

Conductive Plastic Angle Sensor

CP-45F Series



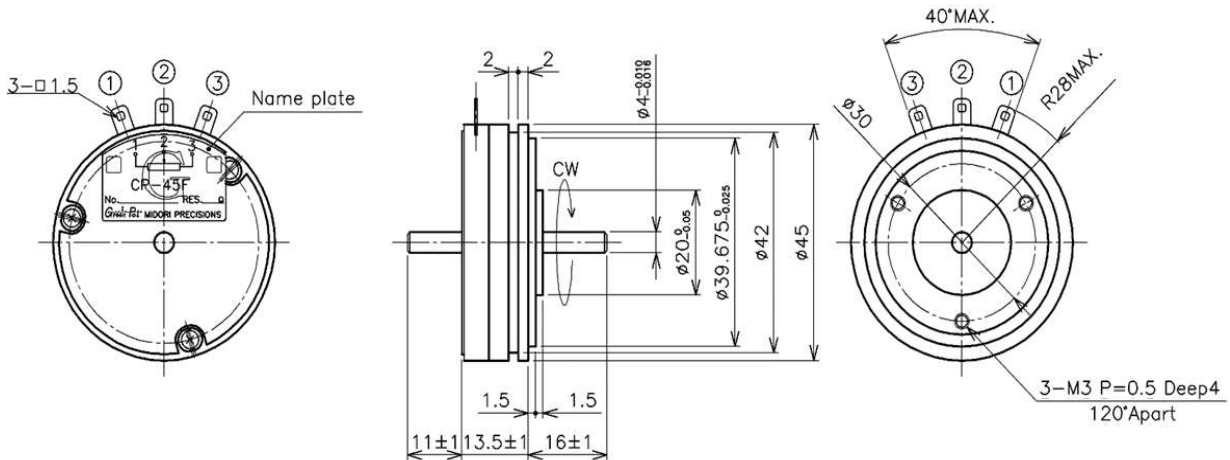
- Conductive Plastic Angle Sensor
- Effective Electrical Angle: 350°
- Independent Linearity: ±0.1%
- Output: Voltage Ratio Output
- Servo Mount & Screw Mount
- Single Output
- Ball Bearing
- Shaft Size: Ø4mm (CP-45F)/ Ø6mm (CP-45FB)

[Material]

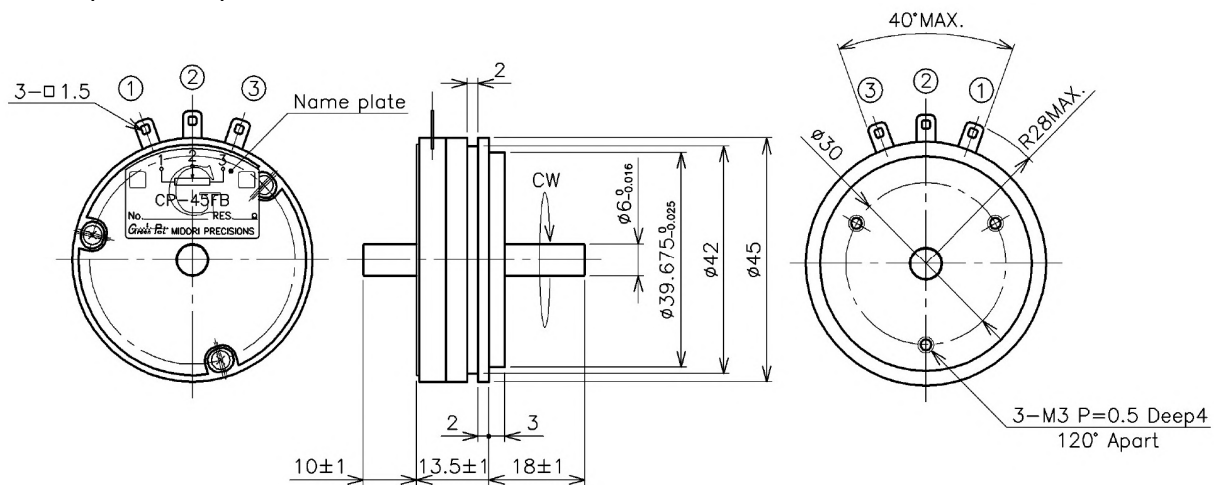
- Housing : Aluminum
- Shaft : Stainless Steel
- Ball Bearing : Stainless Steel

■ Dimension (mm)

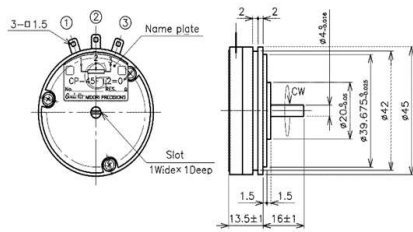
CP-45F (Ø4mm Shaft)



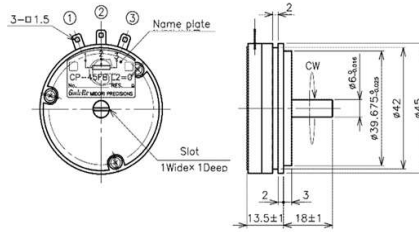
CP-45FB (Ø6mm Shaft)



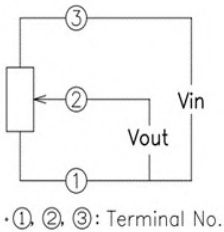
CP-45F Single Shaft Version



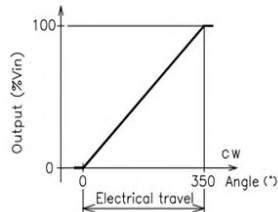
CP-45FB Single Shaft Version



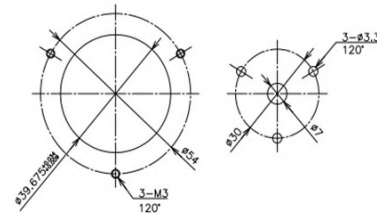
■ Schematic



■ Output Characteristics



■ Mounting



Model No.	CP-45F (Φ4mm Shaft)	CP-45FB (Φ6mm Shaft)
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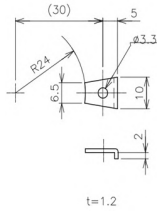
[Electrical Specifications]	
Effective Electrical Angle	350° +3°, -2°
Total Resistance	1K, 2K, 5K, 10K Ω
Total Resistance Tolerance	±15%
Independent Linearity	±0.1%
Rated Dissipation	3W/70°C
Output Smoothness	0.1% MAX.
Insulation Resistance	100MΩ MIN./DC1000V
Dielectric Strength	AC1000V/ 1minute
TC of Resistance	±400ppm/K
[Mechanical Specifications]	
Total Mechanical Travel	360° Endless
Torque	1.8mN · m MAX.
Thrust Load Tolerance	2N
Radial Load Tolerance	6N
Weight	51g
[Environmental Specifications]	
Life Cycles	50M cycles
Category Temperature Range	-40 ~ +120°C
Storage Temperature Range	-40 ~ +120°C
Vibration	200m/S ² 2000Hz 3axis 2hours each
Shock	600m/S ² 11mS 6 directions 3 times
Storage Temp. Range	-40 ~ +85°C

■ Options

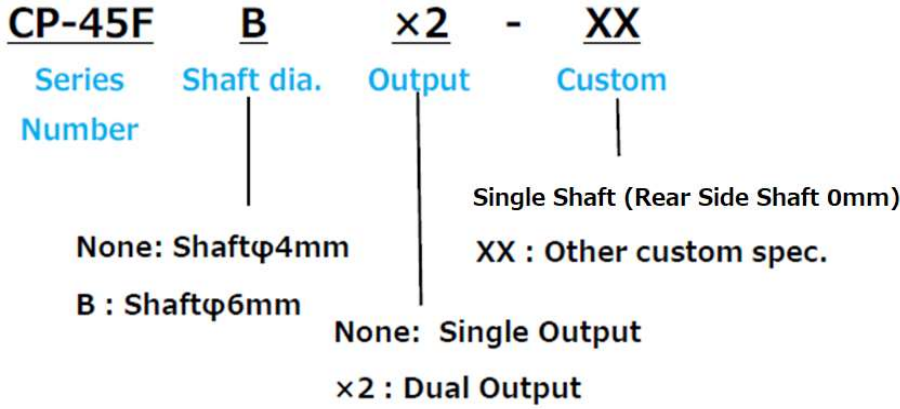
- Total Resistance: 0.5Ω and 20K Ω

■ Accessories

- Mounting Cleats: 3 Pieces



■ Model Number Designation



■ 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 100 times and less than 1000 times of total resistance.
- Slight continuous vibration such as dither might cause short lifetime of the sensor.