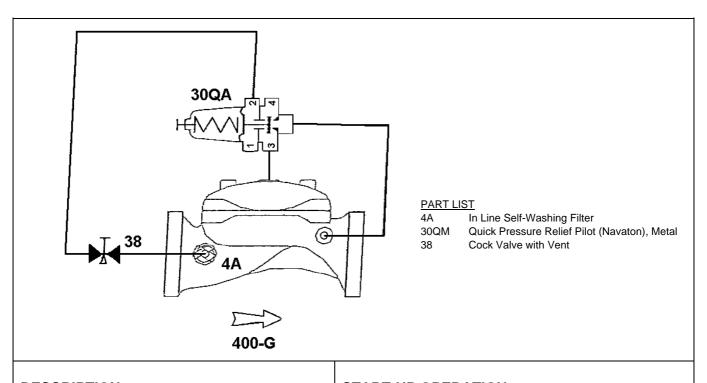


### **QUICK PRESSURE RELIEF VALVE**

# ■ MAINTENANCE ■ OPERATION ■ INSTALLATION



#### **DESCRIPTION**

Model 430-Q quick pressure relief valve is an automatic control valve specially designed to provide a solution to the typical problems associated with spring-load relief valves when constant drfting of relief adjustment occurs.

The valve features:

- 1. Accurate relief pressure setting that remains constant; providing smooth closure without causing pressure surges. It opens to full capacity on minimum pressure rise in the pipe line; and regulates losing speed.
- 2. Manual override for testing operations.

#### INSTALLATION

- Allow enough room around the valve assembly for making adjustments and future maintenance / disassembly work.
- 2. Thoroughly flush the pipeline to remove any dirt, scale, debris, etc. failure to do this may result in the valve being inoperable.
- 3. It is recommended that an isolation valve be installed upstream of the Bermad control valve to allow future maintenance operations.
- 4. Install the valve in the pipeline with the valve flow arrow on the body casting in the proper direction.
- 5. Install the valve horizontally with the cover up for best performance.
- 5. After installation, carefully inspect / correct any damaged accessories, piping, tubing or fittings.

#### **START-UP OPERATION**

- 1. Check / create an inlet pressure equal to the required working pressure.
- 2. Slowly turn the adjusting screw on the pilot 30QM counter clockwise (CCW) until a small leak occurs. Now Gentley turn screw clockwise (CW); allowing the valve to react, until the leak stops.
- 3. Turn adjusting screw ½ turn more and tighten the locknut on the adjusting screw.
- 4. Check valve operation by increasing / decreasing system pressure; the pressure relief valve should open and close.

# 43Q-G



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### **TROUBLESHOOTING**

# SYMPTOM Valve fails

to open.

### **CAUSE**

- 1. Excessive pilot (30QM) spring compression.
- 2. Insufficient inlet pressure.
- 3. Cock valve (1) closed.

#### **REMEDY**

- 1. Turn the adjusting screw CCW on pilot (30QM) until the valve opens.
- 2. Check / create inlet pressure.
- 3. Open cock valve (1).

# Valve fails to close.

- 1. Filter (4A) blocked.
- 2. Restriction no 31 is blocked.
- Insufficient pilot (30QM) spring compression.
- 4. Debris trapped in main valve.
- 1. Remove filter and screen to clean.
- 2. Open restriction and clean it.
- 3. Turn adjusting screw CW on pilot (30QM) until the valve closes.
- 4. Remove and inspect diaphragm assembly. Check seat area.

# Valve fails to regulate.

- 1. Air trapped in main valve cover.
- 1. Loosen cover tube fitting at its highest point and allow the air to escape. Re-tighten.

