Switches/Transmitters

The Series DT Detector Position Sensors

The detector is used for control element position monitoring and indication with APPLICATIONS designed to NEMA 1, 3, 4, 4X, 6, 7, 9, 12 and 13. In hazardous locations, be sure to check local and national electrical codes. The detector is intrinsically safe applications. A detector may be mounted in any position. For installation The detector is excellent for hazardous and corrosive environments, solid state and increases the sensing distance to 0.5˝ (12.7 mm).

They have no moving parts, eliminate costly seal fittings and offer enhanced reliability by being completely interchangeable with competitive units. AC or DC for user friendly operation.

SUGGESTED SPECIFICATION devices such as linear valves – actuators & cylinders – rotary valves – dampers.

The dual inductive, 2-wire AC/DC Series VPS Valve Position Sensor maintains VDE/VDI 3844 dimensions so positioners can be easily mounted on top of the sensor and target. The Model VPS2411 Sensor and Model P1 Target mount easily and directly to actuators with ISO NAMUR stopworks (see picture below). Fully adjustable target in 2° increments, the sensor has two independent LED's and bright flow line indicator that provide local visual indication. All electrical connections are made with the Model VIP82 4-pin quick disconnect cable (6’ in length) for ease in installation. Solid state components are fully embedded in an epoxy resin to prevent condensation build-up and to protect against vibration and shock. The rugged PBTP housing provides excellent corrosion resistance and moisture protection.

Model VPS and P1 mounted on an actuator with a positioner mounted on top.

The Series DT Detector Position Sensors are reliable, magnetically actuated, SS, 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 SS 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 1, 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: -13 to 176°F (-25 to 80°C).
Power Requirements: 20 to 140 VAC (50/60 Hz), 10 to 200 VDC.
Switch Type: Dual NO.
Electrical Rating: 200 mA.
Minimum Load Current: 5 mA.
Leakage Current: 0.8 mA.
Voltage Drop: 0.5 V.
Repeatability: 0.01 mm.
Hysteresis: 3 to 15% of sensing range.
Switching Frequency: 25 Hz.
Housing Material: Polybutylene terephthalate.
Mounting Holes: NAMUR mounting - 3.15” x 1.18” (80 x 30 mm) or 5.118” x 1.18” (130 x 30 mm).
Electrical Connection: 4-pin quick disconnect.

Model VPS2411, Valve Position Sensor
Model P1, Valve Position Target
Model VIP82, Quick Disconnect Cable

Model VPS2411
Model P1

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Model P1, Valve Position Target
Model VIP82, Quick Disconnect Cable