

POSITION TRANSMITTER 2 WIRE – HALL EFFECT NONCONTACT

MODEL: RMG-HPT2W-2018



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.
- 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 hydro static pressure.

APPLICATION

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

DESCRIPTION

RMG-HPT2W-2018 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 Hall effect sensor-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 as per the relevant IS/IEC standards.**

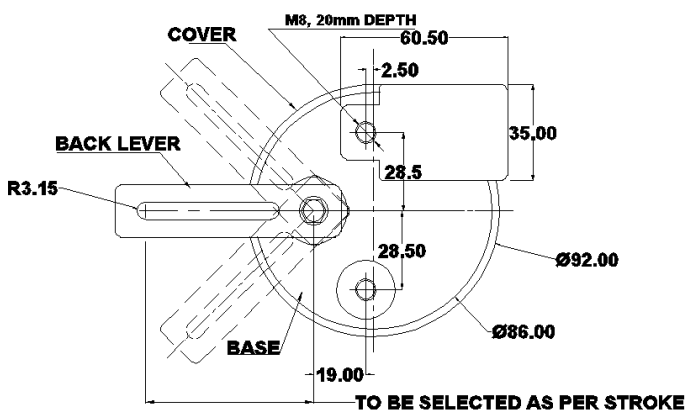


Open view with accessories

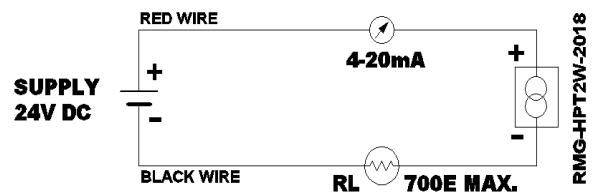


SPECIFICATIONS

Sl. No.	Characteristics	Specified Value
1	Input – Rotary	0-360° 0-180°/0-270°
2	Output	4.00 to 20.00mA
3	Input Supply Voltage Range	10V DC to 60V DC
4	Influence of Input Supply Voltage	≤0.2% of span
5	Type of Transmitter	Two Wire, Loop Powered
6	Type of Sensor	Hall Effect Sensor, non-contact.
7	Load Impedance	700 Ω at 24V DC
8	Operating Temperature Range	-20°C to +80°C.
9	Effect of Temperature	≤0.1% / 10°C.
10	Built-in error corrections incorporated using Micro Controller	a) TanØ b) Manual Mode
11	ZERO & SPAN Setting [Software Assisted]	Through Push button switches.
12	Forward & Reverse Selection	Through Dip switches.
13	Linearity Error	≤ 0.5% of span
14	Hysteresis Error	≤ 0.5% of span
15	Midpoint Linearity Adjustment [Software Assisted]	Maximum of 15 points can be adjusted.
16	Type tests qualified for Enclosure protection (Safety and Sealing)	As per IP 67 requirements of IS/IEC 60529-2001 [Reaffirmed 2014] Test and assessment Report No.IN/CIMFR/TR24/P/912 dt. 19.08.2024 from CIMFR, Dhanbad.
17	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 10Kg/cm² for 1 minute.
18	Cable entry	Cable Gland ½” NPT standard.
19	Size	Ø92mm, Height – 125mm.
20	Weight	<1.2 Kg approx.
21	Enclosure & finish	Aluminium (LM6) gravity die-cast; MRF PU based air dry paint.
22	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.