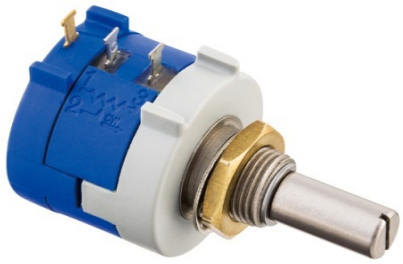
Contact (Wire Wound) Angle Sensor

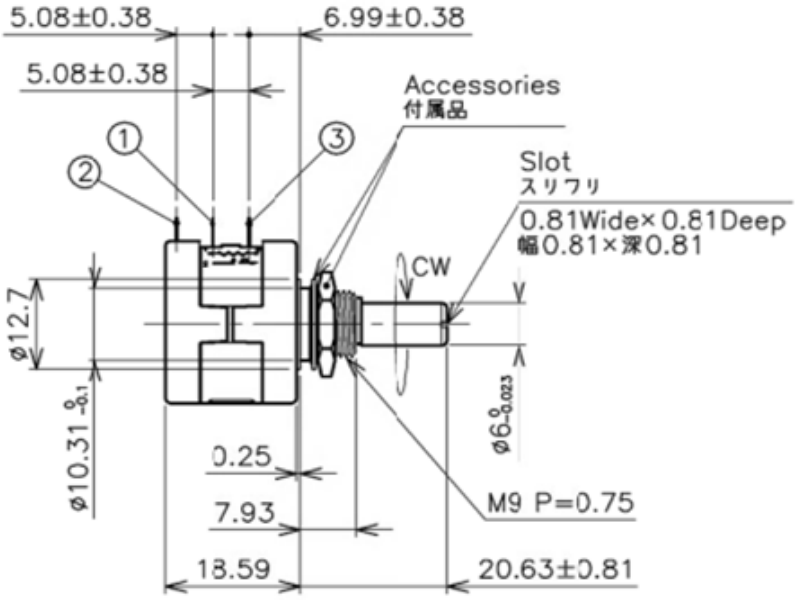
HP-18 Series

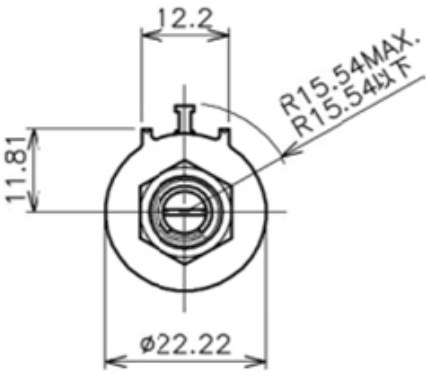


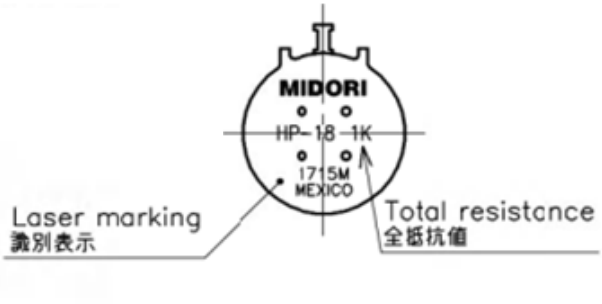
・Contact Wire Wound Angle Sensor (Multi-turns Sensor)
・Effective Electrical Travel：3600° (10-turn)
・Independent Linearity ：±0.25%
・Bushing Mount
・This unit is used with counting dial D-12, H-22, H-46 and DM-15

【Material】
・Housing : Nylon, Copper Alloy
・Shaft : Stainless Steel

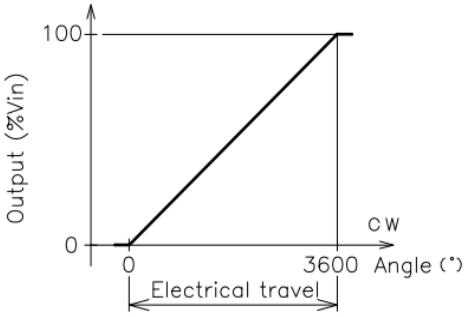
■Dimension [mm]



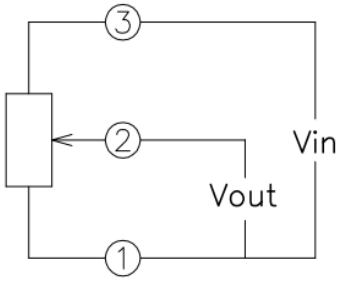




■Output Characteristics



■Schematic



・①, ②, ③: Terminal No.

MIDORI Nidec NIDEC COMPONENTS

【Model No.】	HP-18

【Total Resistance】

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

【Electrical Specifications】

Effective Electrical Travel	3600	°
Total Resistance Tolerance	±5	%
Independent Linearity	±0.25	%
Rated Dissipation	2(40℃)	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
Stoper 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 resistanc
·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.