

Conductive Plastic Angle Sensor

CPP-45-SX Series

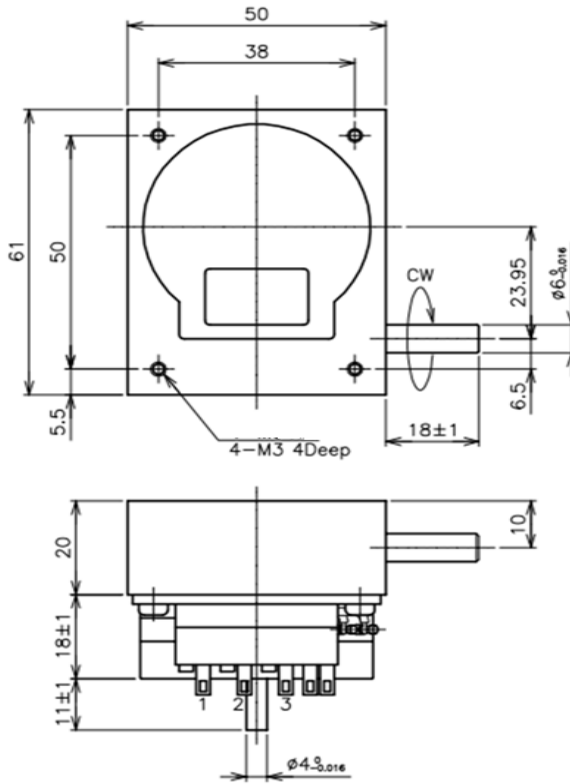


- Conductive Plastic Multi-turn Angle Sensor
- Effective Electrical Travel
 - : 3500° (CPP-45-10SX)
 - : 8400° (CPP-45-24SX)
 - : 12250° (CPP-45-35SX)
 - : 21000° (CPP-45-60SX)
 - : 35000° (CPP-45-100SX)
- Independent Linearity : ±0.3% (Special Linearity : ±0.1%)

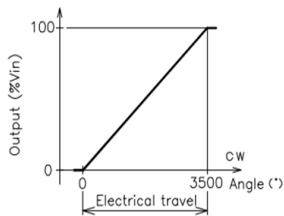
[Material]

- Housing : Aluminum
- Shaft : Stainless Steel
- Ball Bearing : Stainless Steel
- Gear Box : Aluminum die-casting

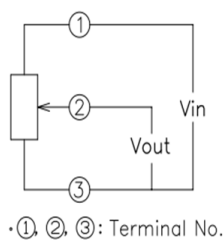
Dimension (mm)



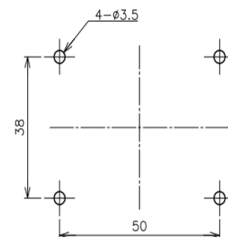
Output Characteristics



Schematic



Mounting



Model No.	CPP-45-10SX	CPP-45-24SX	CPP-45-35SX	CPP-45-60SX	CPP-45-100SX
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Electrical Specifications

Effective Electrical Travel	3500° +20°, -30°	8400°+48°, -72°	12250° +70°, -105°	21000° +120°, -180°	35000°+200°,-300°
Total Resistance	500, 1K, 2K, 5K, 10K, 20K Ω				
Total Resistance Tolerance	±15%				
Independent Linearity	±0.3% (Special Linearity ±0.1%)				
Rated Dissipation	3W/70°C				
Output Smoothness	0.1% MAX.				
Insulation Resistance	100MΩ/ DC1000V MIN.				
Dielectric Strength	AC1000V/1Minute				
TC of Resistance	±400ppm/K				

Mechanical Specifications

Gear Ratio	10:1 (10-Turn)	24:1 (24-Turn)	35:1 (35-Turn)	60:1 (60-Turn)	100:1 (100-Turn)
Torque	4mN · m MAX.				
Repeatability	0.03% MAX. (Include Backlash)				
Thrust Load Tolerance	5N				
Radial Load Tolerance	16N				
Mass	Approx. 220g				

Environmental Specifications

Category Temperature Range	-40~+100°C				
Storage Temperature Range	-40~+100°C				

■ 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.