

Wire-Wound Multi-turn Potentiometer

MIDORI HP-18 Series



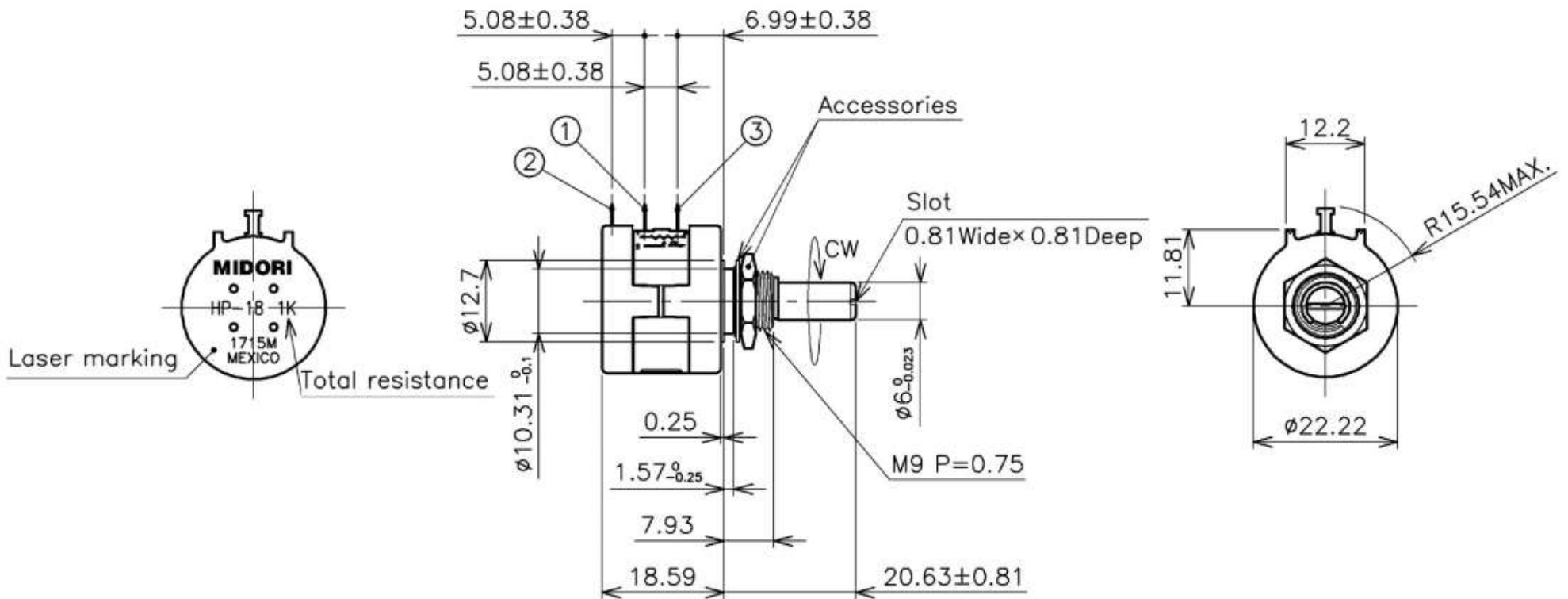
General

- Wire-Wound Multi-turn Potentiometer
- Effective Electrical Travel: 3600° (10-turn)
- Independent Linearity: $\pm 0.25\%FS$
- Bushing Mount
- This unit is used with counting dial: D-12, H-22, H-46 and DM-15

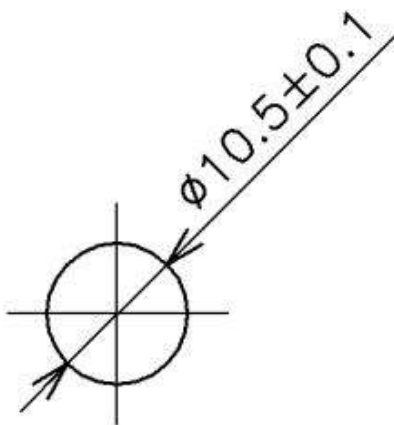
Material

- Housing: Nylon, Copper Alloy
- Shaft: Stainless Steel

Dimension (mm)

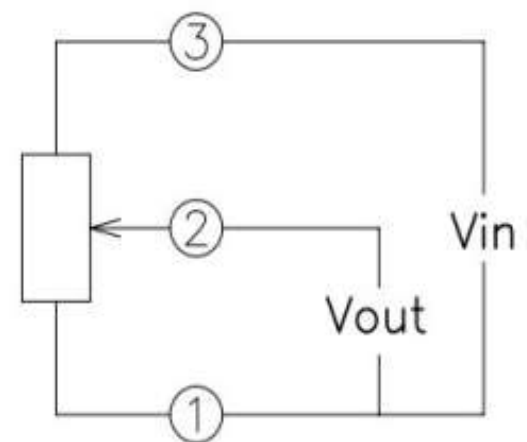


Mounting(mm)



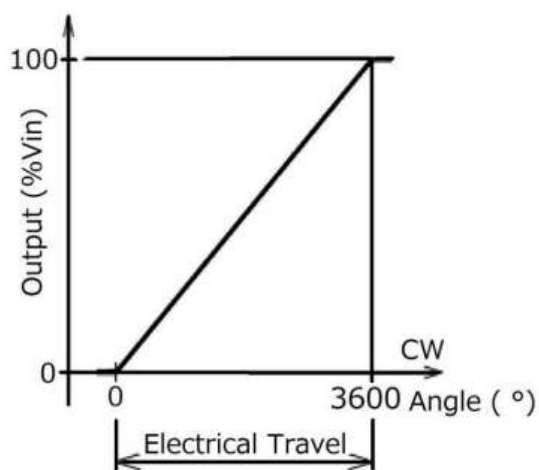
• Recommend Installation panel thickness : 2.46~3.81mm
 If HP-18 is used with a dial, please refer the mounting dimension of the dial.

Schematic



• ①, ②, ③: Terminal No.

Output Characteristics



Specifications

Electrical Specifications

Effective Electrical Travel	3600° +10°, -0°
Total Resistance Tolerance	±5%
Independent Linearity	±0.25%FS
Rated Dissipation	2W/40°C
Insulation Resistance	1000MΩ MIN. DC500V
Dielectric Strength	AC1500V 1minute
TC of Resistance	±50ppm/K MAX.
End Output Voltage	0.1% MAX.
Equivalent Noise Resistance	100Ω MAX.

Mechanical Specifications

Total Mechanical Travel	3600° +10°, -0°
Torque	8.5mN · m MAX.
Mass	Approx. 19g
Stopper Strength	450mN · m MIN.
Backlash	1° MAX.

Environmental Specifications

Operating Temp. Range	-40~+125°C
Storage Temp. Range	-55~+125°C
Vibration	150m/S ²
Shock	500m/S ²
Life Cycle (No Load)	1Million MIN.
IP Level	IP40

Total Resistance & Resolution

1KΩ	0.029%MAX.
2KΩ	0.023%MAX.
5KΩ	0.025%MAX.
10KΩ	0.020%MAX.
20KΩ	0.019%MAX.

Accessories

N9 Nut, Internal Toothed Lock Washer	1piece each
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Handling Instruction

- Winding resistance may oxidizes and causes sliding noise even this sensor is unused for a long time.
- Miswiring might cause burnout of resistive element.
- To reduce sliding noise, add load resistance should be more than 100times and less than 1000times of total resistance.
- Slight continuous vibration such as dither might cause short lifetime of the sensor.
- To avoid damage of stopper, do not rotate the shaft at the end with excessive force.