**Detector Position Sensor**

Reliable Magnetic Point Sensor, Stainless Steel Housing, AC or DC

The Series DT Detector Position Sensors are reliable, magnetically actuated, stainless steel, completely interchangeable with competitive units. AC or DC for user-friendly operation. They have no moving parts, eliminate costly seal fittings and offer enhanced reliability by eliminating arcing. Unintentional actuation by metals is not a problem. The sensor consists of a durable hermetically sealed reed switch potted in a stainless steel housing and a separate 316 SS magnetic actuator bolt. As the actuator moves within the sensing range of the sensor, the magnet in the actuator changes the state of reed switch contacts inside the sensor. This either opens or closes a circuit depending on wiring configuration. Sensing distance is 0.1” (2.54 mm) for the standard actuator. Greater sensitivity of a larger magnetic actuator increases the sensing distance to 0.5” (12.7 mm).

The detector is excellent for hazardous and corrosive environments, solid state and intrinsically safe applications. A detector may be mounted in any position. For installation in hazardous locations be sure to check local and national electrical codes. The detector is designed to NEMA I, 3, 4, 4X, 6, 7, 9, 12 and 13.

**APPLICATIONS**

The detector is used for control element position monitoring and indication with devices such as linear valves – actuators & cylinders – rotary valves – dampers.

**SPECIFICATIONS**

- Temperature Limits: -40 to 163°F (-40 to 73°C).
- Switch Type: Tungsten, SPDT, Form C.
- Electrical Rating: 3A @ 125 VAC, 3A @ 30 VDC.
- Intrinsically Safe: Simple apparatus (w/ barrier).
- Operating/Response Time: 3.0 m sec.
- Initial Contact Resistance: 0.50 ohms (max).
- Repeatability: 0.005 in (.01 cm).
- Hysteresis: 0.030 in (.08 cm).
- Electrical Connection: Factory sealed leads with 18” minimum, 4 conductor, PVC insulated, 18 AWG – green/red/black/white (ground/NC/NO/common).
- Housing: 316 SS.
- Potting: Epoxy resin.
- Conduit: 1/2”-14” female NPT.
- Weight: 0.32 lb (145 g); 0.45 lb (204 g) with actuator.
- Agency Approvals: CE, CSA, UL, cUL.

**SUGGESTED SPECIFICATION**

Position sensor shall be magnetically operated Proximity Detector model (DT1060) (DT1160). Sensing distance shall be 0.1” (2.54 mm). The sensor shall be SPDT, Form C, hermetically sealed and rated 3 amps 125 VAC, 3 amps 30 VDC, and shall include a stainless steel actuator with internal magnet. The 316 SS housing shall be designed to NEMA 4, 4X, 7, 9, UL & CSA certified Class I, Groups A, B, C & D; Class II, Groups E, F, & G, Divs. 1 & 2 requirements and have a 1/2” NPT conduit entrance.