

Contactless Hall-IC Angle Sensor

# CP-45H Series

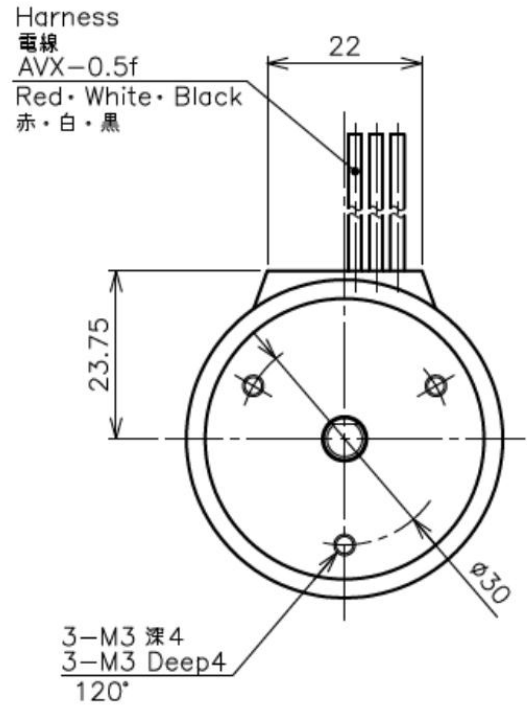
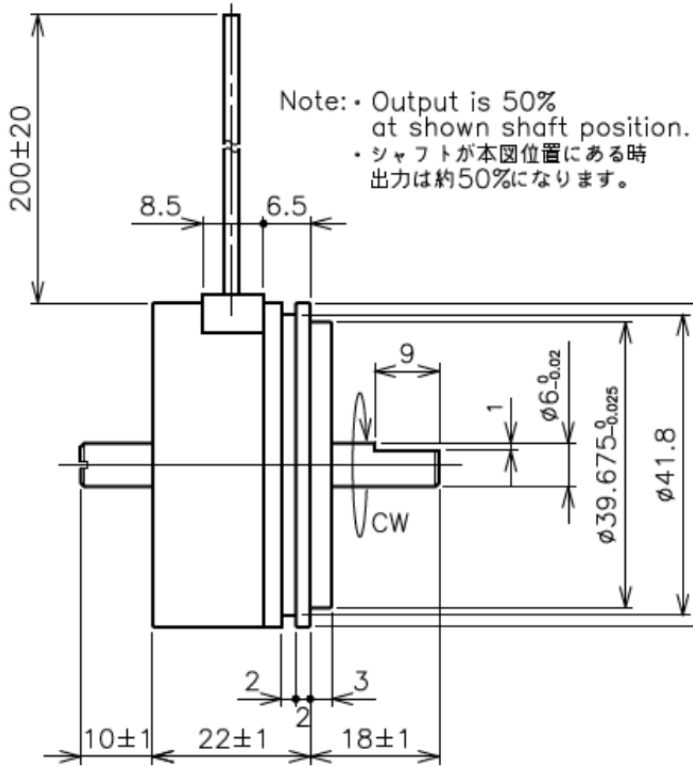


- Contactless Hall-IC Angle Sensor
- Effective Electrical Travel : 360°
- Absolute Linearity : ±0.4%FS
- Input Voltage : DC5±0.5V
- Output Range : 10%~90%Vin

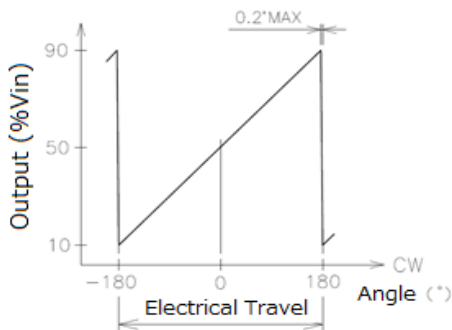
**[OPTIONS]**

- Available Effective Electrical Travel Range : 90°~360°
- Dual Output
- Inverse Output

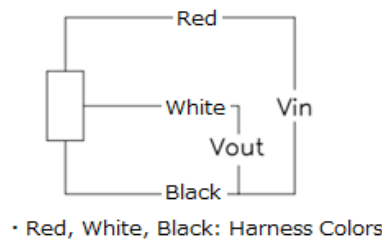
**Dimension** [mm]



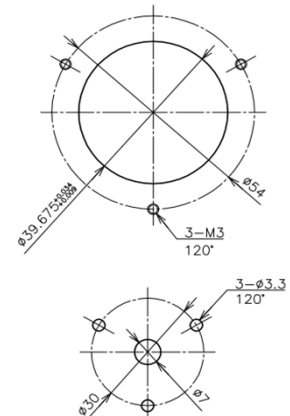
**Output Characteristics**



**Schematic**

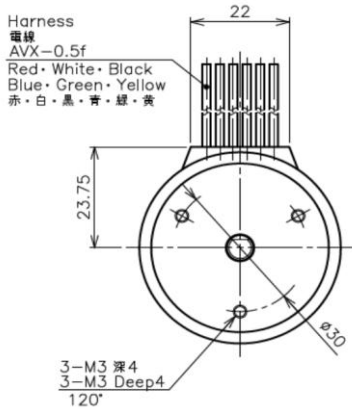


**Mounting**



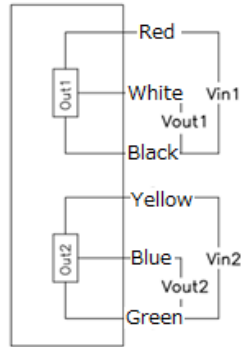
**Dimension** [mm]

Dual Output, 6wires



**Schematic**

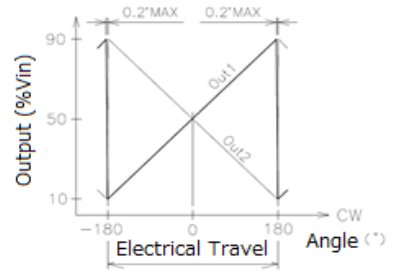
Dual Output, 6wires



Each color indicate harness colors

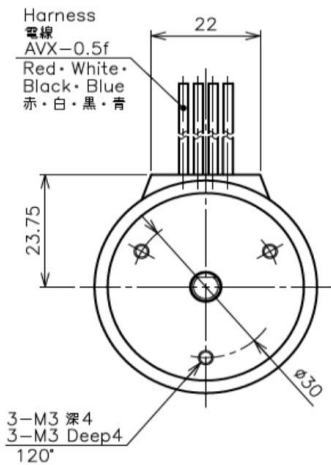
**Mounting**

CP-45HC Cross Output

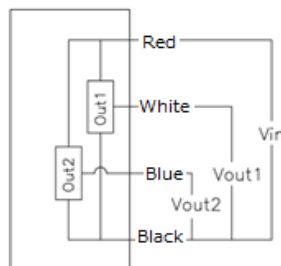


CP-45HP Parallel Output

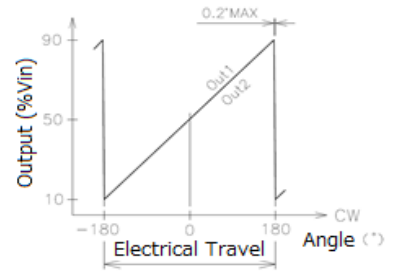
Dual Output, 4wires



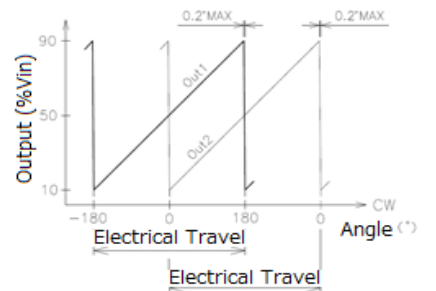
Dual Output, 4wires



Each color indicate harness colors

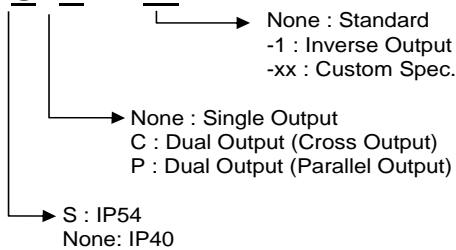


CP-45HP(180°Phase Output)



**CP-45H Model Number Designation**

CP-45H S P - xx



**【Electrical Specifications】**

Model No.	CP-45H	CP-45HS	CP-45HC	CP-45SC	CP-45HP	CP-45HSP	
Effective Electrical Travel	360						°
Output Range	10~90						%Vin
Absolute Linearity	±0.4						%FS
Input Voltage	DC5±0.5						V
Load Resistance	10						kΩ
Supply Current	10 MAX.						mA/1ch
Insulation Resistance	100 MIN /DC50						MΩ
Output Resolution	12 (Shaft Rotational Speed 20rpm MAX.)						bit
Response Time	0.9						ms
Hysteresis	±0.2						%FS
Temp. Characteristics -40~100°C(Ref.Temp.25°C)	±1.08						°
Dual Output Difference	---		100±1.5 (Sum 1,2)			±1.5	%Vin

**【Mechanical Specifications】**

Model No.	CP-45H	CP-45HS	CP-45HC	CP-45SC	CP-45HP	CP-45HSP	
Total Mechanical Travel	360 endless						°
Torque	1.8	30	1.8	30	1.8	30	mN·m
Thrust Load Tolerance	2						N
Radial Load Tolerance	6						N
Mass	Approx. 100						g

**【Environmental Specifications】**

Model No.	CP-45H	CP-45HS	CP-45HC	CP-45SC	CP-45HP	CP-45HSP	
Life Cycles	10M (Room Temp. , No Load, CW/ CCW)						Cycle
Category Temp. Range	-40~+100 (No condensation)						°C
Storage Temp. Range	-40~+100 (No condensation)						°C
Vibration	5~500Hz(6 min) 200m/s <sup>2</sup> (20G) 3directions 4hours each						
Shock	1000m/s <sup>2</sup> (100G) 6directions 3times						
E M S	100V/m 1M~1GHz (ISO 11452)						
ESD (Case to Each Terminal)	±15 MAX. (IEC 61000-4-2)						kV
ESD (Between Each Terminal)	±15 MAX. (IEC 61000-4-2)						kV
IP Level	IP40	IP54	IP40	IP54	IP40	IP54	

**■ 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.