

Conductive Plastic Angle Sensor

MIDORI CP-45F Series



General

- Conductive Plastic Angle Sensor
- Effective Electrical Angle: 350°
- Absolute Linearity: $\pm 0.1\%FS$
- Output: Voltage Ration Output
- Servo Mount & Screw Mount

CP-45F: $\Phi 4mm$ Shaft

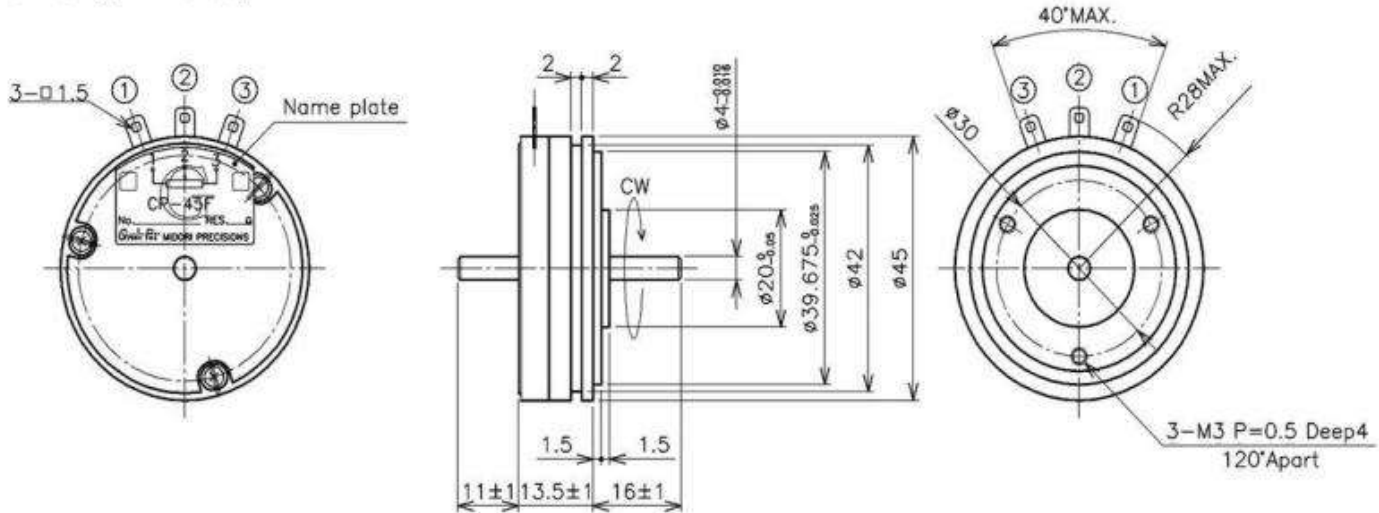
CP-45FB: $\Phi 6mm$ Shaft

Material

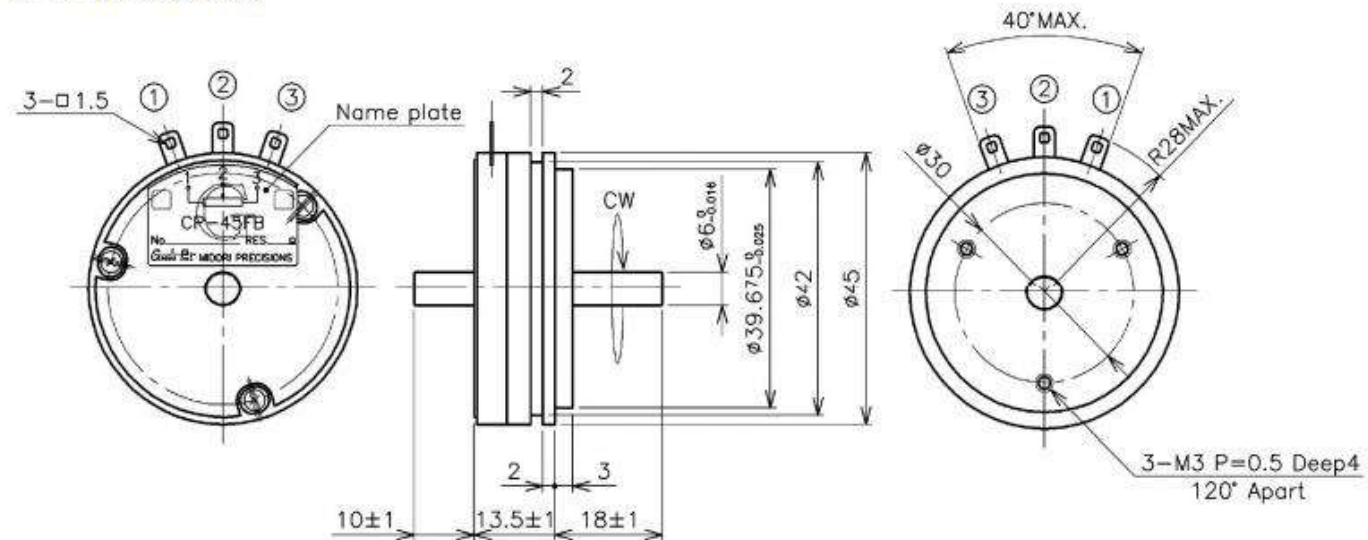
- Housing: Aluminum
- Shaft: Stainless Steel
- Ball Bearing: Stainless Steel

Dimension (mm)

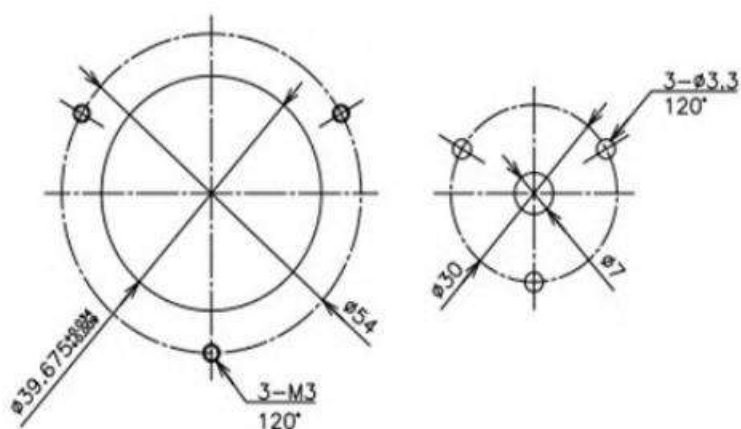
CP-45F ($\Phi 4mm$ Shaft)



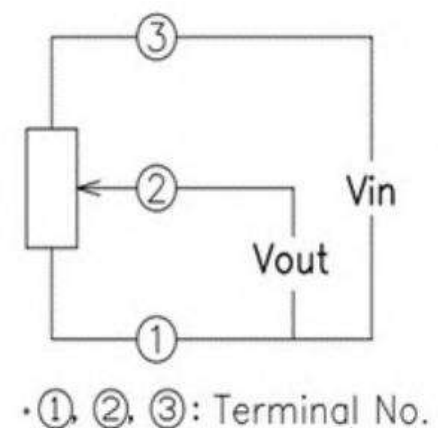
CP-45FB ($\Phi 6mm$ Shaft)



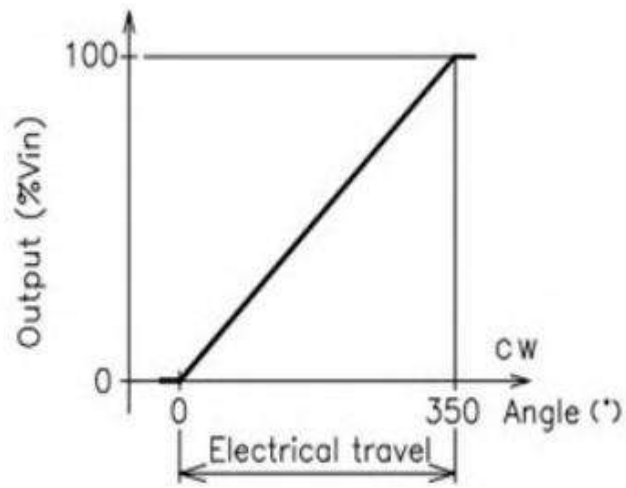
Mounting(mm)



Schematic



Output Characteristics



Specifications

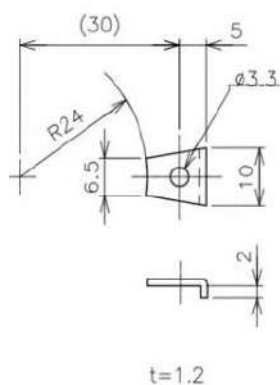
	CP-45F (Φ4mm Shaft)	CP-45FB (Φ6mm Shaft)
Electrical Specifications		
Effective Electrical Travel	350° +3°, -2°	
Total Resistance	1K, 2K, 5K, 10K Ω	
Total Resistance Tolerance	±15%	
Independent Linearity	±0.1%	
Rated Dissipation	3W/70°C	
Output Smoothness	0.1% MAX.	
Insulation Resistance	100MΩ MIN./ DC1000V	
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	Approx. 51g	
Environmental Specifications		
Life Cycles	50M Cycles	
Storage Temp. Range	-40~+120°C	
Category Temp. Range	-40~+120°C	
Shock	600m/S ² , 11ms, 6 directions 3 times	
Vibration	200m/S ² , 2000Hz, 3 axis 2 hours each	

Options

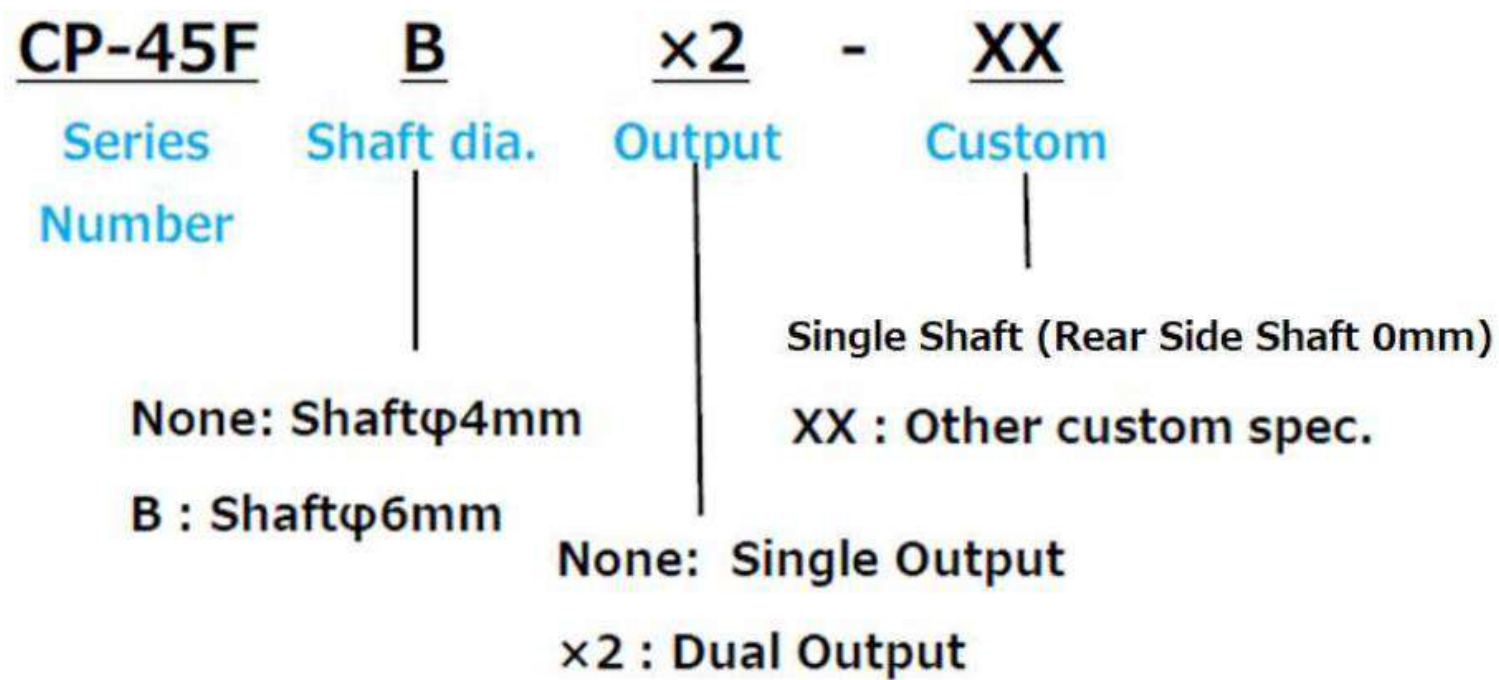
- Total Resistance: 0.5Ω and 20KΩ
- Single Shaft Version

Accessories

Mounting Cleats: 3 Pieces



CP-45F Series 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.