

Contactless Hall-IC Angle Sensor

CP-2HK Series



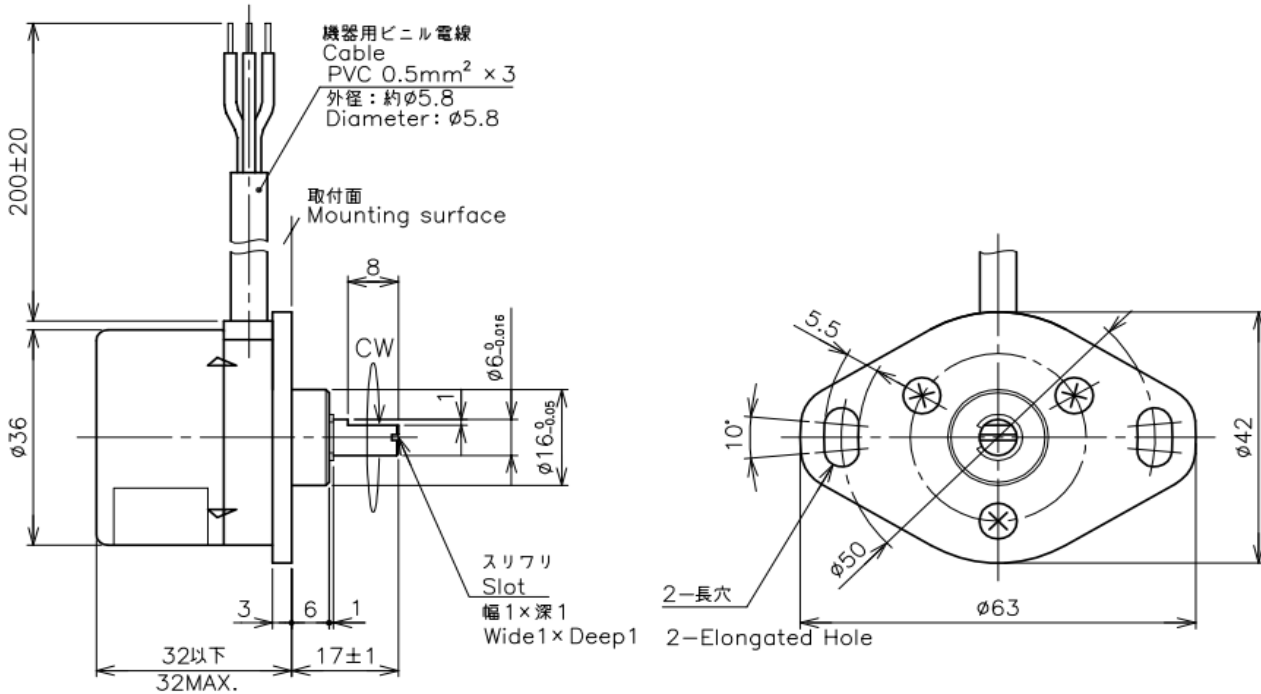
- Contactless Hall-IC Angle Sensor
- Effective Electrical Travel : $\pm 40^\circ$ (Option: 270° , 300° , 360°)
- Absolute Linearity : $\pm 1\%FS$ (Independent Linearity: $\pm 0.5\%FS$)

- CP-2HK : Input Voltage DC $5\pm 0.5V$
- CP-2HK-8R : Input Voltage DC $8\pm 0.5V$
- CP-2HK-10R : Input Voltage DC $10\pm 0.5V$

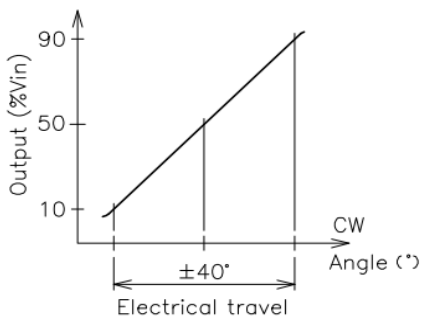
【Material】

- Housing : Aluminum
- Shaft : Stainless Steel
- Ball Bearing : Stainless Steel
- Cover : Steel, Nickel Plate

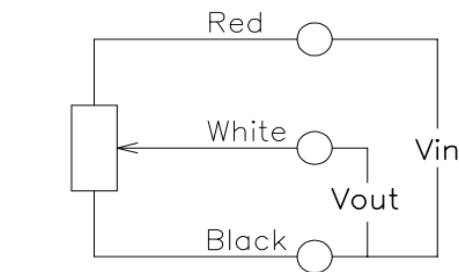
Dimension [mm]



Output Characteristics

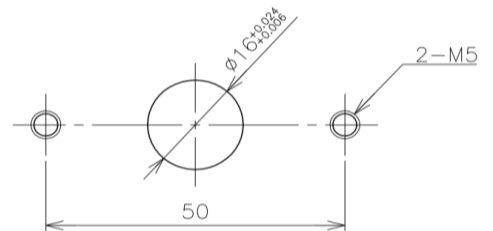


Schematic



• Red, White, Black indicate harness colors.

Mounting



【Model No.】	CP-2HK	CP-2HK-8R	CP-2HK-10R
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【Electrical Specifications】

Effective Electrical Travel	±40 (Option: ±135, ±150, ±180)			°
Output Range	10 ~ 90			%Vin
Absolute Linearity	±1(FS=80°) (Independent Linearity : ±0.5%FS)			%FS
Input Voltage	DC5±0.5	DC8±0.5	DC10±0.5	V
Load Resistance	MIN. 10			kΩ
Supply Current	MAX. 11	MAX. 13		mA
Output Resolution	12			bit
Hysteresis	MAX. 0.1			V
Temp. Characteristics -40 ~ +100°C (Reference Temp. 25°C)	0°position :±0.5° ±40°position :±0.5°	0°position :±0.8° ±40°position :±0.8°		

【Mechanical Specifications】

Total Mechanical Travel	360 Endless			°
Torque	MAX. 2			mN·m
Thrust Load Tolerance	4			N
Radial Load Tolerance	14			N
Mass	Approx. 65			g

【Environmental Specifications】

Life Cycles	MIN. 50 Million			Cycle
Category Temperature Range	-40 ~ +100			°C
Storage Temperature Range	-40 ~ +100			°C
Vibration	100m/s ² 3 axis 2 hours each 5 - 500Hz/6 minutes			
Shock	1000m/s ² 3 axis 6 directions 3 times each			
EMS	100V/m 200MHz - 1GHz			
ESD (Case To Each Terminal)	±12kV (IEC61000-4-2)			
ESD (Between Each Terminal)	±12kV (IEC61000-4-2)			
IP Level	IP54 (Except shaft side from mounting surface)			

■ Handling Instruction

- These products do not shielded with shaft bearing
- Do not use Hall-IC sensor as a variable resistor.
- This product may be influenced from external magnetic field.
- Use this sensor in the place where is protected from ESD.
- This model is available to remove mounting flange.