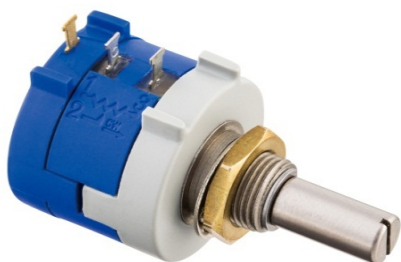


Contact (Wire Wound) Angle Sensor

HP-18 Series

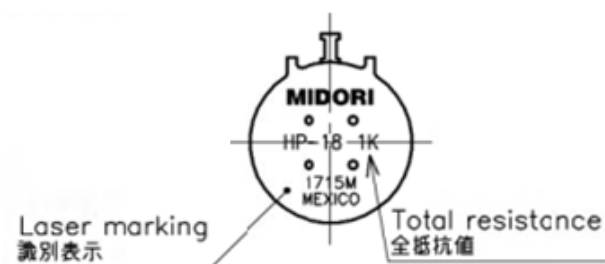
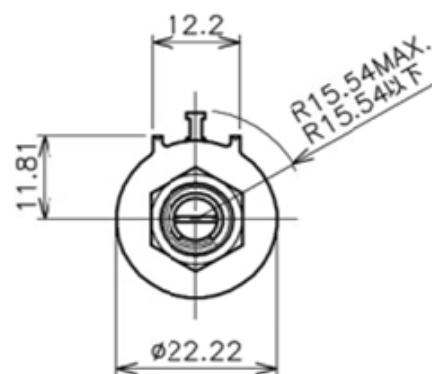
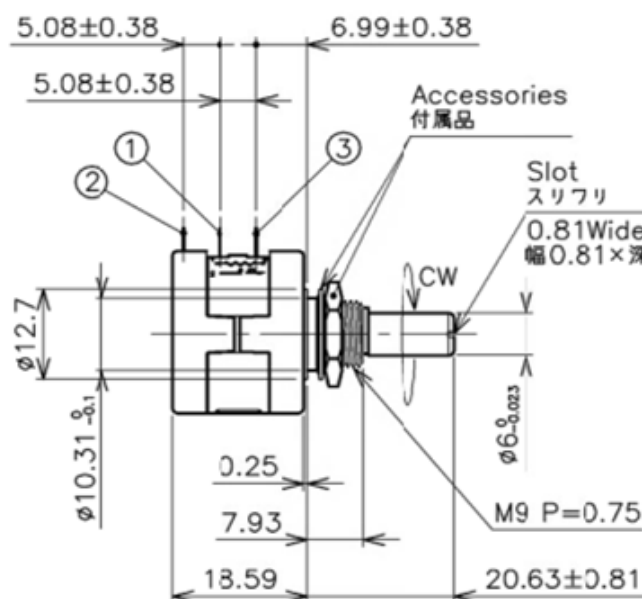


- Contact Wire Wound Angle Sensor (Multi-turns Sensor)
- Effective Electrical Travel: 3600° (10-turn)
- Independent Linearity : $\pm 0.25\%$
- Bushing Mount
- This unit is used with counting dial D-12, H-22, H-46 and DM-15

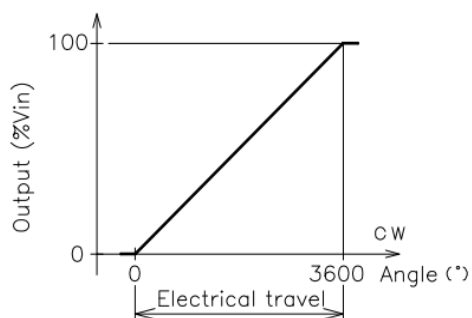
【Material】

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

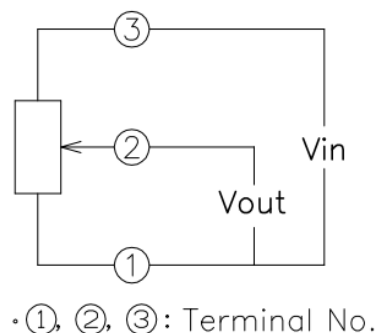
■ Dimension [mm]



■ Output Characteristics



■ Schematic



【Model No.】	HP-18
--------------------	--------------

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

【Electrical Specifications】		
Effective Electrical Travel	3600	°
Total Resistance Tolerance	±5	%
Independent Linearity	±0.25	%
Rated Dissipation	2(40°C)	W
Insulation Resistance	MIN. 1000/DC500V	MΩ
Dielectric Strength	AC1500/1 Minute	V
Temperature Coefficient of Resistance	MAX. 50	ppm/K
End Output Voltage	MAX. 0.1	%
Equivalent Noise Resistance	MAX. 100	Ω

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

■ 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 100times and less than 1000times 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.