

Contactless Hall-IC Angle Sensor

CP-45H α Series

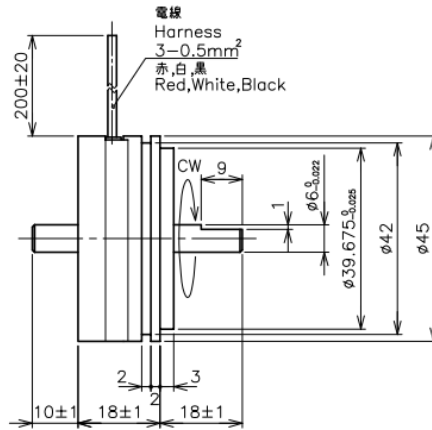
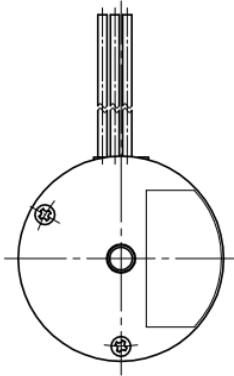


- Contactless Hall-IC Angle Sensor
- Effective Electrical Travel : 90° ~ 360°
- Absolute Linearity : $\pm 0.4\%$ FS (Independent Linearity $\pm 0.2\%$)
- Mounting : Servo Mount / Screw Mount

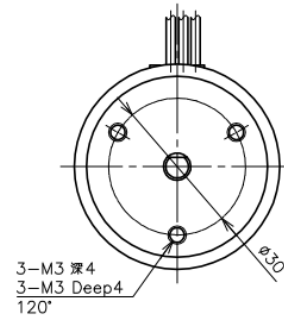
【Material】

- Housing : Aluminum
- Shaft : Stainless Steel
- Ball Bearing : Stainless Steel

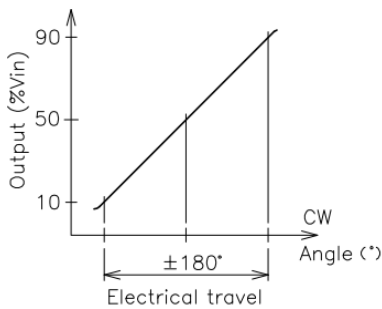
Dimension [mm]



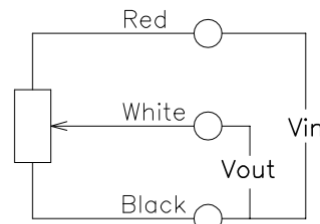
- シャフトが本図位置にある時出力は約50%Vinになります。
- Output is 50%Vin at shown shaft position.



Output Characteristics



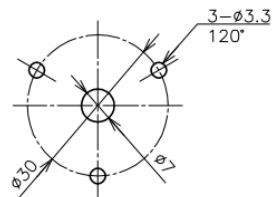
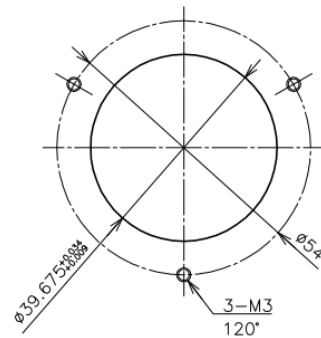
Schematic



- Red, White, Black indicate harness colors.

Mounting

Servo Mount



Screw Mount

【Model No.】	CP-45H
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【Electrical Specifications】

Effective Electrical Travel	360	°
Output Range	5 ~ 95	%Vin
Absolute Linearity	±0.4 (FS=360°) Ind.Lin.:±0.2	%FS
Input Voltage	DC5±0.5	V
Load Resistance	MIN. 1M	Ω
Supply Current	MAX. 30	mA
Output Resolution	MAX. 0.1 (MAX. 400rpm)	°
Hysteresis	±0.5 (±0.14%FS=360°)	°
Temp. Characteristics -40°C ~ +100°C(Reference Temp. 25°C)	±0.3 (=±1.08°) FS=360°	%FS

【Mechanical Specifications】

Total Mechanical Travel	360 Endless	°
Torque	MAX. 1.8	mN·m
Thrust Load Tolerance	2	N
Radial Load Tolerance	6	N
Mass	Approx. 80	g

【Environmental Specifications】

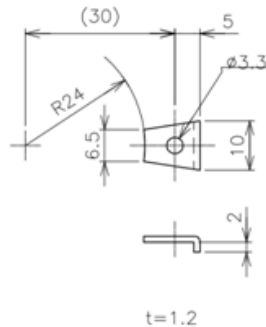
Life Cycles	MIN. 50 Million	Cycle
Category Temperature Range	-40 ~ +100	°C
Storage Temperature Range	-40 ~ +100	°C
Vibration	200m/s ² 5-500Hz(6 min.) 3 axis 2 hours	
Shock	1000m/s ² 11ms 6 directions 3 times	
EMS (IEC61000-4-2)	10V/m, 80M - 1GHz	
ESD (Case To Each Terminal)	±8kV (IEC61000-4-2)	
ESD (Between Each Terminal)	±8kV (IEC61000-4-2)	
IP Level	IP40	

■ Options

•Higher protection grade (IP54) : Model No. CP-45SH

■ Accessories

Mounting Cleats : 3 pieces



■ Handling Instruction

- In applying input power, voltage Vin must rise to 4.5V within 0.2 second, otherwise, output shall be disabled (Vout=0V).
- These products do not shielded with shaft bearing.
- Do not use Hall-IC sensor as a variable resistor.
- This product may be influenced from external magnetic field.
- Use this sensor in the place where is protected from ESD.
- This model is available to remove mounting flange.