

POSITION TRANSMITTER
2 WIRE – NON CONTACT INDUCTIVE

MODEL: RMG-UPT-EX-0501



SALIENT FEATURES

- Non-contact, Inductive type.
- Accepts a wide supply voltage range.
- User friendly for easy installation and calibration.
- Wide operating temperature range.
- Minimal effect of ambient temperature variance on accuracy.
- Encapsulated electronics – to protect from moisture, vibration and tampering of the circuitry.
- Has two additional trim pots for 'MID LOW and MID HIGH' positions.
- Compact in size as compared to other position transmitters available in the market.
- High accuracy with minimal Linearity and Hysteresis errors.
- High Isolation and Dielectric strength.
- Suitable for both Rotary and Linear motion.
- Die-cast Aluminium enclosure capable of withstanding high hydrostatic pressure.

APPLICATION

- Position control, monitoring and feedback.
- Custom applications.

DESCRIPTION

RMG-UPT-EX-0501 is a Loop powered 2 wire Position Feedback Transmitter, widely used to transmit the position of a Control Valve / Power Cylinder / Electric Actuator in a variety of process control applications. This contactless Inductive LVDT based Position Transmitter is a 24V DC operated, Angular Position Transmitter designed for both rotary as well as linear movements when coupled with suitable Back Lever and associated hardware. The Position Transmitter processes the input angular movements and gives out 4.00 to 20.00mA signal. **This Instrument is certified and qualified for Ingress Protection and for use in Flame Proof/Explosion Proof areas and environments as per the relevant IS/IEC standards.**

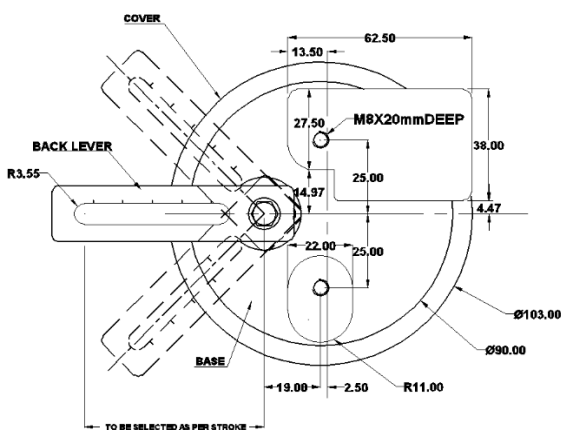


Open view with accessories

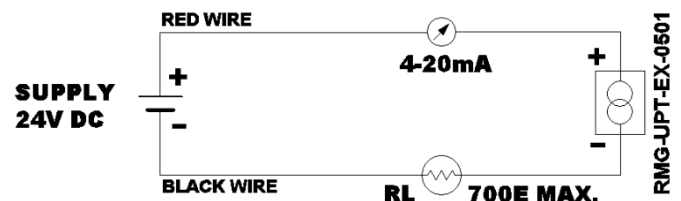


SPECIFICATIONS

| Sl. No. | Characteristics | Specified Value |
|---------|--|---|
| 1 | Input – Rotary | 0-120° 0-15°/ 0-90° |
| 2 | Output | 4.00 to 20.00mA |
| 3 | Input Supply Voltage Range | 10V DC to 60V DC |
| 4 | Influence of Input Supply Voltage | ≤0.5% of span |
| 5 | Type of Transmitter | Two Wire, Loop Powered |
| 6 | Type of Sensor | LVDT, non-contact, Inductive. |
| 7 | Load Impedance | 700 Ω at 24V DC. |
| 8 | Operating Temperature Range | -20°C to +80°C. |
| 9 | Effect of Temperature | ≤0.3% / 10°C. |
| 10 | Linearity Error | ≤ 0.5% of span |
| 11 | Hysteresis Error | ≤ 0.5% of span |
| 12 | Zero adjustment | ±5% of SPAN |
| 13 | Span adjustment | ±15% of SPAN |
| 14 | Type tests qualified for Enclosure protection (Safety and Sealing) | Weatherproof / Flame Proof requirements of IS/IEC 60079-0:2011, IS/IEC 60079-1:2007, IS/IEC 60529-2001. Test Certificate no. CIMFR/TC/P/2585 dt.21.12.2018 from CIMFR, Dhanbad. |
| 15 | Built in Protection | a) Isolation at 500V DC ≥500 MΩ. b) Dielectric strength ≥1.5KV rms for 1 Minute. c) Reverse Polarity protected. d) Enclosure withstands hydrostatic pressure up to 20Kg/cm ² for 1 Minute. e) Sensor and Current Converter are epoxy moulded for protection from moisture, vibration and tampering of circuitry. |
| 16 | Cable entry | Cable Gland ½” NPT standard. |
| 17 | Size | Ø103mm, Height – 122mm. |
| 18 | Weight | ≤1.5 Kg |
| 19 | Enclosure & finish | Aluminium (LM6) gravity die-cast; MRF PU based air dry paint. |
| 20 | Accessories | Back Lever with mounting fasteners. |



Mounting details with dimensions



Connection diagram

- Due to continuous product improvement initiatives, specification is subject to change.
- The images provided are for indicative purposes only. The accessories shown are part of standard supply.
- In addition, we design and manufacture Position Feedback Transmitters as per customer requirements / specifications