

RoHS Compliance

# CP-45H-10S

## FEATURES

- Contactless multiturn sensor with Gear Head Assy combination of CP-45H and an anti-backlash herical gear
- Excellent absolute linearity
- Repeatability:  $\pm 0.2\%$  max. (Incl. backlash)
- Superb temperature characteristic

## Electrical Specifications

<b>Electrical Angle</b>	3500 °
<b>Output Range</b>	5 ~ 95%Vin
<b>Absolute Linearity</b>	$\pm 0.4\%$ FS(Ind.Linearity: $\pm 0.2\%$ FS)
<b>Input Voltage</b>	DC 5 $\pm$ 0.5V
<b>Load Resistance</b>	1M MIN.
<b>Supply Current</b>	30mA MAX.
<b>Resolution</b>	1 °MAX.( 4000rpm MAX. )
<b>Temp. Characteristics</b> - 40°C - 100°C (Reference Temp. 25°C)	$\pm 0.3\%$ FS( FS = 3500 °)

## Mechanical Specifications

<b>Mechanical Angle</b>	3600 °Endless
<b>Gear Ratio</b>	10 : 1
<b>Torque</b>	4mN·m MAX.
<b>Repeatability</b>	$\pm 7 \ell$ ( $\pm 0.2\%$ FS = 3500 °) Including Backlash
<b>Weight</b>	Approx. 260g
<b>Shaft radial load</b>	16N MAX.
<b>Shaft thrust load</b>	5N MAX.

## Enviromental Specifications

<b>EMS(IEC 61000-4-2)</b>	10V/m, 80M ~ 1GHz
<b>Operating Temp.</b>	-40 ~ 100
<b>Storage Temp.</b>	-40 ~ 100
<b>ESD(Case - Each Terminal)</b>	$\pm 8$ kV( IEC 61000-4-2 )
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<b>IP Level</b>	IP40

## OPTIONS

- Gear ratio

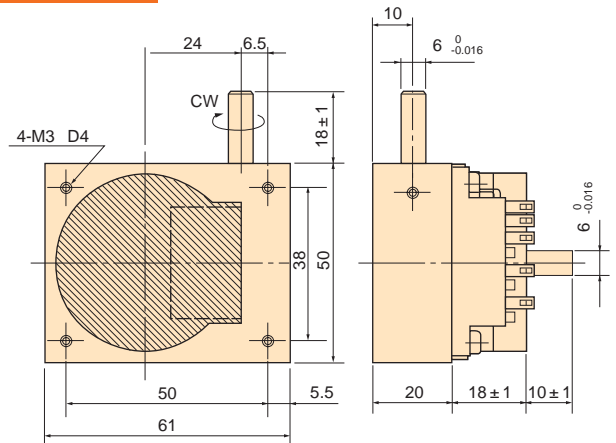
<b>100 : 1</b>	CP-45H-100S
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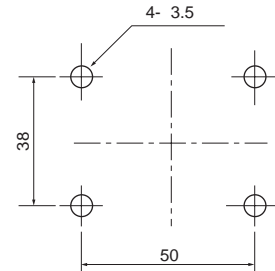
## HANDLING INSTRUCTION

- 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.

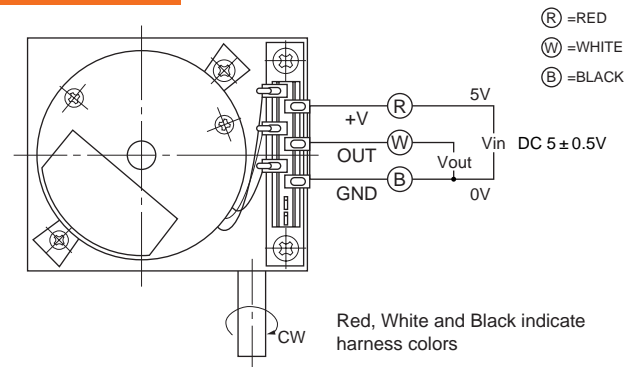
## DIMENSION (mm)



## MOUNTING



## SCHEMATIC



## OUTPUT CHARACTERISTICS

