

Conductive Plastic Angle Sensor

CP-45FB Series



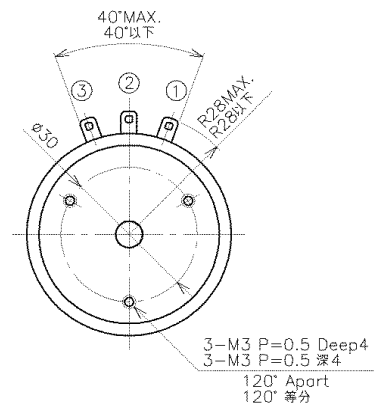
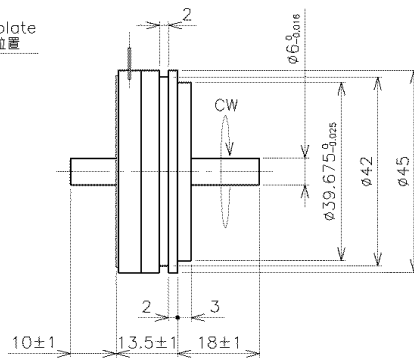
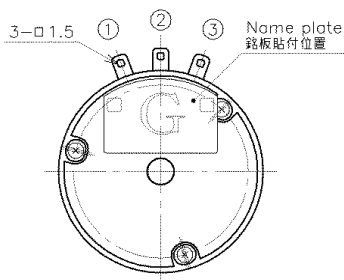
- Conductive Plastic Angle Sensor
- Prolonged lifetime - 50 Mil. Revolution min.
- Effective Electrical Travel : 350°
- Independent Linearity : ±0.1%
- Ratio Output
- Servo Mount and Screw Mount
- 【Options】
- Two Gangs / Output Phase

【Material】

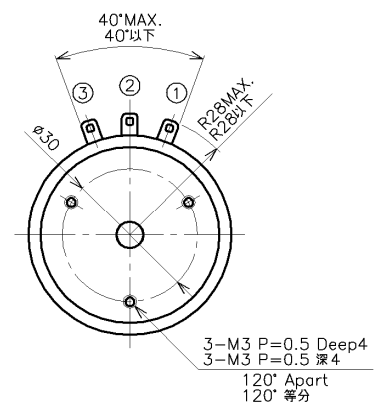
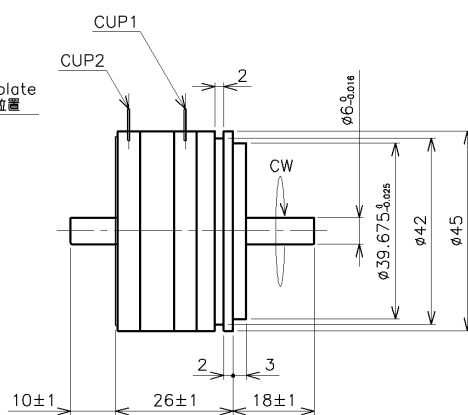
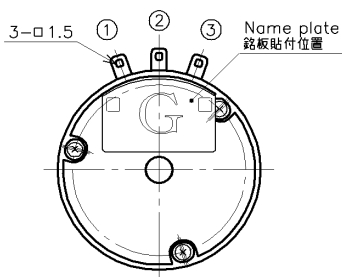
- Housing : Aluminum
- Resistive Element : Plastic
- Shaft : Stainless Steel
- Ball Bearing : Stainless Steel

Dimension [mm]

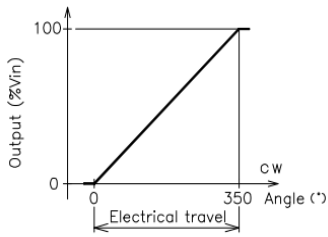
CP-45FB



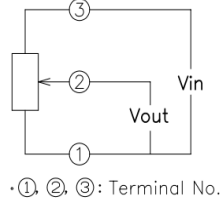
CP-45FB×2



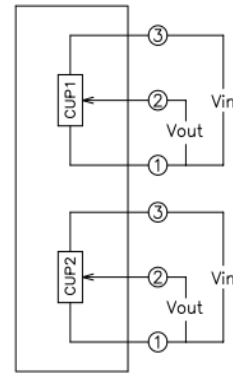
Output Characteristics



Schematic

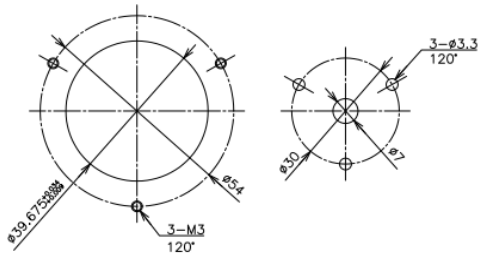


CP-45FB



CP-45FB x 2

Mounting



Servo Mount

Screw Mount

【Model No.】	CP-45FB	CP-45FB x 2
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【Electrical Specifications】

Effective Electrical Travel	350 +3, -2	°
Total Resistance	(Standard) 1, 2, 5, 10 (Option) 0.5, 20	kΩ
Total Resistance Tolerance	±15	%
Independent Linearity	±0.1	%
Rated Dissipation	3/70°C	1.8/70°C
Output Smoothness	MAX. 0.1	%
Insulation Resistance	MIN. 100/DC1000V	MΩ
Dielectric Strength	AC1000/1 Minute	V
Temperature Coefficient of Resistance	±400	ppm/K

【Mechanical Specifications】

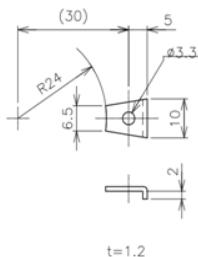
Total Mechanical Travel	360 Endless	°
Torque	MAX 1.8	MAX 3.3
Thrust Load Tolerance	1	2
Radial Load Tolerance	5	6
Mass	51	75

【Environmental Specifications】

Life Cycles	50 Million	Cycle
Category Temperature Range	-40 ~ +120	°C
Storage Temperature Range	-40 ~ +120	°C
Vibration	200m/s ² 2000Hz 3 axis 2 hours each	
Shock	600m/s ² 11ms 6 directions 3 times	

Accessories

Mounting Cleats : 3 pieces



Handling Instruction

- To avoid burnout of resistive element, do not supply more than 1mA current to terminal 2.
- Miswiring might cause burnout of resistive element.
- To reduce sliding noise, add load resistance should be more than 100times and less than 1000times of total resistance.
- Slight continuous vibration such as dither might cause short lifetime of the sensor.