Conductive Plastic Angle Sensor

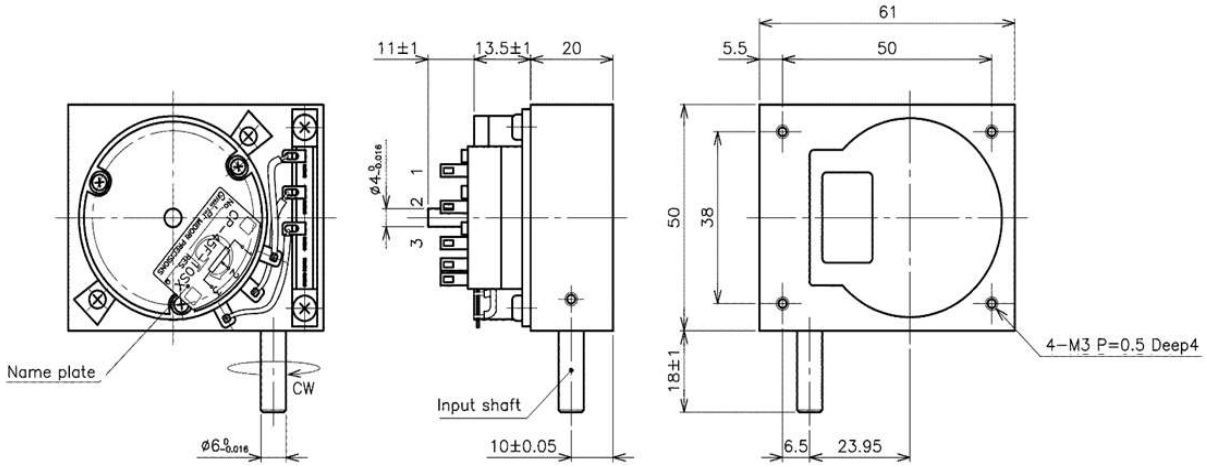
CP-45F Gear Head Series

- Conductive Plastic Angle Sensor
- Effective Electrical Angle : 3500° (CP-45F-10SX)
  : 8400° (CP-45F-24SX)
  : 12250° (CP-45F-35SX)
  : 35000° (CP-45F-100SX)
- Independent Linearity: ±0.1%
- Output: Voltage Ratio Output

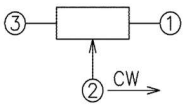
【Material】

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

■ Dimension (mm)

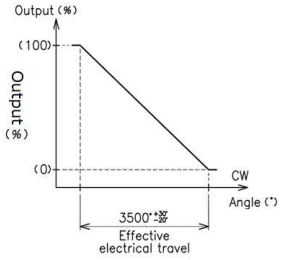


■ Schematic

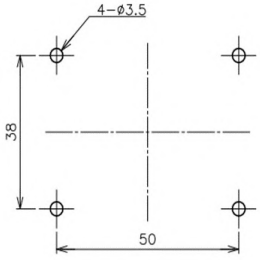


- ①②③ :Terminal No.
- This schematics shows the rotation direction as viewed from the input shaft.

■ Output Characteristics



■ Mounting



MIDORI MAC Midori America Corporation

【Model No.】	CP-45F-10SX	CP-45F-24SX	CP-45F-35SX	CP-45F-100SX	
【Electrical Specifications】					
Effective Electrical Angle	3500° +30°, -20°	8400° +72°, -48°	12250° +105°, -70°	35000°+300°, -200°	
Total Resistance	1K, 2K, 5K, 10K Ω				
Total Resistance Tolerance	±15%				
Independent Linearity	±0.1%				
Power Rating	3W/70℃				
Output Smoothness	0.1% MAX.				
Insulation Resistance	100MΩ MIN./DC1000V				
Dielectric Strength	AC1000V/1min.				
TC of Resistance	±400 ppm/K				
【Mechanical Specifications】					
Gear Ratio	10:1	24:1	35:1	100:1	
Torque	4mN・m MAX.				
Repeatability	0.03% MAX. (Including Backlash)				
Thrust Load	5N				
Radial Load	16N				
Weight	Approx. 210g				
【Environmental Specifications】					
Category Temp. Range	-40 ~ +120℃				
Storage Temp. Range	-40 ~ +85℃				

■ Options

- Total Resistance: 0.5K, 20K Ohm
- Gear Ratio: 14:1 (CP-45F-14SX), 60:1 (CP-45F-60SX)

■ 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.