

**POSITION TRANSMITTER**  
**2 WIRE - NON-CONTACT- HALL EFFECT**

**MODEL : RMG-HPT2W-EX-2018**



**DESCRIPTION**

**RMG – HPT2W – EX- 2018** is a 2 wire Position Transmitter, widely used to transmit the position of a Control Valve in a variety of process control applications. The Contactless Hall effect based Position Transmitter is a 24V DC operated 2Wire System, which accepts angular movements ranging from 0° to 15° to 0° to 90° and converts into 4.00 to 20.00mA signal when suitable back lever and linkages are used.

**SALIENT FEATURES**

- Flame Proof to be Certified
- User friendly & easy calibration.
- Accepts a wide supply voltage range.
- Wide operating temperature range.
- Minimal effect of ambient temperature variance on accuracy.
- Encapsulated electronics - to protect from moisture, vibration and tampering of the circuitry.
- Compact in size as compared to other position transmitters available in the market.
- Linearity can be adjusted for a maximum of 15 points in the operating range.
- High accuracy with minimal Linearity and Hysteresis errors.
- Reverse Polarity protected.
- High Isolation and Dielectric strength.
- Suitable for use in very low stroke as well as for very high stroke applications.
- Die - cast enclosure capable of enduring high hydro static pressure and with high ingress protection. Complies with IP 67 requirements as per IS/IEC 60947-1:2004.

**APPLICATION**

- Position control, monitoring and feedback.
- Custom built operations.



**SPECIFICATION**

SI No	Characteristics	Specified value
1	Input	Angular movements ranging from 0-15° to 0-90°
2	Output	4.00 to 20.00mA
3	Input Supply Voltage Range	10V DC to 60 V DC
4	Influence of Input Supply Voltage	≤0.2% of span
5	Type of Transmitter	Two wire
6	Type of Sensor	Hall Effect, Non – contact
7	Load Impedance	700 Ω at 24 V DC
8	Burden Effect	<0.1%/700 Ω
9	Residual Ripple	<0.5% of 1 max
10	Response time for full range	<0.2 Sec
11	Operating Temperature Range	-20° C to +80 ° C
12	Effect of Temperature	≤0.1% / 10°C
13	Linearity Error	≤ 0.1% of span
14	Hysteresis Error	≤ 0.5% of span
15	Zero Adjustment	Independent adjustment using Push Button switch. Current Adjustment possible from 03.70mA to 07.00mA typical using Trimpot.
16	Span Adjustment	Independent adjustment using Push Button Switch. Current Adjustment possible from 17.00mA to 23.00mA typical using trimpot
17	Linearity Adjustment	Current at midpoints can be adjusted from -2.50 to +2.50mA from the actual reading using trimpot. A maximum of 15 points can be adjusted.
18	Direction Selection	Using Dipswitch
19	Connector	Screw type Terminals
17	Built in Protection	Sensor and Converter are epoxy moulded for protection from moisture, vibration and tampering of circuitry. Isolation at 500V DC ≥500MΩ. Dielectric strength ≥1.5KV rms for 1 Minute. Reverse Polarity protected. Enclosure withstands hydrostatic pressure upto 20Kg/cm² for 1 Minute.
18	<u>Enclosure Details</u>	
	a) Size	Ø104mm, Height – 122mm
	b) Weight	1 Kg approx.
	c) Material & finish	Aluminum (LM6) gravity die-cast; Enamel painted & oven baked.
	d) Enclosure Protection (Safety and Sealing)	Complies with the Ingress Protection requirements of IP 67 as per IS/IEC 60947-1:2004 standard Complies with the Flame Proof for Gas group II A and IIB as per IS 2148-2004 /IEC 60079-1:2001.
	e) Electrical connection	½" NPT standard. Provision for any other cable gland available request.

In addition , we design and manufacture POSITION TRANSMITTERS AS PER CUSTOMER REQUIREMENTS/ SPECIFICATION

**Note 1:** Due to continuous product improvement initiatives, specification is subject to change.

**Note 2:** Images provided are for indicative purpose only. Accessories shown are not part of standard supply.