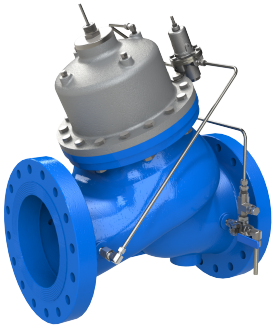
QUICK PRESSURE RELIEF VALVE

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.



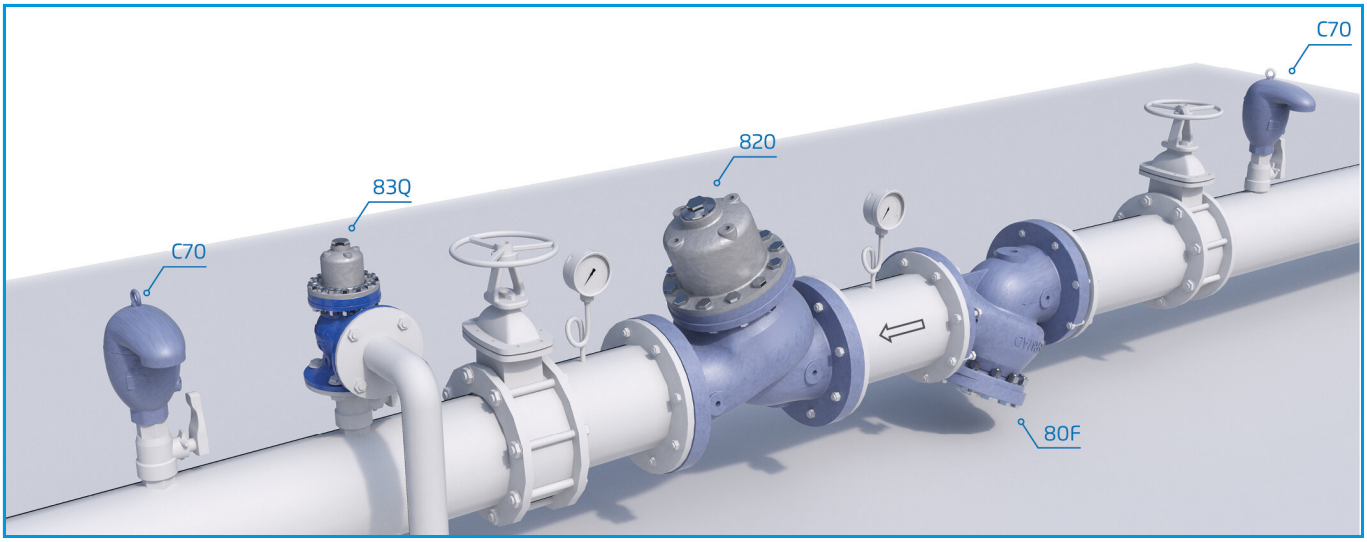
Features & Benefits

- 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

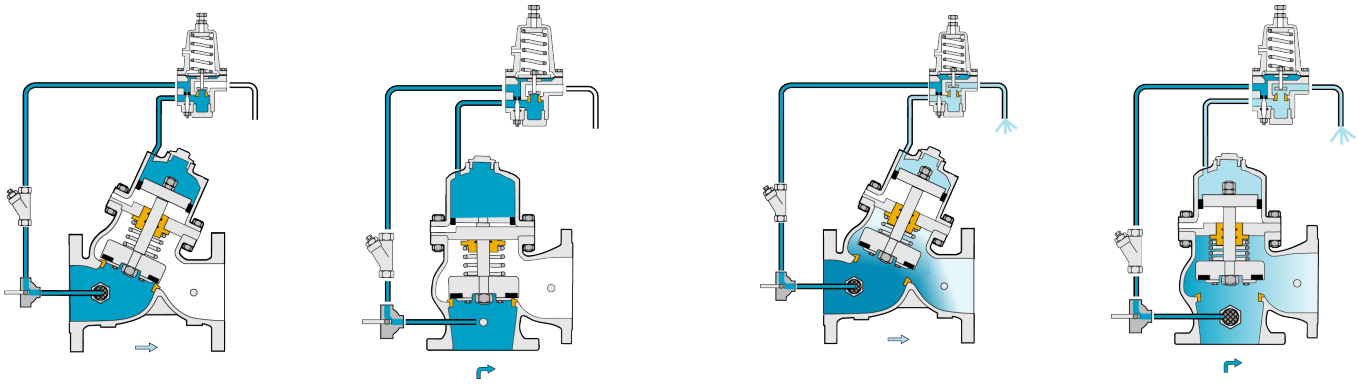
Typical Applications

- 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



All images in this catalog are for illustration only



Closed

Open

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: 40 bar
End Connection: Flanged, Threaded, Grooved
Plug Types: Flat disc, V-port, Cavitation cage
Temperature Rating: 80°C
For 60–80°C 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 website.

October 2025