

Conductive Plastic Angle Sensor

MIDORI CPP-45SB Series



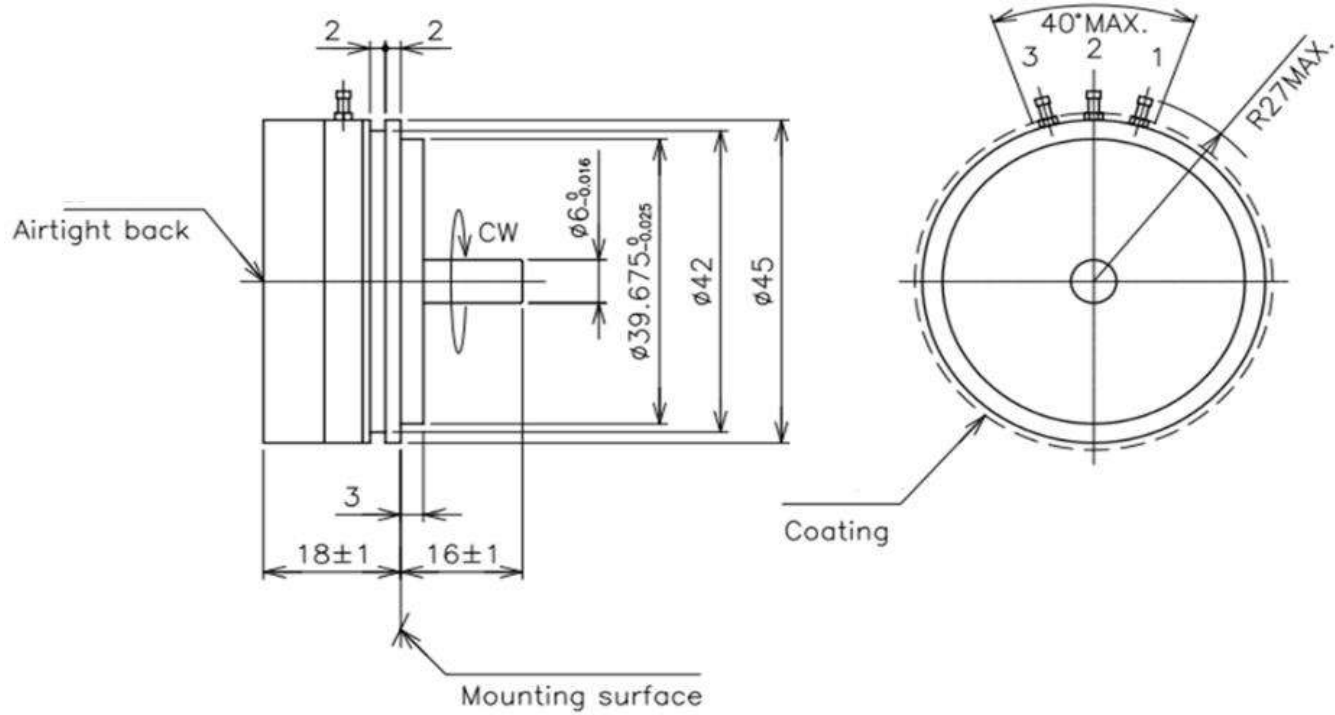
General

- Conductive Plastic Angle Sensor
- Effective Electrical Travel: 350°
- Independent Linearity: $\pm 0.3\%FS / \pm 0.1\%$
- Servo Mount & Screw Mount
- Drip Proof

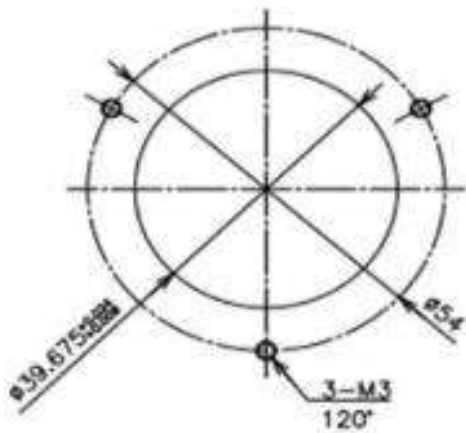
Material

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

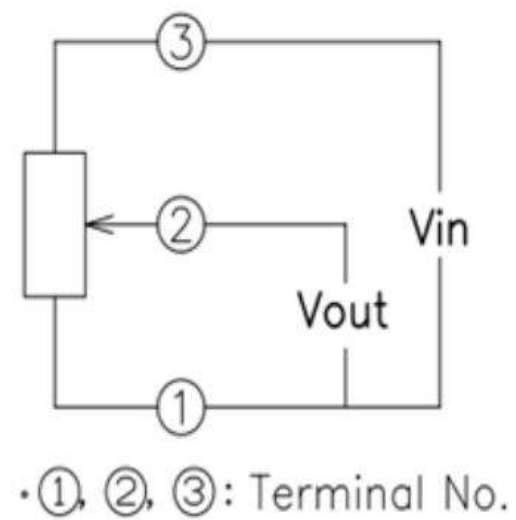
Dimension (mm)



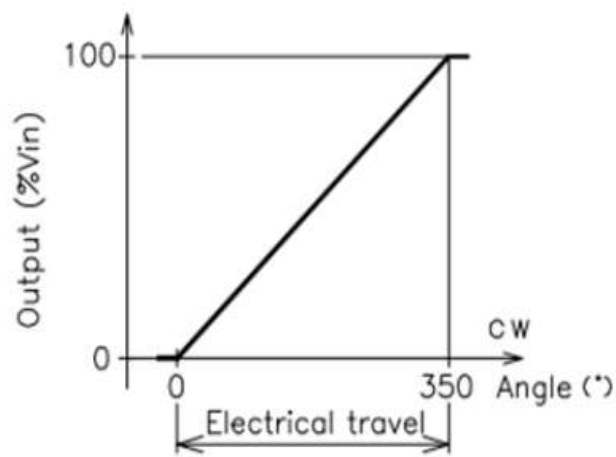
Mounting(mm)



Schematic



Output Characteristics



Specifications

Electrical Specifications

Effective Electrical Travel	350° +2°, -3°
Output Range	0.5K, 1K, 2K, 5K, 10K, 20K Ω
Total Resistance Tolerance	±15%
Independent Linearity	±0.3%, ±0.1%
Rated Dissipation	3W/ 70°C
Output Smoothness	0.1% MAX.
Insulation Resistance	100MΩMIN./DC1000V
Dielectric Strength	AC1000V/ 1Minute
TC of Resistance	±400ppm/K

Mechanical Specifications

Total Mechanical Travel	360° Endless
Torque	15mN · m MAX. (Additional 1.2mN · m/ add one gang)
Thrust Load Tolerance	3N
Radial Load Tolerance	9N
Weight	Approx. 60g (Additional 10g/add one gang)

Environmental Specifications

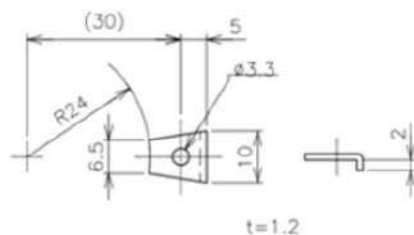
Life Cycles	10 Million cycles MIN.
Category Temp. Range	-30~+90°C
Storage Temp. Range	-30~+90°C
Vibration	150m/S ² 2000Hz 3axis 2hours each
Shock	500m/S ² 11ms 6directions 3times
IP Level	IP54

Options

Multi Ganging: up to 2 sections
Additional Center Tap: C.T(A) --- No shorted angle
C.T(B) --- Shorted on Tap (Shorted angle 1°~5°)

Accessories

Mounting Cleats: 3 pieces



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.