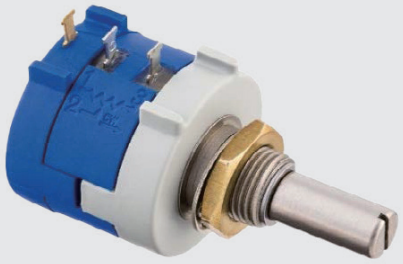
MULTITURN BUSHING MOUNT POTENTIOMETER

CONTACT WIRE WOUND ANGLE SENSOR

HP-18 series

RoHS compliant



FEATURES

- Contact Wire Wound Angle Sensor (Multi-turns Sensor)
- Effective Electrical Travel : 3600° (10-turns)
- Independent Linearity : ±0.25%
- 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

STANDARD SPECIFICATIONS

Electrical characteristics

Effective Electrical Travel	3600°
Total Resistance Tolerance	± 5 %
Independent Linearity	±0.25 %
Rated Dissipation	2 W (40°C)
Insulation Resistance	1000 MΩ min. / 500 VDC
Dielectric Strength	1500 VAC/1 Minute
Temperature Coefficient of Resistance	50 ppm/K max.
End Output Voltage	0.1% max.
Equivalent Noise Resistance	100 Ω max.

Mechanical characteristics

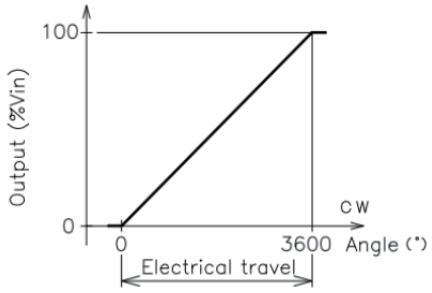
Total Mechanical Travel	3600 +10, 0°
Torque	8.5 mN·m max.
Net weight	Approx.19 g
Stoper Strength	450 mN·m min.
Bucklash	1° max.

TOTAL RESISTANCE

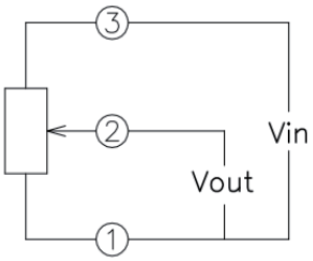
Total Resistance	Resolution	Input Voltage
1 kΩ	0.029%	40 V (40°C)
2 kΩ	0.023%	60 V (40°C)
5 kΩ	0.025%	80 V (40°C)
10 kΩ	0.020%	100 V (40°C)
20 kΩ	0.019%	150 V (40°C)

HP-18
POTENTIOMETERS

■ OUTPUT CHARACTERISTICS



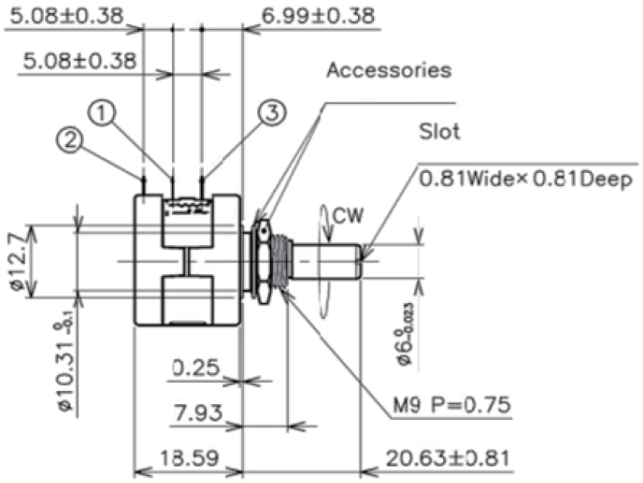
■ SCHEMATIC

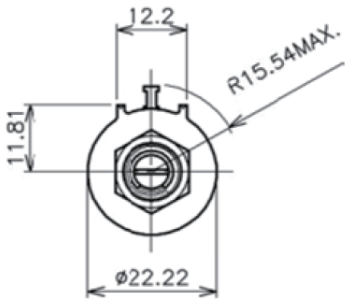


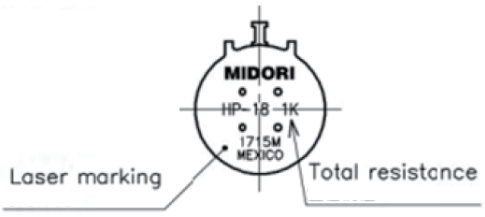
①, ②, ③ : Terminal No.

■ OUTLINE DIMENSIONS

(Unit:mm)







<Accessories>

M9 Nut, Internal toothed lock washer
1 piece each

■ 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 100 times and less than 1000 times of total resistance.
- Slight continuous vibration such as dither might cause lifetime of the sensor.
- To avoid damage of stopper, do not rotate the shaft at the end with excessive force.