



# PUMP DISCHARGE PRESSURE SUSTAINING ELECTRIC CHECK VALVES

## With Normal, Emergency and Manual Controls

### This Valve Will:

1. Check to prevent reverse flow back through pump
2. Provide adjustable opening and closing speed to minimize pump start-up and normal shutdown surges
3. Provide adjustable emergency closing speed control to prevent excessive pump backspin on power outage
4. Throttle as needed to sustain minimum pump discharge pressure

### Function:

The pump discharge pressure sustaining valve shall function to minimize surges associated with the starting and normal shutdown of a pump. The valve operation is solenoid controlled and actuated by water pressure obtained from the inlet and outlet side of the valve

The valve will open at a controlled rate of speed when the NSP and ESP are energized and the pump discharge pressure is sufficient to satisfy the setting of the sustaining pilot. Once open the valve will throttle at whatever position necessary to maintain the minimum pump discharge pressure set on the sustaining pilot. The valve will open fully if the discharge pressure exceeds the pilot setting and close if it falls below the pilot setting.

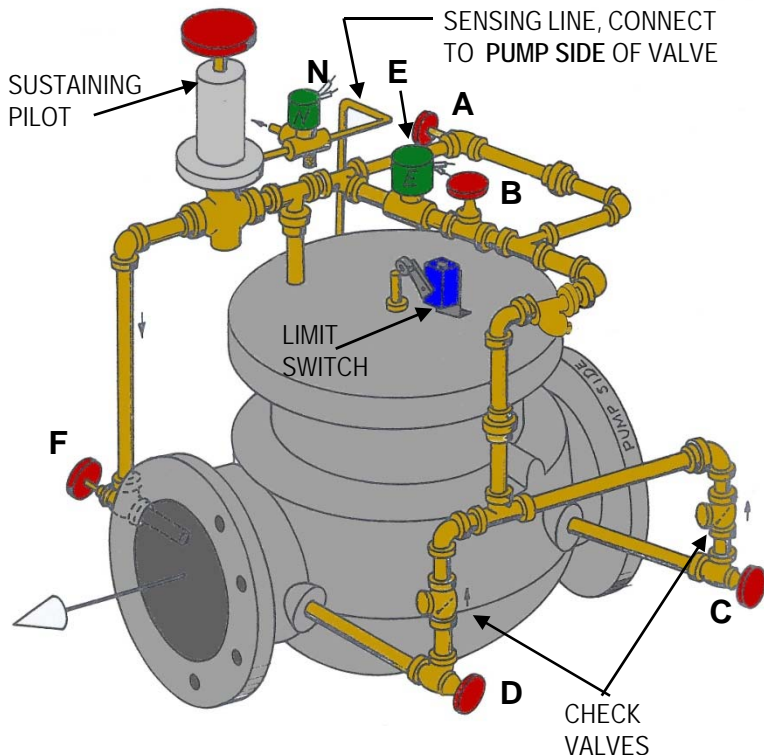
De-energizing the NSP shall initiate a normal controlled valve closure. At a point near the seated position the indicator rod actuates the limit switch and disengages the pump motor and the emergency solenoid pilot.

In the event of an electrical power outage the emergency solenoid de-energizes and initiates a more rapid valve, but controlled, closure to minimize pump backspin.

A manual operator on the normal solenoid pilot allows valve/pump operation if the solenoid coil is burned out.

### When to use this Electric Check:

- To control pump start-up and shutdown surges, and...
- To prevent "over-pumping" a well and/or...
- To prevent the pump from "running out on its curve" during periods of high demand or low system pressure and...
- To prevent pump/motor damage from inefficient operation



- A – Normal Closing Speed Control
- B – Emergency Closing Speed Control
- C – Stop Valve (Normally Open)
- D – Stop Valve (Normally Open)
- E – Emergency Solenoid Pilot (ESP)
- F – Stop Valve (Normally Open)
- N – Normal Solenoid Pilot (NSP) with Manual Operator

GLOBE BODY SHOWN, ALSO AVAILABLE IN ANGLE BODY

Figure 11730-DR Class 125 Globe  
Figure 11730-UR Class 250 Globe

Figure 11740-DR Class 125 Angle  
Figure 11740-UR Class 250 Angle