



## Contactless Angle Sensor

### <RoHS Compliance>

# CP-2HK-8R CP-2HK-10R

### FEATURES

- Substitution model of CP-2UK-R200
- Superb Temperature Characteristic and Linearity
- Input Voltage: 8V (CP-2HK-8R) , 10V (CP-2HK-10R)

### Electrical Specifications

| Model No.                                                  | CP-2HK-8R                                                                  | CP-2HK-10R       |
|------------------------------------------------------------|----------------------------------------------------------------------------|------------------|
| Electrical Angle                                           | $\pm 45^\circ$                                                             |                  |
| Output Range                                               | 10~90%Vin                                                                  |                  |
| Absolute Linearity                                         | $\pm 1\%FS$ (FS=80°)                                                       |                  |
| Input Voltage                                              | DC8V $\pm 0.5V$                                                            | DC10V $\pm 0.5V$ |
| Load Resistance                                            | 10K $\Omega$ MIN.                                                          |                  |
| Supply Current                                             | 13mA MAX.                                                                  |                  |
| Resolution                                                 | 12bit                                                                      |                  |
| Hysteresis                                                 | 0.1° MAX.                                                                  |                  |
| Temp.Characteristics<br>-40~100°C<br>(Reference Temp.25°C) | 0° Position : $\pm 0.8^\circ$<br>$\pm 40^\circ$ Position : $\pm 0.8^\circ$ |                  |

### Mechanical Specification

|                   |              |
|-------------------|--------------|
| Mechanical Angle  | 360° Endless |
| Torque            | 2mN · m MAX. |
| Weight            | Approx.65g   |
| Shaft Radial Load | 14N          |
| Shaft Thrust Load | 4N           |

### Environmental Specification

|                         |                                                 |
|-------------------------|-------------------------------------------------|
| Life Cycles             | 500M Cycle MIN.                                 |
| Vibration               | 100m/S , 3 axis 2hours each<br>5~500Hz/6minutes |
| Shock                   | 1000m/S , 3 axis 6directions 3times each        |
| EMS                     | 100V/m 200MHz~1GHz                              |
| Operating Temp.         | -40~100°C                                       |
| Storage Temp.           | -40~100°C                                       |
| ESD(Case~Each Terminal) | $\pm 12kV$ (IEC61000-4-2)                       |
| ESD(Each Terminal)      | $\pm 12kV$ (IEC61000-4-2)                       |
| IP Level                | IP54 Excluding Seal Between Shaft and Bushing   |

### OPTIONS

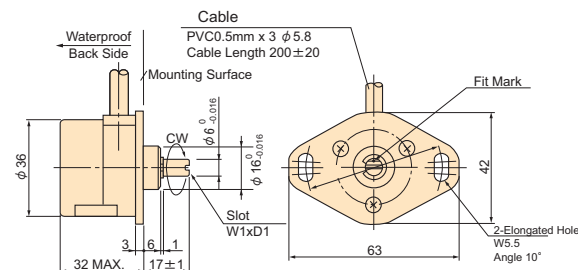
- Electrical Angle: 270° , 300° , 360°



### HANDLING INSTRUCTION

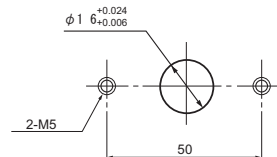
- This product may be influenced from external magnetic field of apparatus which generates a magnetic field.
- Use this sensor in the place where is protected from ESD

### DIMENSION (mm)

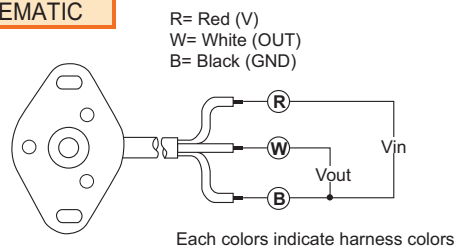


※When Shaft is positiond as shown, output is at approx. 50%

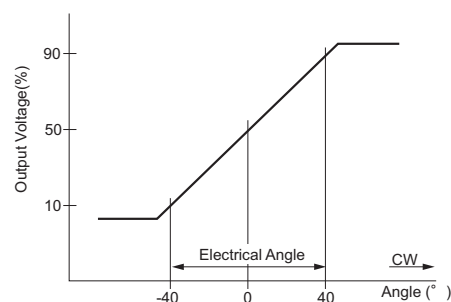
### MOUNTING



### SCHEMATIC



### OUTPUT CHARACTERISTICS



## We are here for you. Addresses and Contacts.

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