Quick Pressure Relief Valve

Model MN-13Q

Hydraulically self-operated, pressure sustaining control valve which uses the hydraulic forces of the line pressure to relieve excessive line pressure when it rises above preset maximum, It responds to rises in system pressure immediately, accurately and with high repeatability, by opening fully.

The valves hydrodynamic body is designed for unobstructed flow path and provides excellent and highly effective modulation capacity for high differential pressure applications.

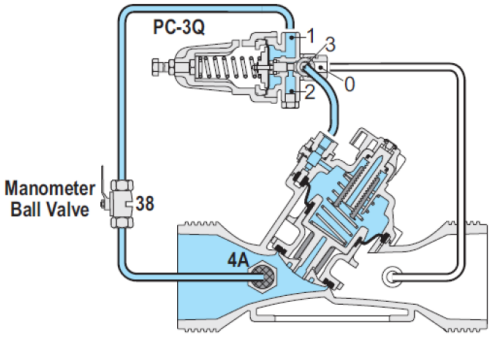
Features and Benefits

- Designed to - stand up to the toughest conditions
  - ✓ High stability and accuracy
  - ✓ Drip tight sealing
- h**Y**flow "Y" Valve Body
  - ✓ Meets rough service conditions with high chemical and cavitation resistance.
  - ✓ End-to-end "look-through" design and full bore seat with unobstructed flow path.
  - ✓ Free of any in-line ribs, supporting cage or shafts.
  - ✓ Enables ultra-high flow capacity with minimal head loss.
- In-line serviceable - Easy maintenance
  - ✓ No bolts in the cover. Its cover ring fastens valve cover to body, stiffening and strengthening the valve body.
- Unitized Plug Assembly
  - ✓ Flexible Super Travel (FST) plug assembly with a long travel guided valve plug.
  - ✓ Peripherally replaceable supported diaphragm
- Flexible design - Easy addition of features

Typical Application

- System Burst Protection
- Momentary Pressure Peak Elimination
- System Failure Visual Indication
- Filter Burst Protection

Control Schematic (*)



Standard Configuration

38 Upstream Isolation Valve
4A In-Line Filter
PC-3Q 2W Pressure Relief Pilot

Additional Features (OPTIONAL)

6 Pressure Gauge

(*) As a reference only. Components may vary based on valve's size and class

Operation:

- ✓ Model MN-130 is equipped with an adjustable 2W pressure relief pilot which senses upstream pressure.
- ✓ The pilot internal restriction continuously allows flow from the main valve inlet into the upper control chamber.
- ✓ Should upstream pressure abruptly rises above pilot setting, the pilot opens, and pressure in the upper control chamber is vented, causing the main valve to immediately open, thereby relieving excessive system pressure.
- ✓ When upstream pressure decreases to below pilot setting, the pilot closes, enabling pressure to accumulate in the control chamber, causing the main valve to smoothly close.

Pilot Options:

Various calibration springs are available. Select according to valve size and operation conditions. For more details check pressure reducing pilots product page

Spring	Setting Range		
	bar	psi	
L	0.8-6	12-85	Standard
U/Y	0.5-3	7-43	

Materials

Components		Base Solutions Applications	Acid Solutions Applications (**)
Main Valve	Body & Cover	Nylon 6, Glass Filed	Polypropylene
	Internals	Stainless Steel 316	Stainless Steel 316
	Seals	NBR	Viton
Pilot	Body	Nylon 6, Glass Filed	Polypropylene
	Internals	Stainless Steel	Stainless Steel 316
	Elastomers	NBR	Viton
Control Loop Accessories	Accessories	PVC / Stainless Steel 316	PVC / Stainless Steel 316
	Tubing & Fittings	Polypropylene / Stainless Steel 316	Polypropylene / Stainless Steel 316

(**) For highly aggressive acid solutions: Hastelloy C-276 internal parts (instead of St.St.316) is optional. Others by request.

Pressure Rating and End Connections:

	Nylon Body			Polypropylene Body		
Max. Recommended Pressure	150 PSI			90 PSI		
Available End Connection (***)	Flanged ANSI #150	Grooved ANSI/AWWA C606	Threaded	Flanged ANSI #150	Grooved ANSI/AWWA C606	Threaded

(***) For more details about availiable end connections by sizes refer to Engineering Section

Notes:

- Inlet pressure, back pressure (if any) and flow rate are required for optimal sizing and cavitation analysis.
- Recommended maximum intermittent flow velocity: 15m/sec; 50ft/sec
- Minimum operating pressure: 0.7 bar / 10 PSI