

Contactless Hall-IC Angle Sensor

CP-45H-5V Series

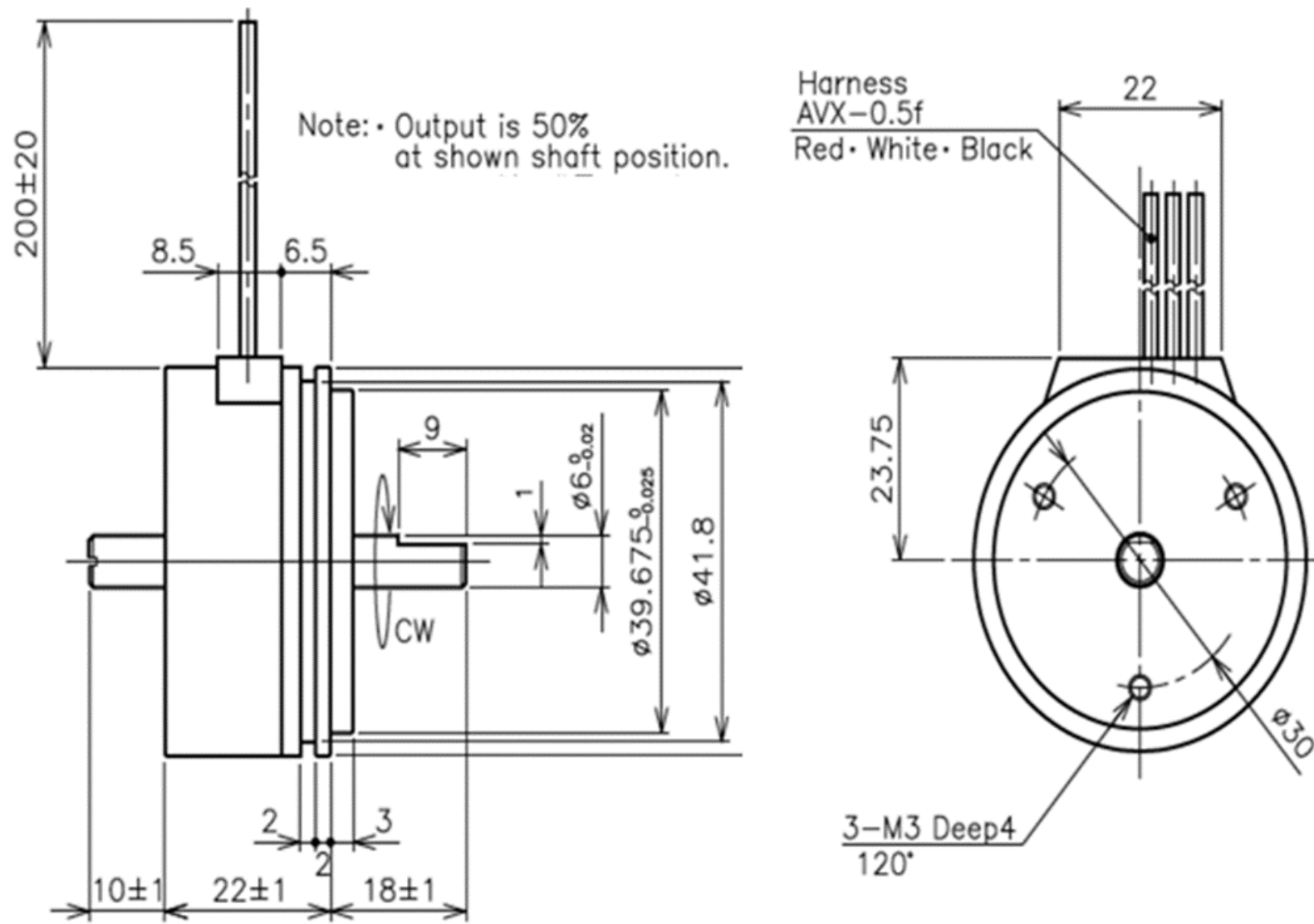


- Contactless Hall-IC Angle Sensor
- Effective Electrical Travel : 360°
- Absolute Linearity : ±1%FS
- Input Voltage : 8 ~ 32V
- Output Range : DC 0 ~ 5V

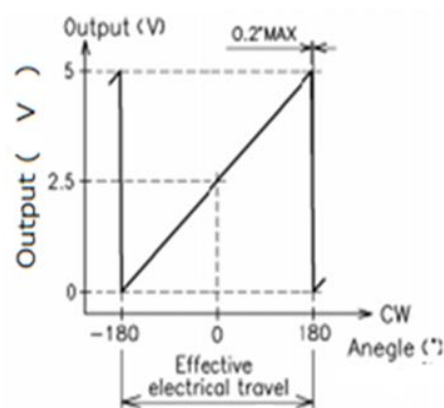
[Material]

- Housing : Aluminum
- Shaft : Stainless Steel

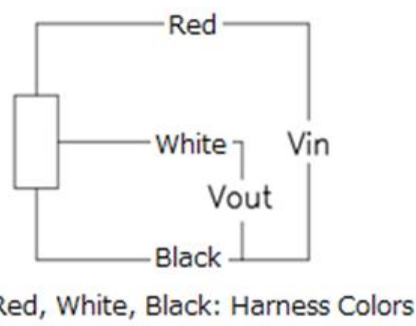
Dimension (mm)



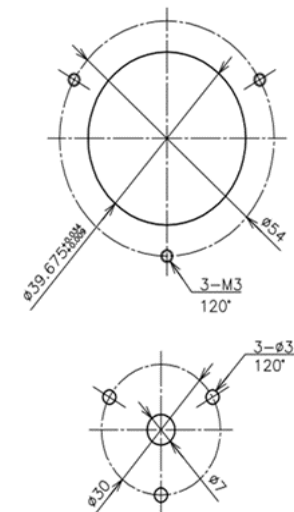
Output Characteristics



Schematic

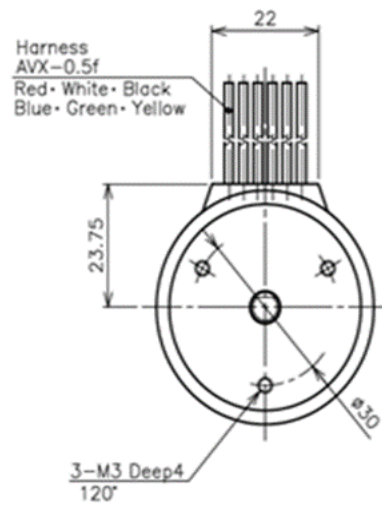


Mounting

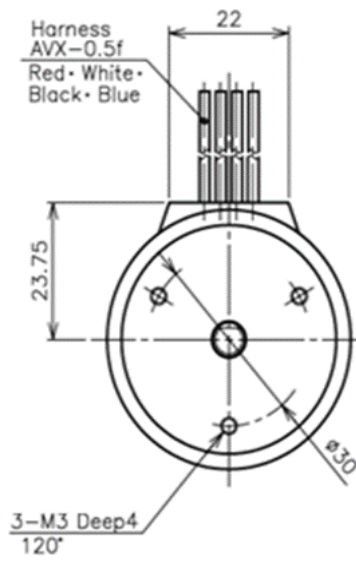


■ **Dimension (mm)**

Dual Output, 6 wires

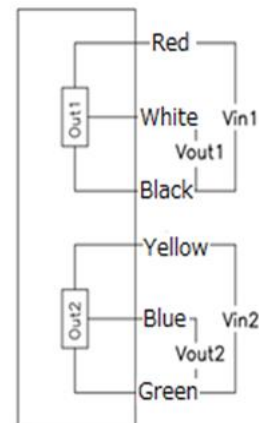


Dual Output, 4 wires



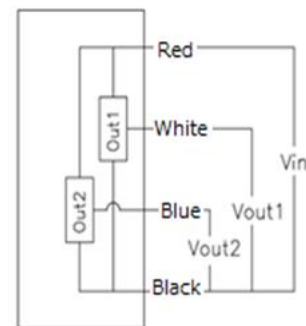
■ **Schematic**

Dual Output, 6 wires



Each color indicate harness colors

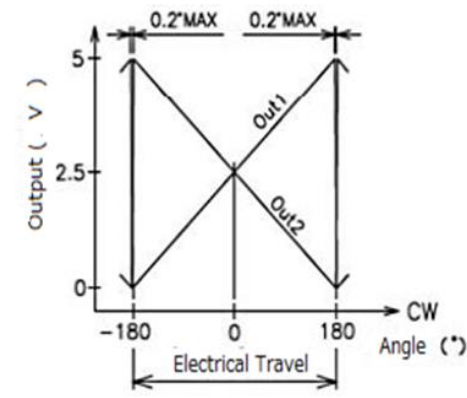
Dual Output, 4 wires



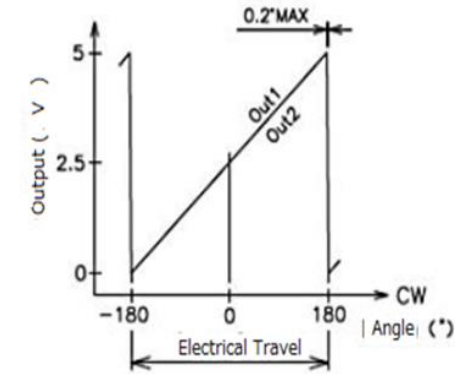
Each color indicate harness colors

■ **Output Characteristics**

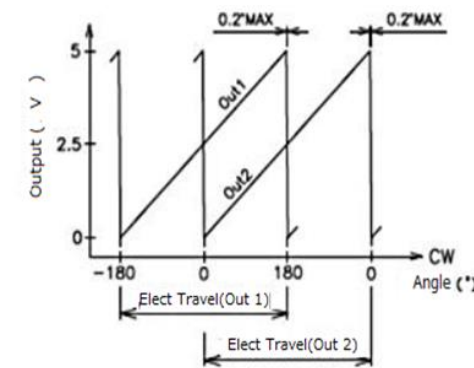
CP-45HC-5V Cross Output



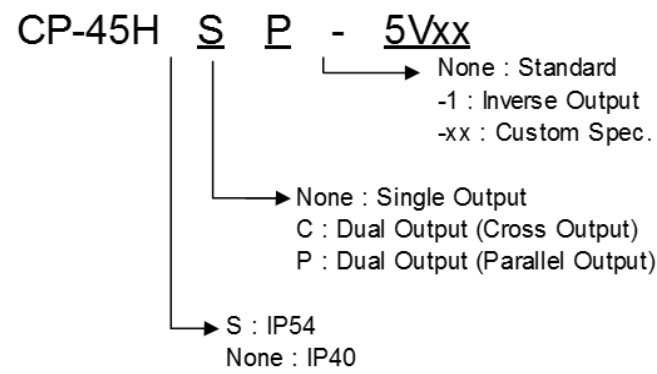
CP-45HP-5V Parallel Output



CP-45HP-5V 180° Phase Output



■ **CP-45H-5V Model Number Designation**



[Model No.]	CP-45H-5V	CP-45HS-5V	CP-45HC-5V	CP-45SC-5V	CP-45HP-5V	CP-45HSP-5V
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Electrical Specifications

Effective Electrical Travel	360°					
Output Range	0 ~ 5 V					
Absolute Linearity	± 1.0 %FS					
Input Voltage	DC 8 ~ 32 V					
Load Resistance	10 KΩ MIN.					
Supply Current	13 mA MAX. /1ch					
Insulation Resistance	100 MΩ MIN. DC 50V					
Output Resolution	12 bit (0 ~ 100%Vin) (Shaft Rotational Speed 16rpm MAX.)					
Response Time	0.9ms MAX.					
Hysteresis	± 0.2 %FS MAX.					
Temp. Characteristics -40 ~ 100°C (Ref.Temp. 25°C)	± 3.6° MAX.					
Dual Output Difference	---	100 ± 1.5%Vin (Sum 1 and 2)			± 1.5 %Vin	

Mechanical Specifications

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

Environmental Specifications

Life Cycles	10 M Cycles (Room Temp., No load, CW / CCW)					
Category Temp. Range	-40 ~ +100 °C (No condensation)					
Storage Temp. Range	-40 ~ +100 °C (No condensation)					
Vibration	5 ~ 500 Hz (6min) 200m/S ² (20G) 3 directions 4 hours each					
Shock	1000 m/S ² (100G) 6 directions 3 times					
EMS	100V/m 1M ~ 1GHz (ISO 11452)					
ESD (Case to each terminals)	± 15 kV MAX. (IEC 61000-4-2)					
ESD (Between each terminals)	± 15 kV MAX. (IEC 61000-4-2)					
IP Level	IP 40	IP 54	IP 40	IP 54	IP 40	IP 54

■ OPTIONS

- Effective Electrical Travel : 90° ~ 360°
- Inverse Output

■ Handling Instruction

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