



QUICK PRESSURE RELIEF VALVE

Model 83Q

Hydraulically operated, piston actuated, quick pressure relief valve that relieves excessive system pressure when such pressure rises above a pre-set value. It responds immediately, accurately, and with high repeatability to a rise in system pressure by opening fully. It also provides smooth drip tight closing.

BERMAD 800 series valves are hydraulically operated, piston actuated globe valves for high pressure. Their full-bore body ensures unobstructed flow, and they are available in various models, sizes, patterns, and end connections.



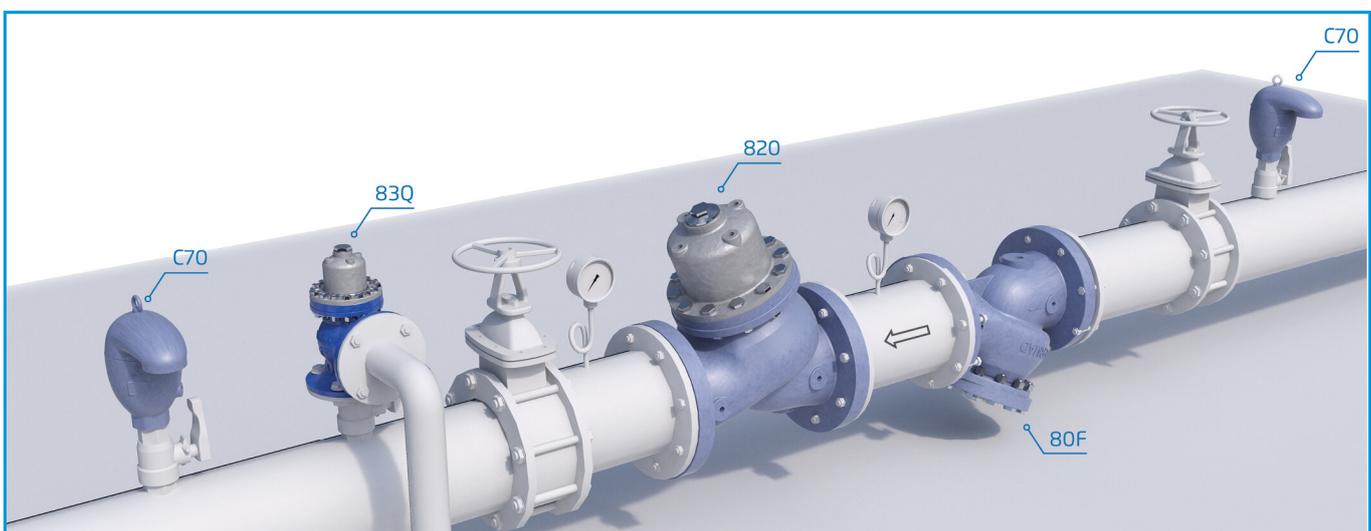
Features & Benefits

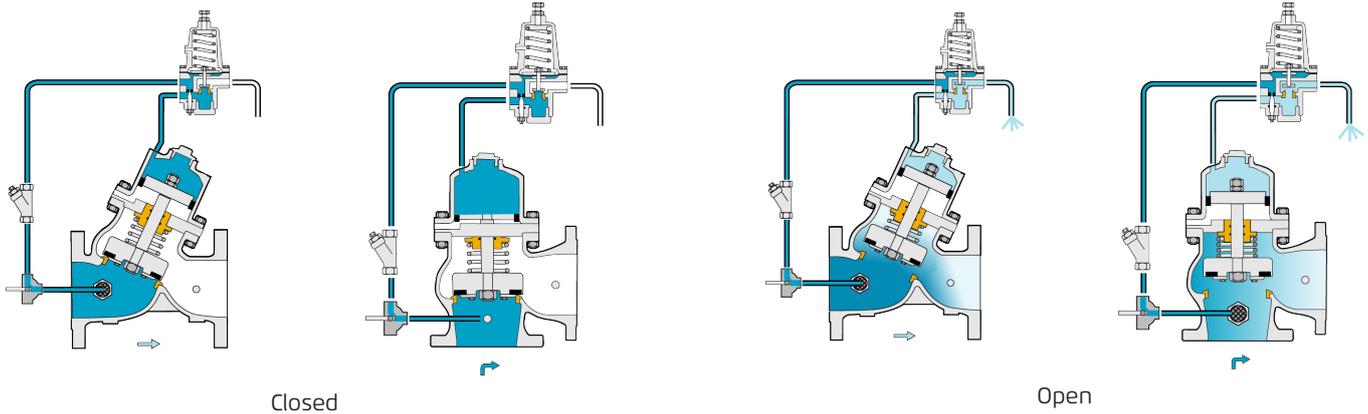
- Robust structure, piston actuated – High pressure service
- Line pressure driven – Independent operation
- Elegant simplicity
 - Cost effective
 - Simple to maintain
 - Minimal external accessories
- In-line serviceable - Easy maintenance
- Double chamber design
 - Moderated valve reaction
 - Moderated closing curve
- Flexible design - Easy addition of features
- Semi-straight flow – Non-turbulent flow
- Stainless Steel raised seat - Cavitation damage resistant
- Obstacle free, full bore – Uncompromising reliability
- V-Port throttling plug (optional) - Very stable at low flow

Typical Applications

- Pressure reducing systems - Protection against pressure rise during sudden demand stoppage or failure
- Old pipe systems - Installed at sensitive spots and line ends to protect against bursts during pressure surges

Typical Installation





This drawing refers to 1½ – 14"; DN40-350 sized valves only. For other sizes please refer to the Model's IOM.

Main Valve

Size Range: 1½-20"; 40-500 mm

Pattern: "Y" (globe) & "A" (angle)

Pressure Rating: 600 psi

End Connection: Flanged, Threaded, Grooved

Plug Types: Flat disc, V-port, Cavitation cage

Temperature Rating: 180°F

For 140–180°F consult factory

Standard Materials:

Body & Cover: Ductile Iron (1½-10"; 40-250 mm) ; Cast Steel (12-24"; 300-600 mm) & Stainless Steel Cover

Bolts, Nuts & Studs: Stainless Steel

Internals: Stainless Steel & Tin Bronze

Seals: Synthetic rubber

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

- Main pipe diameter, pressure rating, flow rate and relief pressure are required for optimal sizing
- Recommended continuous flow velocity: 0.3-15 m/sec; 1-50 ft/sec.

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