

Contactless Hall-IC Angle Sensor

MIDORI CP2HX-P



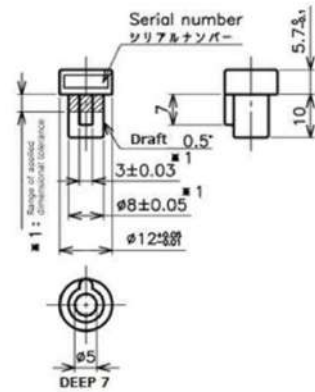
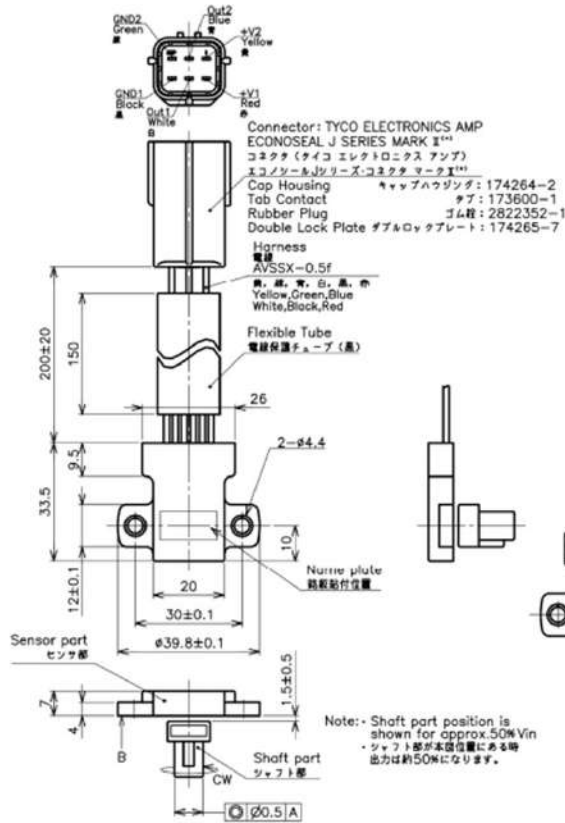
General

- Single-turn Hall-IC Angle Sensor
- Effective Electrical Angle (Standard): $\pm 180^\circ$
- Absolute Linearity: $\pm 2\%FS$
- Output: PWM
- Dual Output (6-Wires)
- Touchless Type (Sensor Body and Magnet Rotor)
- IP 67

Material

- Housing: PBT

Dimension (mm)



Magnet Rotor (Model#: MH01)

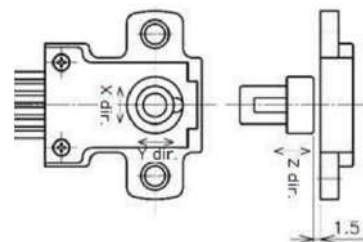
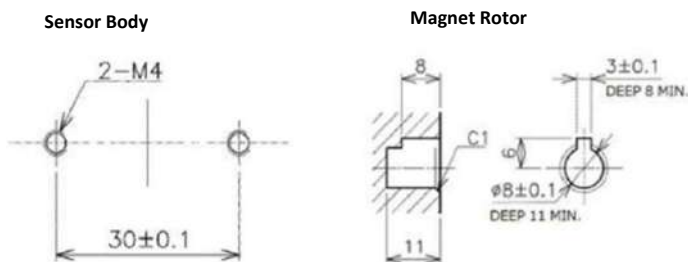
If you require a custom design of the magnet rotor, please contact us.

Operating Distance between Sensor body and Magnet Rotor

We recommend the installation distance in the table below to provide the good function of the sensor.

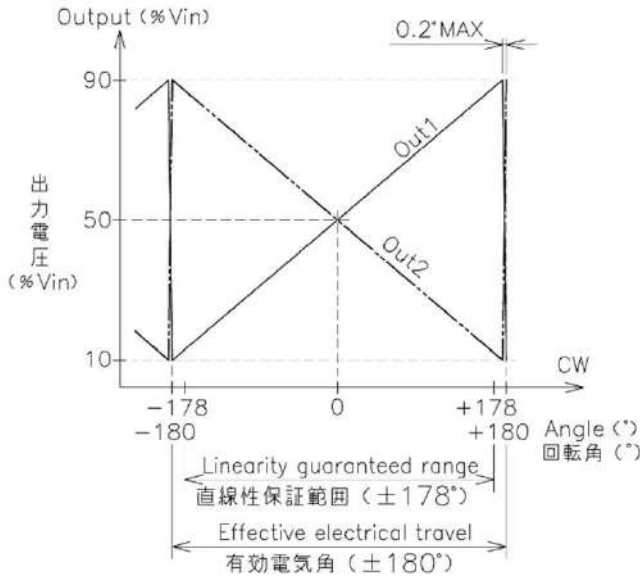
Direction	Recommendation value
Z Direction	1.5mm (0.5mm~3.5mm)
X↔Y Direction	±0.5mm

Mounting(mm)

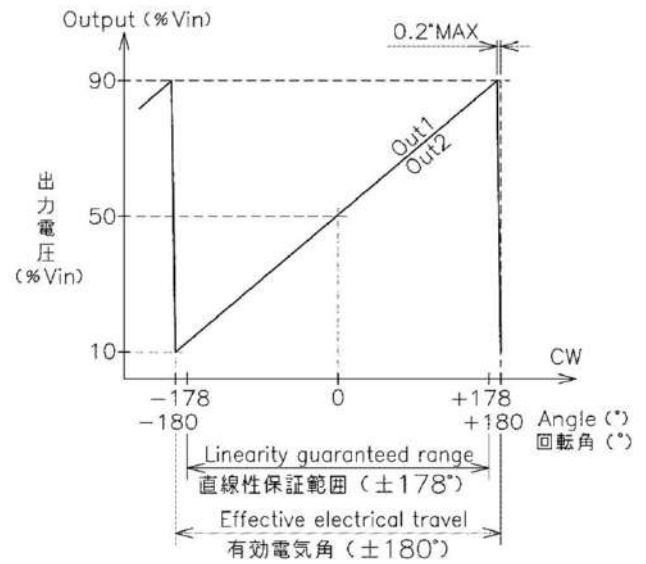


Output Characteristics

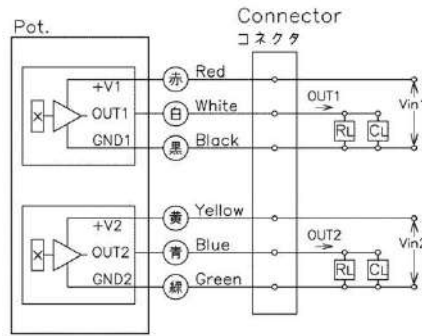
Cross Output



Parallel Output



Schematic



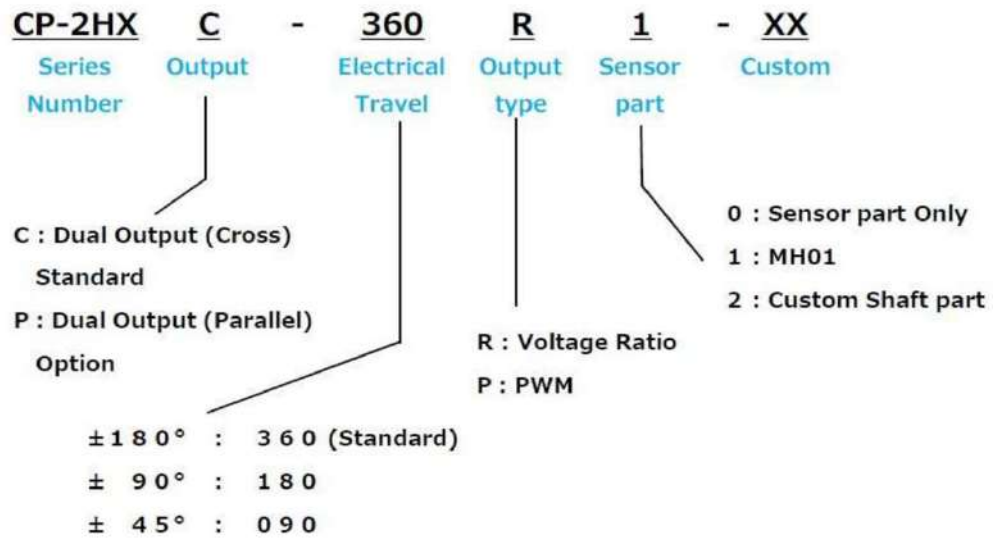
• Red, white, black, yellow, blue and green indicate harness colors.

Specifications

	CP2HXC-P (Cross Output)	CP2HXP-P (Parallel Output)
Electrical Specifications		
Effective Electrical Travel	±180° (Dead Angle 0.2°), Option: ±90°, ±45°	
Output Range	PWM 10~90%Vin	
Absolute Linearity	±2%FS	
Input Voltage	DC5±0.5V	
Load Resistance	10KΩ MIN./ 1ch	
Current Consumption	10mA MAX./ 1ch	
Insulation Resistance	100MΩ MIN./ DC50V	
Resolution	12bit (0~100%Vin)	
Hysteresis	1.0%FS	
Temp. Characteristics -40~+85°C (25°C STD)	±1°	
Dual Output Difference	Out1+Out2: 100±1%	Out1+Out2: ±1%
Mechanical Specifications		
Total Mechanical Travel	360° Endless	
Mass	Approx. 30g	
Environmental Specifications		
Category Temp. Range	-40~+100°C	
Storage Temp. Range	-40~+100°C	
Vibration	200m/S ² , 5~500Hz, 10min, 3axis 2hours (Room Temp.)	
Shock	500m/S ² , 11ms, 3axis 3 times (Room Temp.)	
EMS	100V/m, 1MHz~1GHz (ISO11452-2, -3)	

	CP2HXC-R (Cross Output)	CP2HXP-R (Parallel Output)
ESD (Case to Each Terminal)	Contact Discharge ±15kV (IEC61000-4-2)	
ESD (Each Terminal)	Contact Discharge ±15kV (IEC61000-4-2)	
IP Rating	IP67	

CP2HX Series Model Number Designation



Handling Instruction

- This product is work by the combination with sensor part and magnet rotor (MH01).
- Please use the sensor body and magnet rotor marked with the same serial number in maintain the good accuracy of this product.
- This product may be influence by an external magnetic field.
- Use this product in an environment protected from ESD.