

Contactless Hall-IC Angle Sensor

MIDORI CP-2HK Series



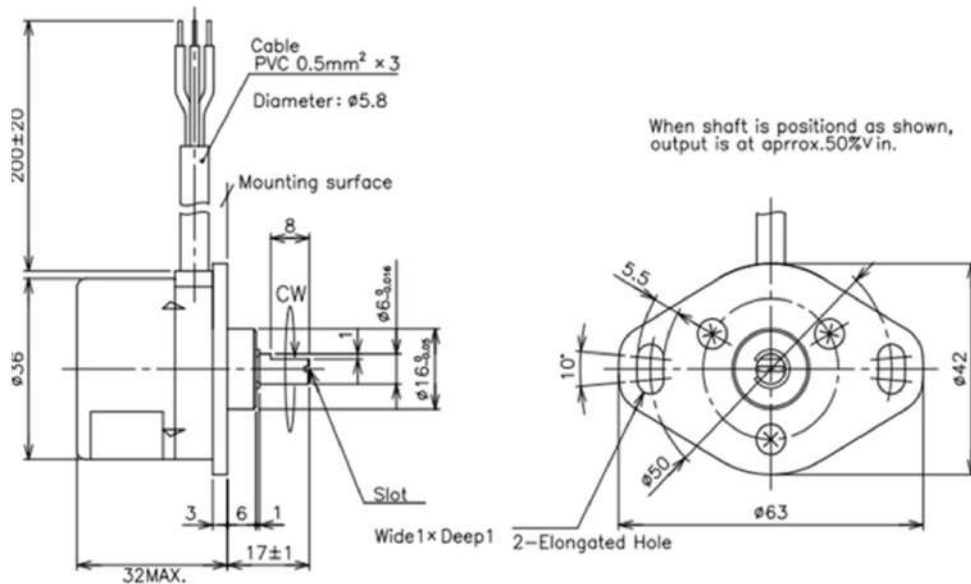
General

- Single-turn Hall-IC Angle Sensor
- Effective Electrical Travel: 80°
- Absolute Linearity: $\pm 1\%FS$
- Input Voltage
 - **CP-2HK:** DC5V $\pm 0.5V$
 - **CP-2HK-8R:** DC8V $\pm 0.5V$
 - **CP-2HK-10R:** DC10V $\pm 0.5V$

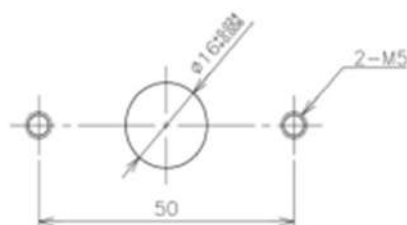
Material

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

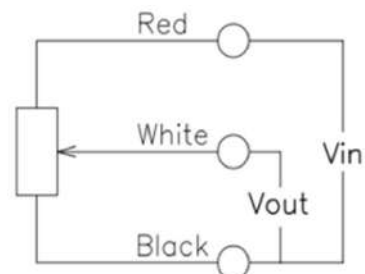
Dimension (mm)



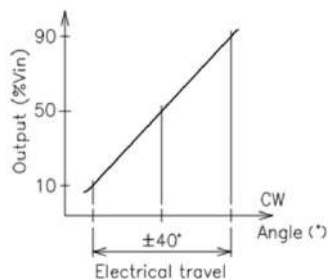
Mounting(mm)



Schematic



Red, White, Black indicate harness colors.



Specifications

Model Number	CP-2HK	CP-2HK-8R	CP-2HK-10R
Electrical Specifications			
Effective Electrical Travel	Standard: 80° (Option: 270°, 300°, 359.9°)		
Output Range	10%~90%Vin		
Absolute Linearity	±1%FS (FS=80°)		
Input Voltage	DC5V±0.5V	DC8V±0.5V	DC10V±0.5V
Load Resistance	10KΩMIN.		
Input Current	11mA MAX.	13mA MAX.	13mA MAX.
Output Resolution	12bit		
Hysteresis	0.1° MAX,		
Temp. Characteristics -40~+100°C (Reference Temp. 25°C)	@0°Position: ±0.5° @±45°Position: ±0.5°	@0°Position: ±0.8° @±45°Position: ±0.8°	
Mechanical Specifications			
Total Mechanical Travel	360° Endless		
Torque	2mN · m MAX.		
Thrust Load Tolerance	4N		
Radial Load Tolerance	14N		
Weight	Approx. 65g		
Environmental Specifications			
Life Cycles	50 Million Cycle		
Category Temp. Range	-40~+100°C		
Storage Temp. Range	-40~+100°C		
Vibration	1000m/S ² , 3axis 2hours each 5~500Hz/6minutes		
Shock	1000m/S ² , 3axis 6directions 3times each		
EMS	100V/m 200MHz~1GHz		
ESD (Case to Each Terminal)	±12KV (IEC61000-4-2)		
ESD (Between Each Terminal)	±12kV (IEC 61000-4-2)		
IP Level	IP54 (Except mounting surface)		

Handling Instruction

- Do not use Hall-IC sensors as a variable resistor.
- This product may be influence from external magnetic field.
- Use this sensor in the place where is protected from ESD.