

Contactless Hall-IC Angle Sensor

CP-45H-S Series

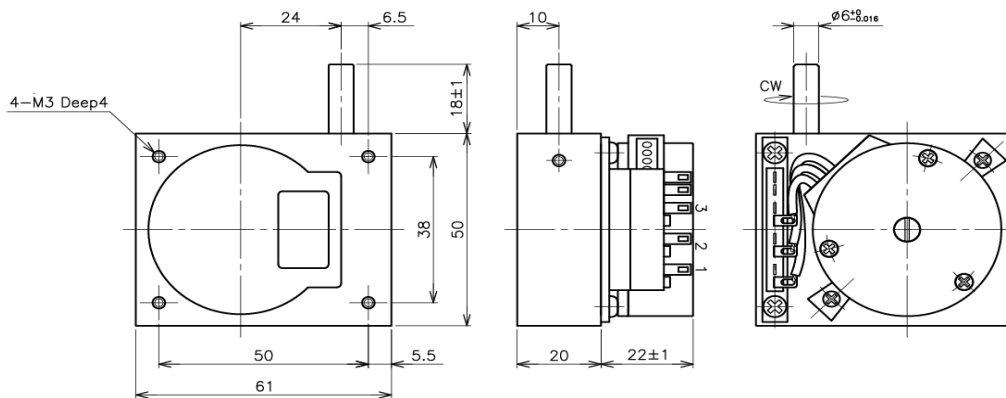


- Contactless Hall-IC Multi-turn Angle Sensor
- Effective Electrical Travel : 3500° (CP-45H-10S)
: 35000° (CP-45H-100S)
- Absolute Linearity : $\pm 0.4\%FS$ (=Independent Linearity : $\pm 0.2\%FS$)

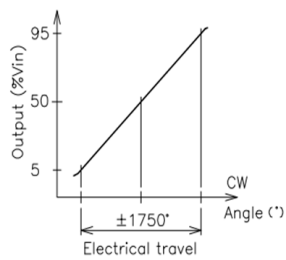
[Material]

- Housing : Aluminum
- Shaft : Stainless Steel
- Ball Bearing : Stainless Steel
- Gear Box : Aluminum die-casting

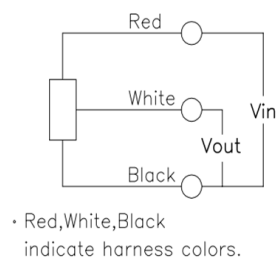
■ Dimension (mm)



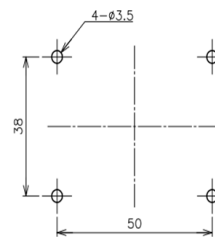
■ Output Characteristics



■ Schematic



■ Mounting



Model No.	CP-45H-10S	CP-45H-100S
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Electrical Specifications

Effective Electrical Travel	3500°	35000°
Output Range	5~95%Vin	
Absolute Linearity	±0.4%FS (Independent Linearity: ±0.2%FS) FS= 3500°	±0.4%FS (Independent Linearity: ±0.3%FS) FS=35000°
Input Voltage	DC5V ±0.5V	
Load Resistance	10KΩ MIN.	
Supply Current	10mA MAX.	
Output Resolution	1° MAX. (4000rpm MAX.)	
Temp. Characteristics -40~+100°C Reference Temp: 25°C	±0.3%FS (FS= 3500°)	±0.3%FS (FS= 35000°)

Mechanical Specifications

Total Mechanical Travel	Endless	
Gear Ratio	10:1 (10-Turn)	100:1 (100-Turn)
Torque	4mN · m MAX.	
Thrust Load Tolerance	5N	
Radial Load Tolerance	16N	
Mass	Approx. 280g	

Environmental Specifications

Category Temperature Range	-40~+100°C
Storage Temperature Range	-40~+100°C
EMS (IEC61000-4-2)	100V/m, 1M~1GHz
ESD (Case to Each Terminal)	±15KV (IEC61000-4-2)
ESD (Between Each Terminal)	±15KV (IEC61000-4-2)
IP Level	IP40

■ Options

- Other Gear Ratio 12:1 (12-Turn), 24:1 (24-Turn), 35:1 (35-Turn)

■ Handling Instruction

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