

Contactless Hall-IC Angle Sensor

MIDORI CP-45H-10V Series



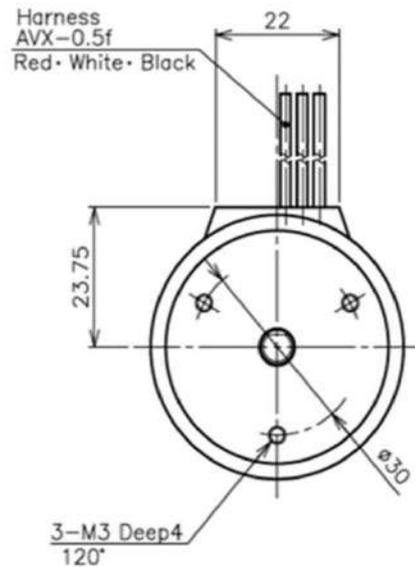
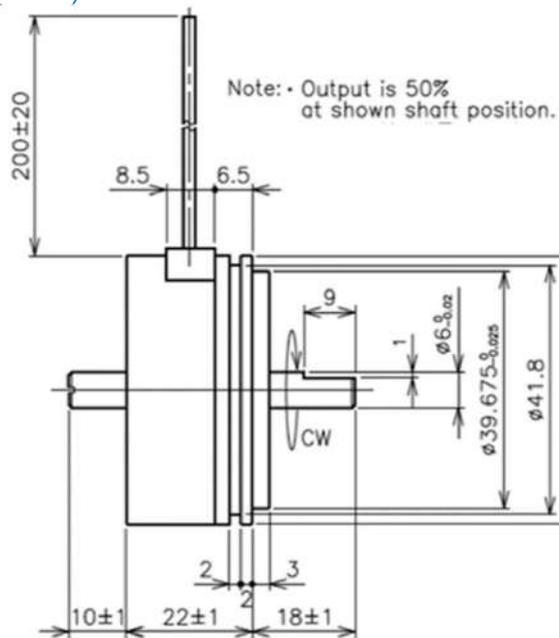
General

- Single-turn Hall-IC Angle Sensor
- Effective Electrical Travel: 360° (=359.8°)
- Absolute Linearity: ±1%FS
- Input Voltage: 14~32V
- Output range: DC0~10V
- Single (3wires)/ Dual Output (6wires or 4wires)

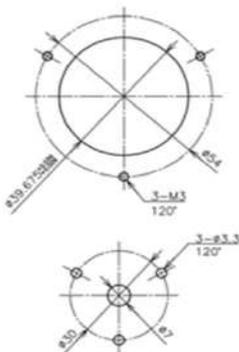
Material

- Housing: Aluminum
- Shaft: Stainless Steel

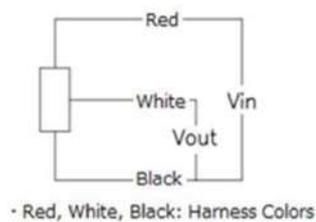
Dimension (mm)



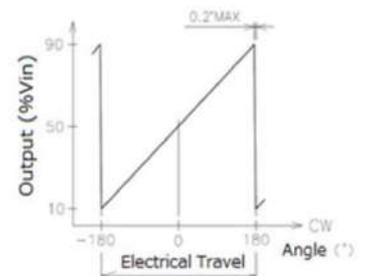
Mounting(mm)



Schematic

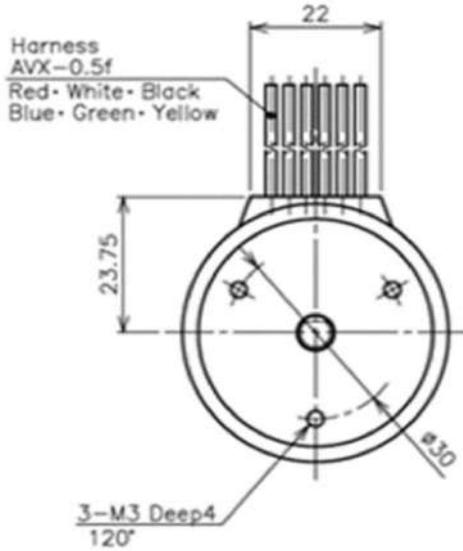


Output Characteristics

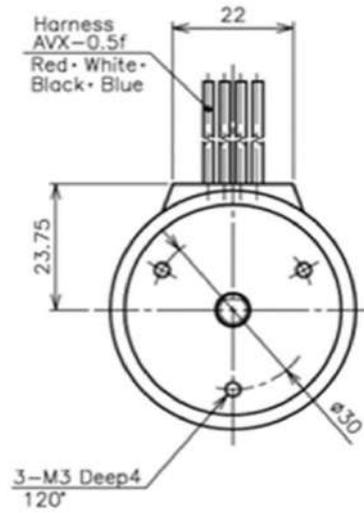


Dimension (mm)

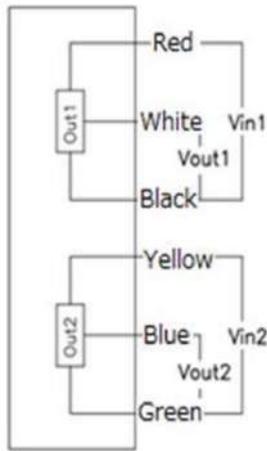
Dual Output, 6 wires



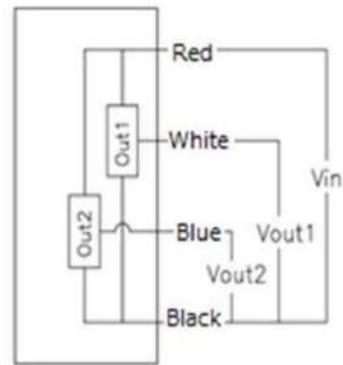
Dual Output, 4 wires



Schematic



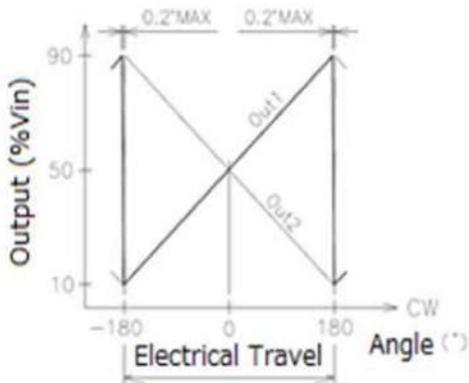
Each color indicate harness colors



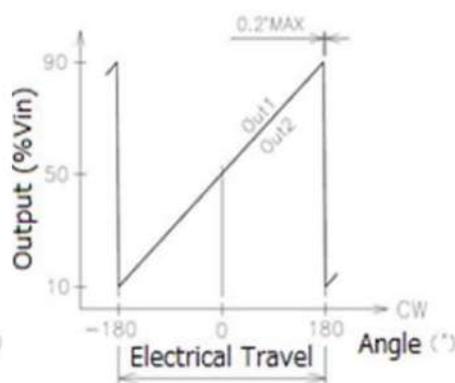
Each color indicate harness colors

Output Characteristics

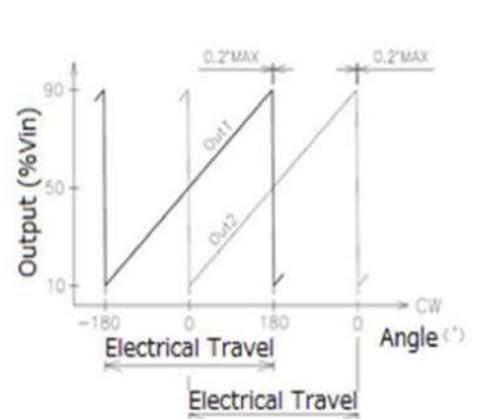
Cross Output



Parallel Output



180° Phase Output



Specifications

CP-45H-10V	CP-45HS-10V	CP-45HC-10V	CP-45HP-10V	CP-45HSP-10V	CP-45HSC-10V
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Electrical Specifications

Effective Electrical Travel	360° (=359.8°)				
Output Range	0~10V				
Absolute Linearity	±1%FS (FS=360°)				
Input Voltage	DC14~32V				
Load Resistance	10KΩMIN.				
Insulation Resistance	100MΩMIN. DC50V				
Supply Current	13mA MAX.				26mA MAX.
Output Resolution	12bit (Shaft Rotational Speed 16rpm MAX.)				
Hysteresis	±0.2%FS MAX.				
Response Time	0.9ms MAX.				
Temp. Characteristics -40~100°C (Ref.Temp. 25°C)	±3.6° MAX.				
Dual Output Difference	---	---	100±1.5%Vin	±1.5%Vin	±1.5%Vin 100±1.5%Vin

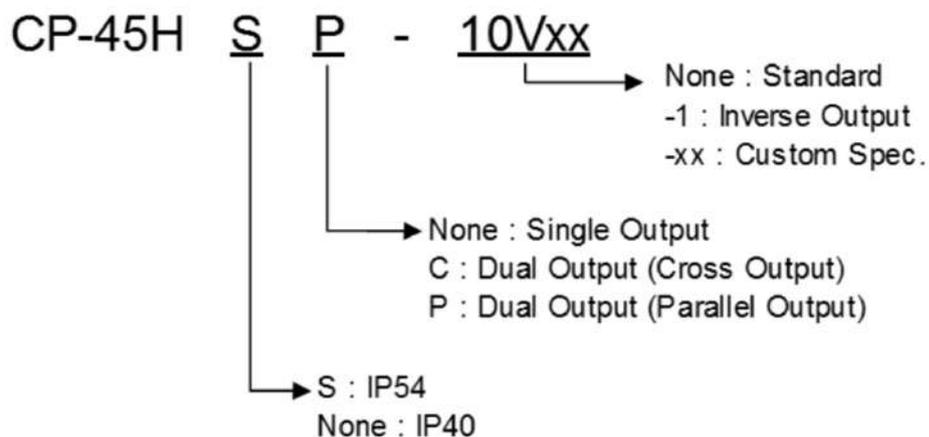
Mechanical Specifications

Total Mechanical Travel	360° Endless				
Thrust Load Tolerance	2N				
Radial Load Tolerance	6N				
Mass	Approx. 100g				
Torque	1.8mN · m	30mN · m	1.8mN · m	1.8mN · m	30mN · m 30mN · m

Environmental Specifications

Life Cycle	10 Million Cycle (Room Temp. No load)				
Category Temp. Range	-40~+100°C				
Storage Temp. Range	-40~+100°C				
Vibration	5~500Hz, 200m/S ² (20G) 3directions 4hours each				
Shock	1000m/S ² (100G), 6directions 3times				
EMS	100V/m 1M~1GHz (ISO 11452)				
ESD (Case to Each Terminal)	±15kV MAX. (IEC61000-4-2)				
ESD (Between Each Terminal)	±15kV MAX. (IEC61000-4-2)				
IP Level	IP40	IP54	IP40	IP40	IP54 IP54

CP-45H-5V Model Number Designation



Handling Instruction

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