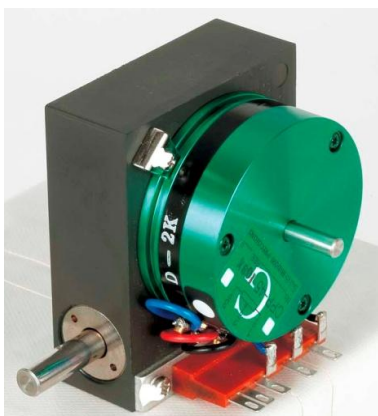


Conductive Plastic Angle Sensor

# CPP-45-SX Series



•Conductive Plastic Multi-Turn Angle Sensor

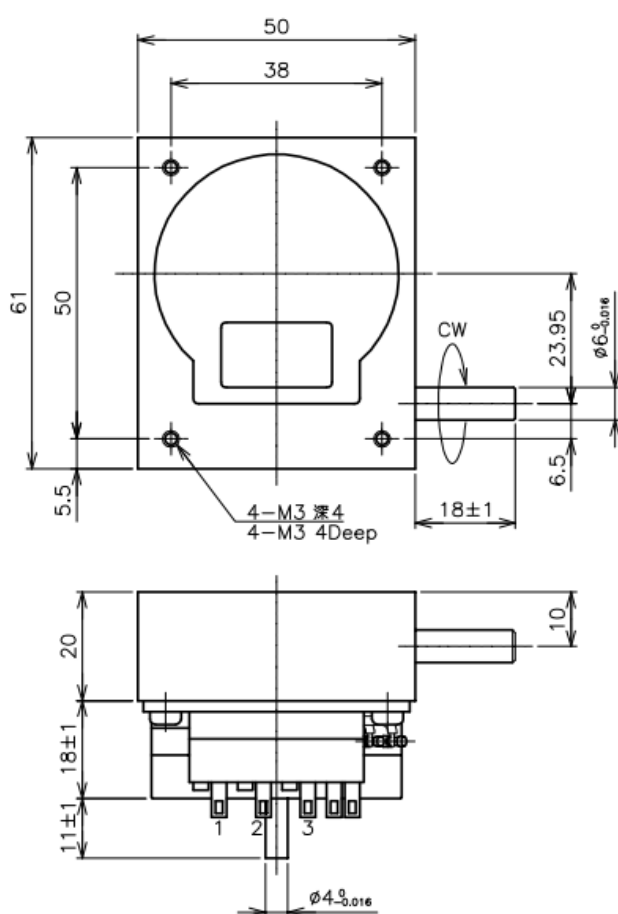
- Effective Electrical Travel : 3500° (CPP-45-10SX)
- 8400° (CPP-45-24SX)
- 12250° (CPP-45-35SX)
- 21000° (CPP-45-60SX)
- 35000° (CPP-45-100SX)

•Independent Linearity : ±0.3% (Special Linearity: ±0.1%)

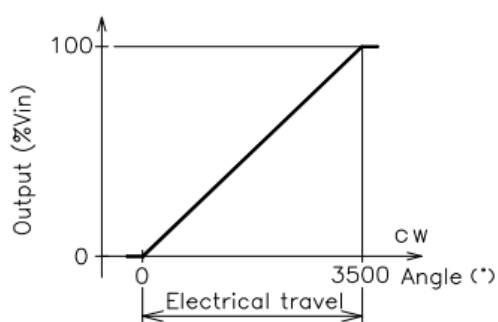
**【Material】**

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

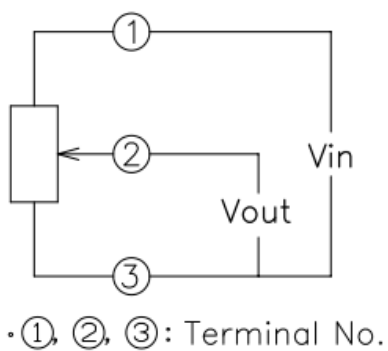
**Dimension [mm]**



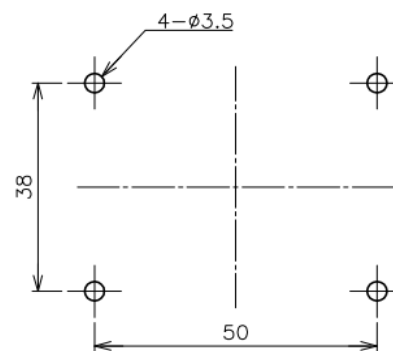
**Output Characteristics**



**Schematic**



**Mounting**



【Model No.】	CPP-45-10SX	CPP-45-24SX	CPP-45-35SX	CPP-45-60SX	CPP-45-100SX	
	<10-turn>	<24-turn>	<35-turn>	<60-turn>	<100-turn>	
<b>【Electrical Specifications】</b>						
Effective Electrical Travel	3500 +20, -30	8400 +48, -72	12250 +70, -105	21000 +120, -180	35000 +200, -300	°
Total Resistance	0.5, 1, 2, 5, 10, 20					kΩ
Total Resistance Tolerance	±15					%
Independent Linearity	±0.3 (Special Linearity ±0.1%)					%
Rated Dissipation	3 /70°C					W
Output Smoothness	MAX. 0.1					%
Insulation Resistance	MIN. 100 /DC1000V					MΩ
Dielectric Strength	AC1000 /1 Minute					V
Temperature Coefficient of Resistance	±400					ppm/K

<b>【Mechanical Specifications】</b>						
Gear Ratio	10:1	24:1	35:1	60:1	100:1	
Torque	MAX. 4					mN·m
Repeatability	MAX. 0.03 (Including Backlash)					%
Thrust Load Tolerance	5					N
Radial Load Tolerance	16					N
Mass	Approx. 220					g

<b>【Environmental Specifications】</b>						
Category Temperature Range	-40 ~ +125					°C
Storage Temperature Range	-40 ~ +125					°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.