

RoHS Compliance

# CP-3HK-100

## FEATURES

- Contactless rotary sensor, combination of a magnet, Hall Effect Sensing Element and custom IC
- Wide angle range: Electrical angle range 360 ° max.
- Excellent absolute linearity
- Long useful life
- Superb temperature characteristic

## Electrical Specifications

<b>Electrical Angle</b>	360 °
<b>Output Range</b>	5 ~ 95%Vin
<b>Absolute Linearity</b>	±0.4%FS(Ind.Linearity: ±0.2%FS)
<b>Input Voltage</b>	DC 5 ±0.5V
<b>Load Resistance</b>	1M MIN.
<b>Supply Current</b>	30mA MAX.
<b>Resolution</b>	0.1 °MAX.( 400rpm MAX. )
<b>Hysteresis</b>	±0.5 ( ±0.14%FS=360 °)
<b>Temp. Characteristics</b> - 40°C - 100°C (Reference Temp. 25°C)	±0.3%FS( ± 1.08 °) FS = 360 °

## Mechanical Specifications

<b>Mechanical Angle</b>	360 °Endless
<b>Torque</b>	2mN·m MAX.
<b>Weight</b>	Approx. 80g
<b>Shaft radial load</b>	14N MAX.
<b>Shaft thrust load</b>	4N MAX.

## Environmental Specifications

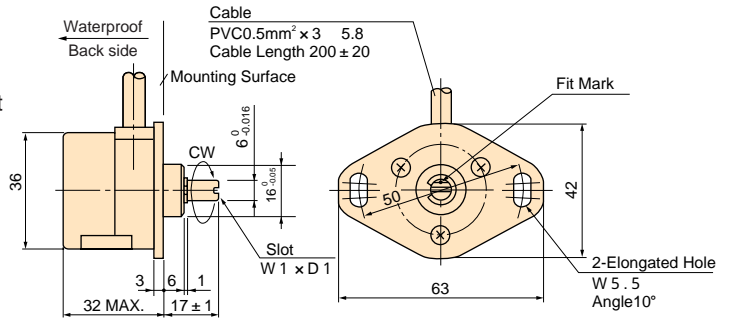
<b>Life Cycles</b>	50M Cycle MIN.
<b>Vibration</b>	100m/s <sup>2</sup> 5 ~ 500Hz(6min) 3axis 2hours
<b>Shock</b>	1,000m/s <sup>2</sup> 11ms 6axis 3times
<b>Operating Temp.</b>	-40 ~ 100
<b>Storage Temp.</b>	-40 ~ 100
<b>ESD(Case - Each Terminal)</b>	± 8kV( IEC 61000-4-2 )
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<b>IP Level</b>	IP54 Excluding Seal Between Shaft and Bushing



## HANDLING INSTRUCTION

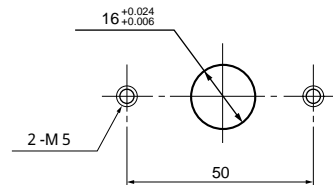
- In applying input power, voltage Vin must rise to 4.5V within 0.2 seconds, otherwise, output shall be disabled(Vout=0V)
- This product may be influenced from external magnetic field of apparatus which generates a magnetic field.
- Use this sensor in the place where is protected from ESD.

## DIMENSION (mm)

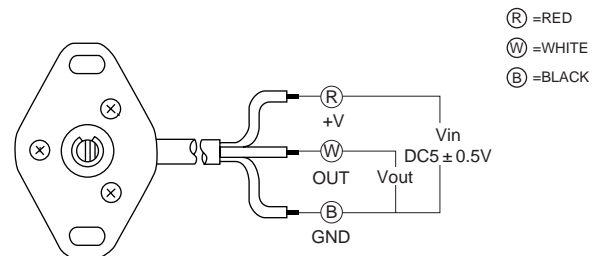


When shaft is positioned as shown, output is at approx. 50%

## MOUNTING



## SCHEMATIC



Red, White and Black indicate harness colors

## OUTPUT CHARACTERISTICS

