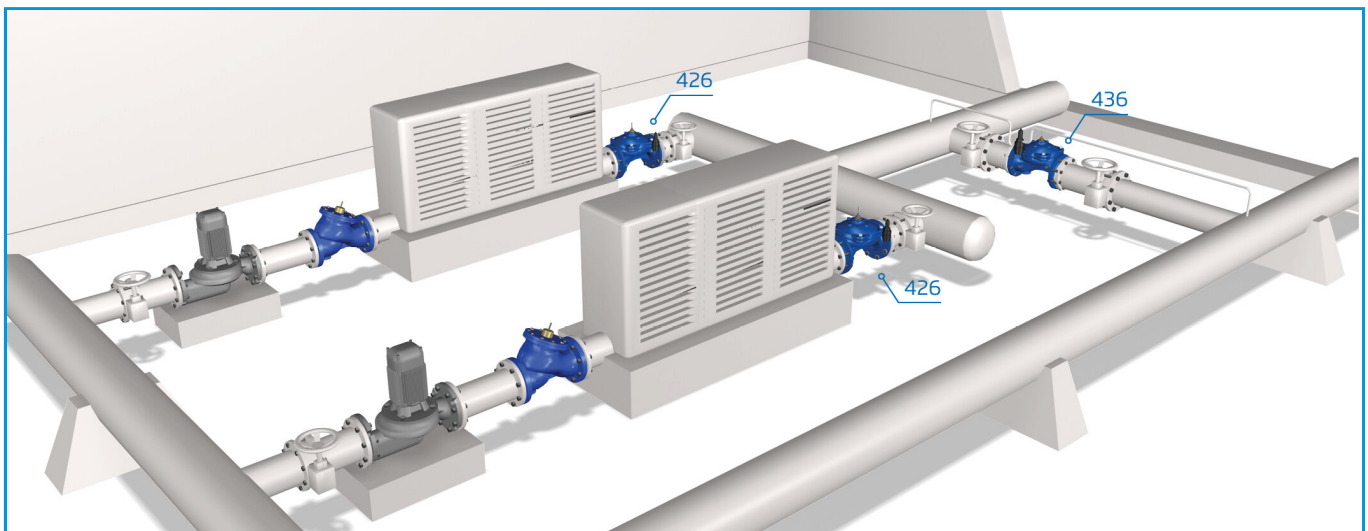
Features & Benefits

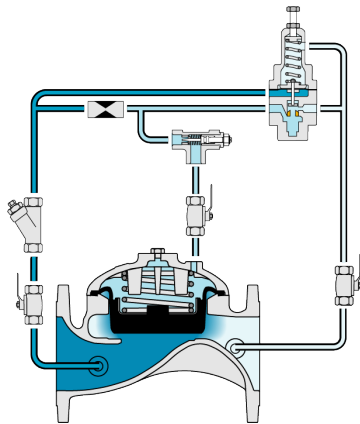
- Line pressure driven – Independent operation
- High performance control trim
 - High stability and accuracy at wide flow range
 - Drip tight sealing
 - Differential pressure sensing
- Flexible design - Easy addition of features
- Advanced globe hydro-efficient design
 - Unobstructed flow path
 - Single moving part
 - Non-turbulent flow
 - High flow capacity
- Fully supported & balanced diaphragm
 - Excellent low flow regulation performance
 - Progressively restrains valve closing
 - Prevents diaphragm distortion
- In-line serviceable
 - Easy maintenance
 - Minimal down time

Typical Applications

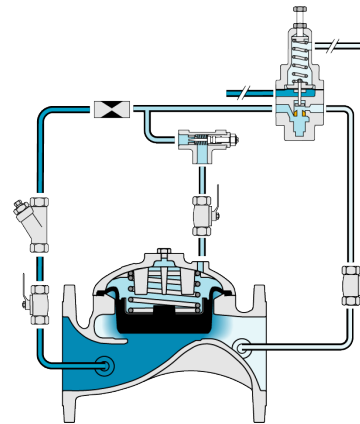
- HVAC Systems - Balancing pressure during low consumption conditions
- Filtration system - Automatic bypass of a blocked filter or during high demand

Typical Installation





Internal Sensing - Regulating



External Sensing - Regulating

This drawing refers to 1½ – 8"; 40-200 mm sized valves only. For other sizes please refer to the Model's IOM.

Main Valve

Size Range: 1½-12"; DN40-300

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.

Notes

- Inlet Pressure, Outlet Pressure and Flow-rate are required for optimal sizing and cavitation analysis.
- Recommended continuous flow velocity: 0.1-6.0 m/sec; 0.3-20 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](https://www.bermad.com) website.