



“THROTTLING” ELECTRIC CHECK VALVES For PUMP CONTROL 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 in response to remote electrical signal to regulate flow

Function:

The Throttling Electric Check 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 N, P and E solenoids are energized. With the E energized, the valve will stop opening when the N solenoid is de-energized and close at normal speed when both the N and P solenoids are de-energized. The valve will stop closing when the P solenoid is energized and the N solenoid is de-energized. While the pump is running and the E solenoid is energized, the valve can be positioned in mid-stroke to regulate flow in response to remote SCADA electrical signals by appropriately energizing and de-energizing the N and P solenoid pilots.

A normal pump shutdown initiates by de-energizing the N and P solenoids. At a point near the seated position the indicator rod actuates the limit switch and disengages the pump motor and the emergency solenoid pilot.

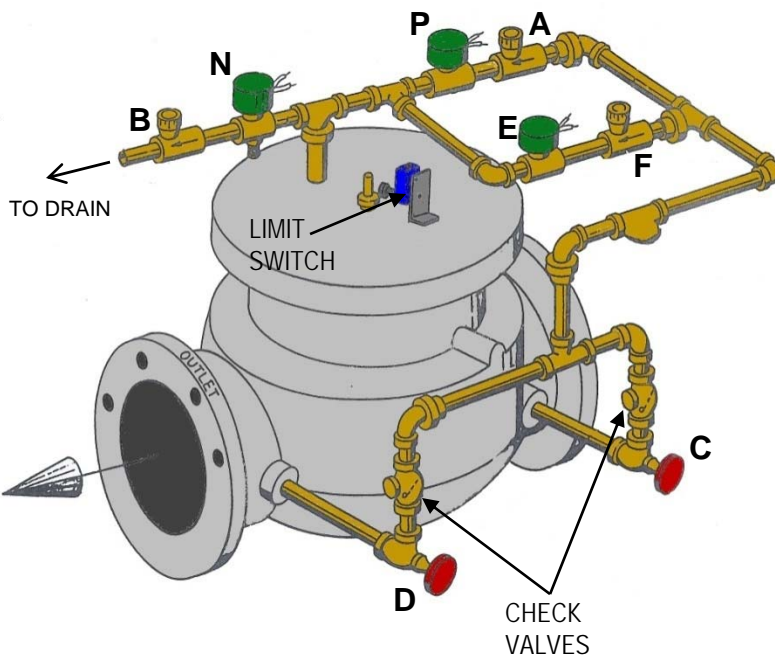
In the event of an electrical power outage the emergency solenoid de-energizes and initiates a more rapid valve, but controlled, closure to minimize pump backspin.

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...
- In conjunction with SCADA to reduce the pumping rate during periods of low demand and/or...
- In conjunction with SCADA to prevent the pump from “running out on its curve” during periods of high demand and/or...
- To prevent pump/motor damage from inefficient operation

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



GLOBE BODY SHOWN, ALSO
AVAILABLE IN ANGLE BODY

Figure 1730-DT Class 125 Globe
Figure 1730-UT Class 250 Globe

Figure 1740-DT Class 125 Angle
Figure 1740-UT Class 250 Angle

GA Industries, LLC

9025 Marshall Road, Cranberry Township, PA 16066 USA

Telephone: 724-776-1020 Fax: 724-776-1254 E-mail: ga@gaindustries.com