

800 Series

# **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 designed for high pressure operation and available in either standard oblique (Y) or angle pattern design. Their full bore hydrodynamic body provides an unobstructed flow path while their seat assembly and double-chamber unitized actuator can be disassembled without removing the valve body from the pipeline.



Click here for control accessories

**Major Additional Features:** 

See relevant BERMAD publication

Flow stem – 83Q-M

Limit Switch – 830-S

Position indicator – 83Q-I



# **Features and 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
  - 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 **Typical Application** C70 80F

All images in this catalog are for illustration only

Link to Animation

C70

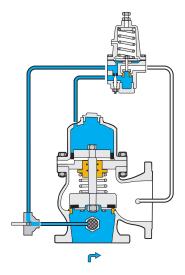


# **BERMAD** Waterworks



Model 83Q 800 Series





This drawing refers to  $1\frac{1}{2}$  – 14"; DN45-350 sized valves only. For other sizes please refer to the Model's IOM.

# Main Valve

Valve Patterns, Size Range: "Y" (Globe): 1½-20"; DN40-500 Angle: 1½-18"; DN40-450 Pressure Rating: 40 bar; 600 psi

End Connections: Flanged (all standard)
Plug Types: Flat disc, Cavitation cage

**Temperature Rating:** 50°C; 122°F for Cold water applications. **Optional higher temperature:** Available on request

## **Standard Materials:**

Body: Cast Steel or Ductile Iron Cover (Cylinder): Stainless Steel Bolts Nuts & Studs: Stainless Steel Internals: Stainless Steel, Tin Bronze Elastomers: Synthetic rubber

Optional Materials: Stainless Steel, Nickel Aluminum Bronze,

Duplex & others

Coating: Fusion Bonded Epoxy, RAL 5017 (Blue)

# **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 or Brass

**Elastomers:** Synthetic Rubber **Spring:** Stainless Steel **Internals:** Stainless Steel

# Pilot Selection:

Consult factory

### 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 data, visit the Series Engineering Documentation & Model Engineering Specifications or the Downloads Center on the BERMAD website



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