

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

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

Mechanical Specifications

| | |
|--------------------------|--------------|
| Mechanical Angle | 360 °Endless |
| Torque | 2mN·m MAX. |
| Weight | Approx. 80g |
| Shaft radial load | 14N MAX. |
| Shaft thrust load | 4N MAX. |

Environmental Specifications

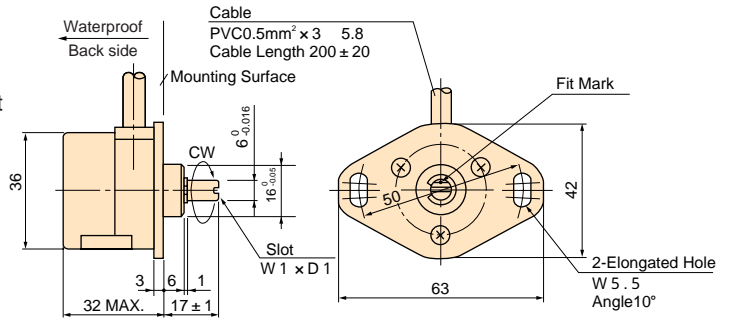
| | |
|----------------------------------|--|
| Life Cycles | 50M Cycle MIN. |
| Vibration | 100m/s ² 5 ~ 500Hz(6min) 3axis 2hours |
| Shock | 1,000m/s ² 11ms 6axis 3times |
| Operating Temp. | -40 ~ 100 |
| Storage Temp. | -40 ~ 100 |
| ESD(Case - Each Terminal) | ± 8kV(IEC 61000-4-2) |
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|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



HANDLING INSTRUCTION

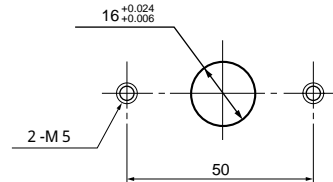
- In applying input power, voltage Vin must rise to 4.5V within 0.2 seconds, otherwise, output shall be disabled(Vout=0V)
- This product may be influenced from external magnetic field of apparatus which generates a magnetic field.
- Use this sensor in the place where is protected from ESD.

DIMENSION (mm)

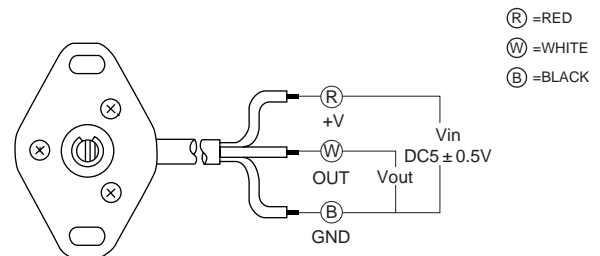


When shaft is positioned as shown, output is at approx. 50%

MOUNTING



SCHEMATIC



Red, White and Black indicate harness colors

OUTPUT CHARACTERISTICS

