

Contactless Hall-IC Angle Sensor

MIDORI CP-1HX-R



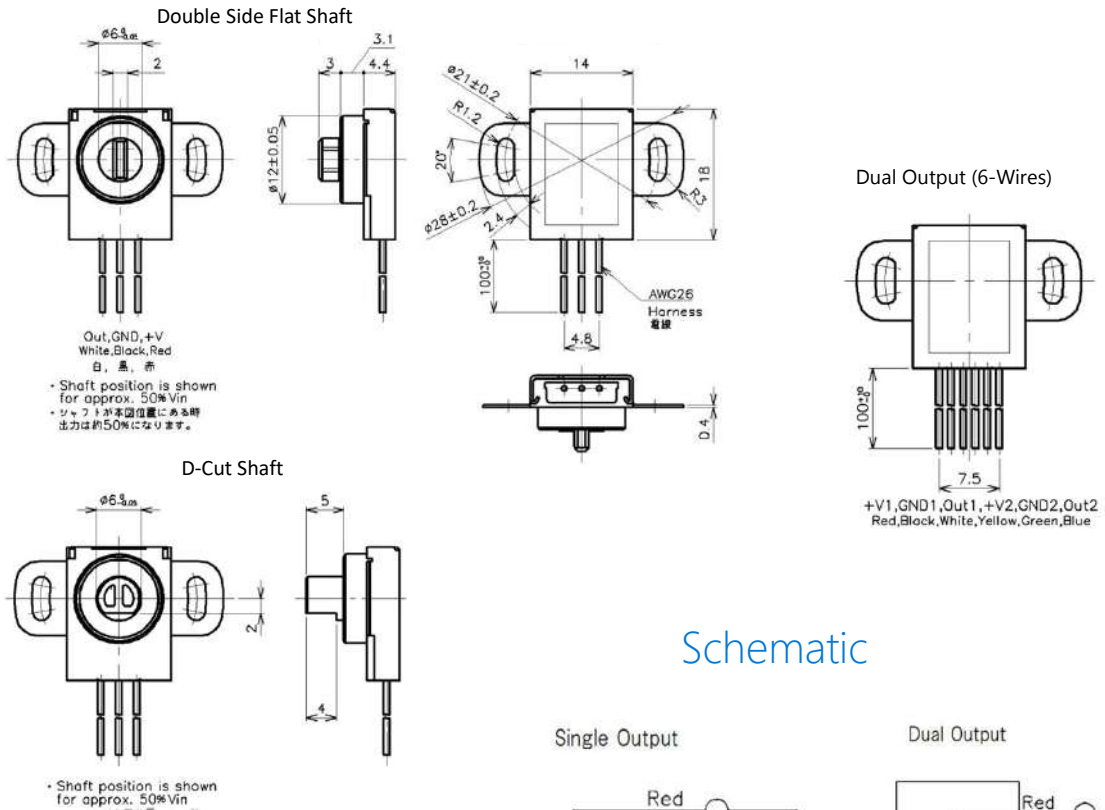
General

- Single-turn Hall-IC Angle Sensor
- Effective Electrical Angle (Standard): 90°, 180°, 360°
- Absolute Linearity: ±2%FS
- Output: Ratio Output
- Single Output(3-Wires)/ Dual Output (6-Wires)
- Shaft: D-Cut/ Double Side Flat
- IP 67

Material

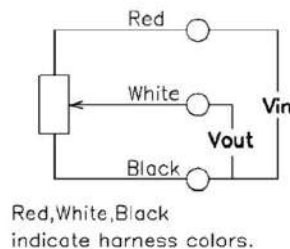
- Housing: PBT
- Flange: Stainless Steel

Dimension (mm)

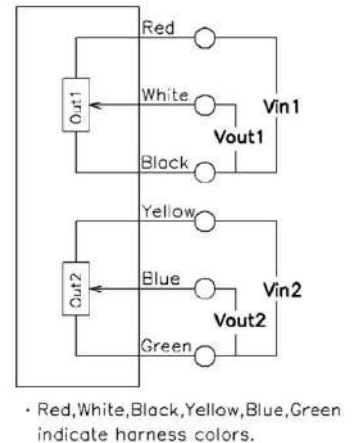


Schematic

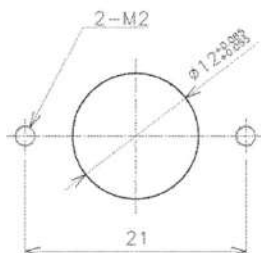
Single Output



Dual Output

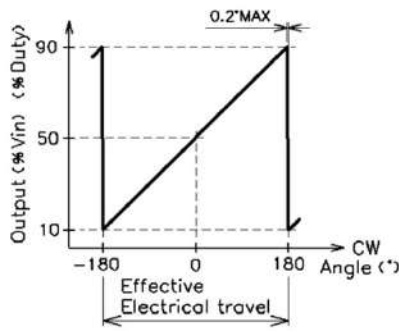


Mounting(mm)

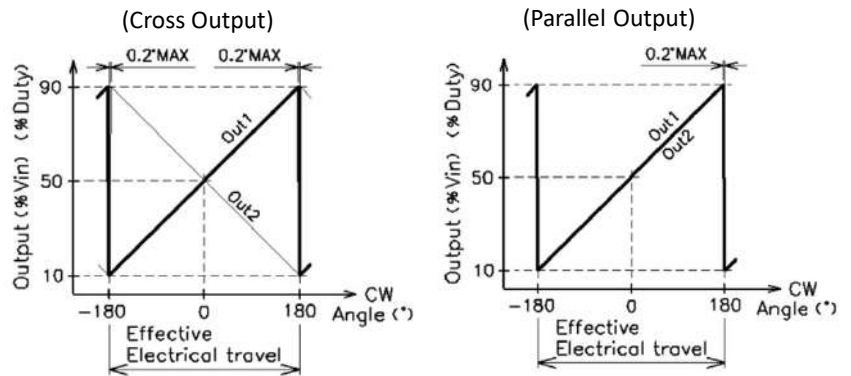


Output Characteristics

Single Output



Dual Output



Specifications

Electrical Specifications

	CP-1HX-xxRx (Single Output)	CP-1HXC/P-xxRx (Dual Output)
Effective Electrical Travel	90°, 180°, 360° (Dead Angle 0.2°)	
Output Range	Ratio output 10~90%Vin	
Absolute Linearity	±2%FS	
Input Voltage	DC5±0.5V	
Load Resistance	10KΩ MIN./ 1ch	
Current Consumption	10mA MAX.	20mA MAX.
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	---	(Cross Output) 100±1%Vin (Parallel Output) Out1+Out2: ±1%

Mechanical Specifications

Total Mechanical Travel	360° Endless
Torque	3mN · m MAX.
Thrust Load Tolerance	4N
Radial Load Tolerance	3N
Weight	Approx. 5g

Environmental Specifications

Category Temp. Range	-40~+85°C
Storage Temp. Range	-40~+85°C
Effective Electrical Travel	200m/S2, 5~500Hz, 10min, 3axis 2hours (Room Temp.)
Shock	500m/S2, 11ms, 3axis 3 times (Room Temp.)
EMS	100V/m, 1MHz~1GHz (ISO11452-2, -3)
ESD (Case to Each Terminal)	Contact Discharge ±15KV (IEC 61000-4-2)
ESD (Between Each Terminal)	Contact Discharge ±15KV (IEC 61000-4-2)
IP Level	IP67 (Except Lead Wires)

Handling Instruction

- This product may be influence by an external magnetic field.
- Use this product in an environment protected from ESD.

CP-1HX Series Model Number Designation

