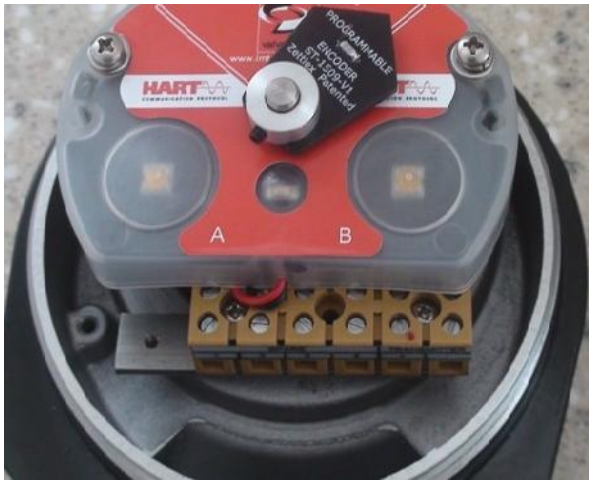
PRODUCT BULLETIN

Imtex Non-contact Valve Position Transmitter

Overview

Imtex Solid State Position Transmitters are available in a variety of mechanical platforms for use in the onshore & offshore oil & gas industries. Imtex transmitter systems offer the following standard features :



- Solid State Technology
- Non-Contact Target
- Push Button Set Up
- Fast Update Rates - 50ms
- Analogue and Digital (HART)
- Fits Into AQ, IQ, SRA & SRX Enclosures
- Available with optional Switches/Sensors
- Certification to ATEX & IECEx Ex ia & Ex d

Position Sensing Principle

The non-contact sensing technique is inductive and uses the same basic physics as a resolver or rotationally variable differential transformer (RVDT). The position of a passive target is sensed relative to an array of windings which are energized with an AC signal to produce an electromagnetic field.

This AC electromagnetic technique has significant advantages over magnetic DC techniques such as Hall effect or giant magnetoresistive which include -

- Insensitive to local DC fields or DC offsets from nearby magnetically permeable materials.
- No hysteresis.
- Larger installation tolerances for a given accuracy.
- Lower temperature coefficient.
- Reduced part to part and batch to batch variability because the inherent variability in the metallurgical and hence magnetic properties of individual magnets is avoided. (Note : our inductive targets can be swapped with no change in performance).
- Mechanically brittle magnets are eradicated.

Such inductive techniques are the preferred choice experienced in the aero-space& defence industries in harsh environment applications such as -

- In-flight refuelling position sensors for A400M & KC46.
- Aileron, throttle and brake controls for unmanned aircraft such as HERTI.
- Missile seeker and fin actuation systems.
- Armoured fighting vehicle weapons systems (Leopard, Warrior & Scout SV).

Further Details

For further product information, or to discuss an application, please contact our sales staff at the following address:

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