

Conductive Plastic Angle Sensor

CP-45Fx2 Series



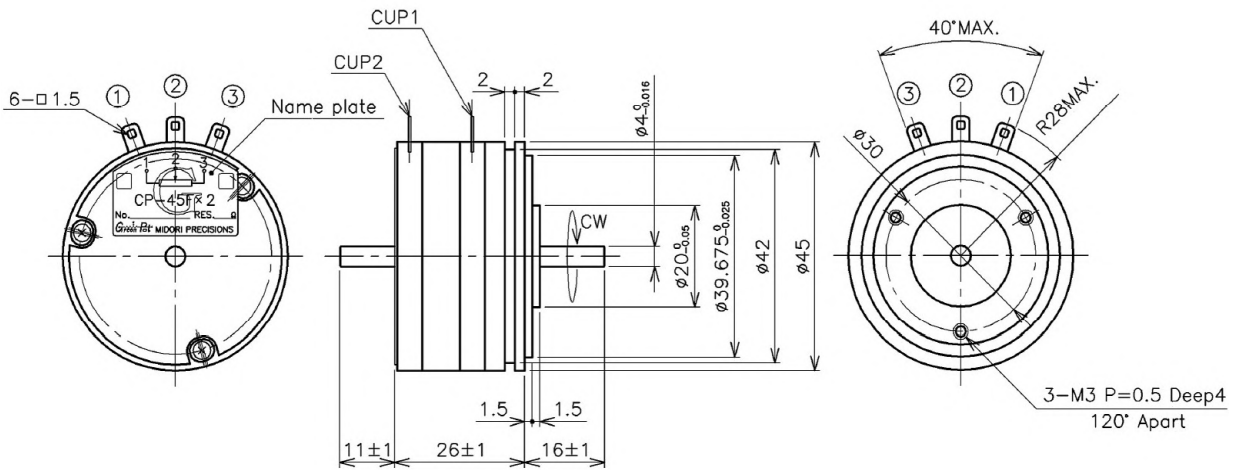
- Conductive Plastic Angle Sensor
- Effective Electrical Angle: 350°
- Independent Linearity: ±0.1%
- Output: Voltage Ratio Output
- Servo Mount & Screw Mount
- Dual Output
- Ball Bearing
- Shaft Size: $\Phi 4\text{mm}$ (CP-45Fx2)/ $\Phi 6\text{mm}$ (CP-45FBx2)

[Material]

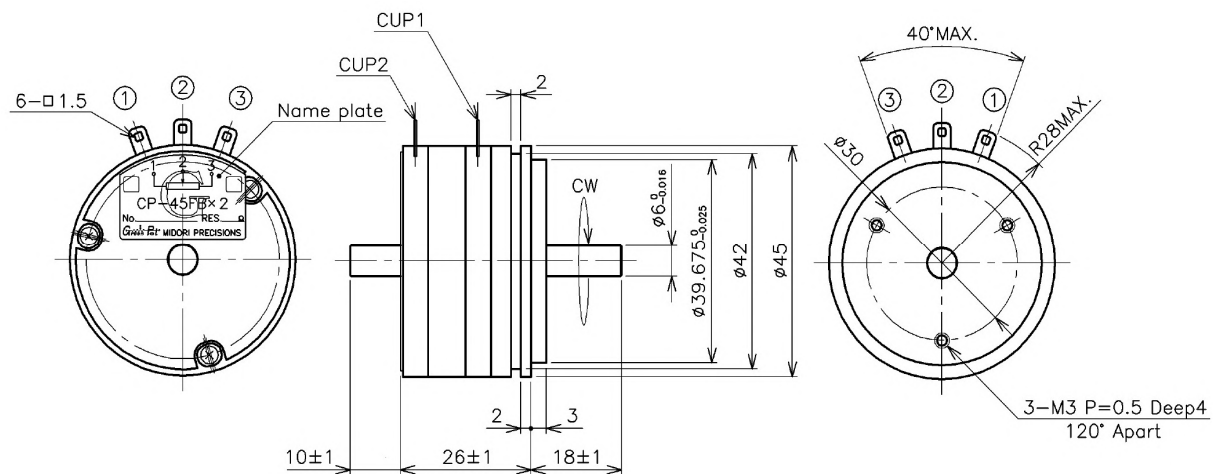
- Housing : Aluminum
- Shaft : Stainless Steel
- Ball Bearing : Stainless Steel

Dimension (mm)

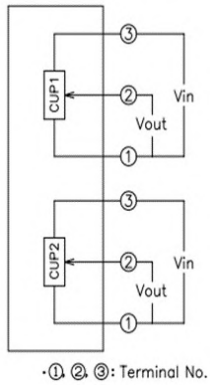
CP-45Fx2 Series



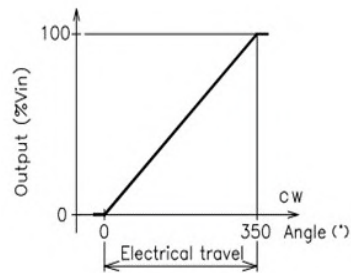
CP-45FBx2 Series



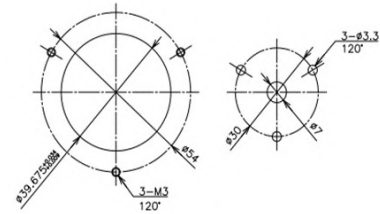
■ Schematic



■ Output Characteristics



■ Mounting



[Model No.]

CP-45Fx2 (Φ4mm Shaft)

CP-45FBx2 (Φ6mm Shaft)

[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	1.8W/ 70°C
Output Smoothness	0.1% MAX.
Insulation Resistance	100MΩ MIN./DC1000V
Dielectric Strength	AC1000V/ 1Minute
TC of Resistance	±400 ppm/K

[Mechanical Specifications]

Total Mechanical Angle	360° Endless
Torque	3.3 mN · m MAX.
Thrust Load Tolerance	2N
Radial Load Tolerance	6N
Weight	Approx. 75g

[Environmental Specifications]

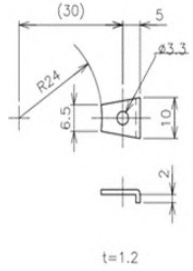
Life Cycles	50 Million cycles
Category Temp. Range	-40 ~ +120°C
Storage Temp. Range	-40 ~ +120°C
Vibration	200m/S ² , 2000Hz, 3axis 2hours each
Shock	600m/S ² , 11ms, 6directions 3times

■ Options

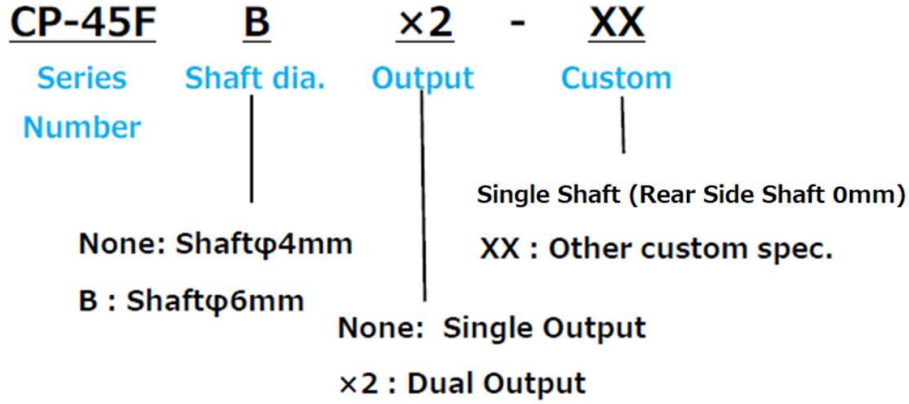
- Total Resistance: 500Ω and 20KΩ

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