RMG® Electromech
Redefining Mechatronics Globally

ANGULAR POSITION TRANSMITTER
2 WIRE – HALL EFFECT NON CONTACT

MODEL: RMG - APT - 2017

SALIENT FEATURES

- Non-contact, Hall Effect Sensor.
- Embedded design using Micro Controller.
- 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.
- 2-line 16-digit Alpha numeric LCD.
- 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 Aluminum enclosure to withstanding high hydrostatic pressure.

APPLICATION

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

DESCRIPTION

Angular Position Transmitter Model no. RMG- APT-2017, is a versatile, advanced Position Transmitter widely used to transmit the position of a Control Valve / Power Cylinder / Electric Actuator in a variety of process control applications. The Contactless Hall effect-based Position Transmitter is a 24V DC operated loop powered 2Wire System, with a 2-line Alpha Numeric LCD, designed for both rotary and linear movements when suitable linkages are used. **This Instrument is certified and qualified for [IP67] Ingress Protection as per the relevant IS/IEC standards.**

Open view with accessories

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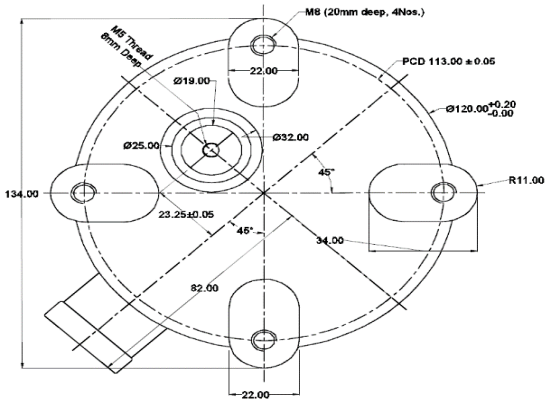
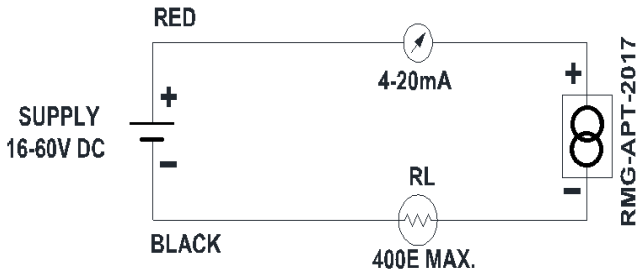
SPECIFICATIONS

Sl. No.	Characteristics	Specified Value
1	Input – Rotary	Range 0°- 360° 0°- 180°
2	Output	4.00 to 20.00mA
3	Input Supply Voltage Range	16V 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	Hall Effect Sensor, non-contact.
7	Load Impedance	400 Ω at 24V DC.
8	Operating Temperature Range	-20° C to +70° C.
9	Effect of Temperature	≤0.3% / 10°C.
10	Built in Error Corrections incorporated using Micro Controller	a) Tan Ø b) Manual Mode.
11	Mode selection	Through Push button switches.
12	ZERO & SPAN Setting [Software Assisted]	Through Push button switches.
13	Forward & Reverse Selection	Through Push button switches.
14	Linearity Error	≤ 0.5% of span
15	Hysteresis Error	≤ 0.5% of span
16	Midpoint Linearity Adjustment in manual mode [Software Assisted]	Maximum of 9 points can be adjusted.
17	Type test Enclosure protection (Safety and Sealing)	As per IP 67 requirements of IS/IEC 60529-2001 RA 2019. Test Report No. CPRIBLREATD24T0532 dt. 26.12.2024 from CPRI, BANGALORE.
18	Built in Protection	Isolation at 500V DC ≥500 MΩ Dielectric strength ≥1.5KV rms for 1 Minute. Reverse Polarity protected. Enclosure withstands hydrostatic pressure up to 20Kg/cm² for 1 Minute.
19	Cable entry	LCSO approved 3pin MIL Connector or ½" NPT Cable Gland as per customer choice.
20	Size	Ø134mm, Height-147mm (including shaft).
21	Weight	≤1.8 Kg.
22	Enclosure & finish	Aluminum (LM6) gravity die-cast; MRF PU based air dry paint.
23	Accessories	3 Pin Military Connector (plug and socket) with Mounting fasteners.



Mounting Details with Dimensions (Bottom View)



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 the standard supply.**
- **In addition, we design and manufacture Position Feedback Transmitters as per customer requirements / specifications**