

Conductive Plastic Angle Sensor

MIDORI CP-2FL Series



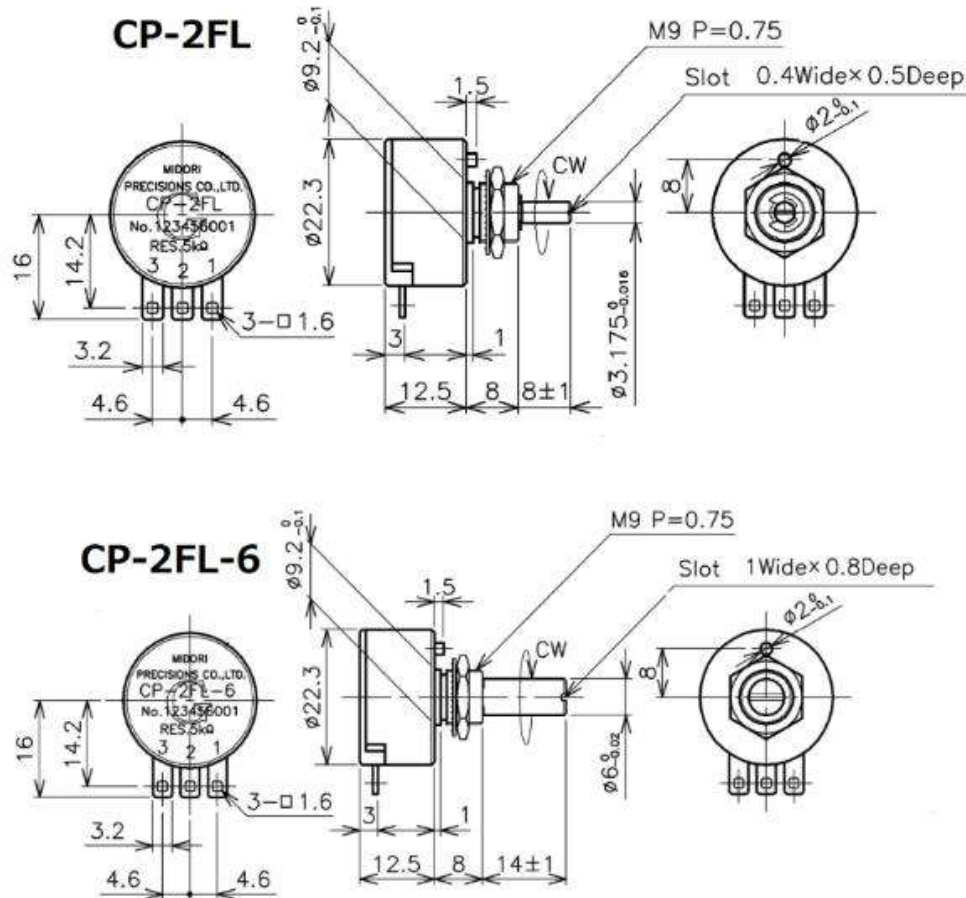
General

- Conductive Plastic Angle Sensor
- Mass Production Design of CP-2FJ series
- Effective Electrical Angle: 340°
- Independent Linearity: $\pm 2\%$ / $\pm 1\%$
- Bushing Mount
- CP-2FL:** $\Phi 3.175\text{mm}$ Shaft, Metal Sleeve Bearing
- CP-2FL-6:** $\Phi 6\text{mm}$ Shaft, Metal Sleeve Bearing

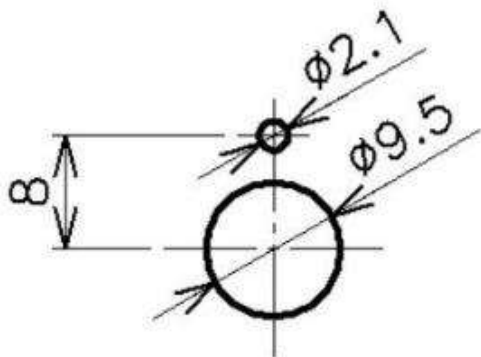
Material

- Housing: PBT
- Shaft: Stainless Steel
- Metal Sleeve Bearing: Copper Alloy

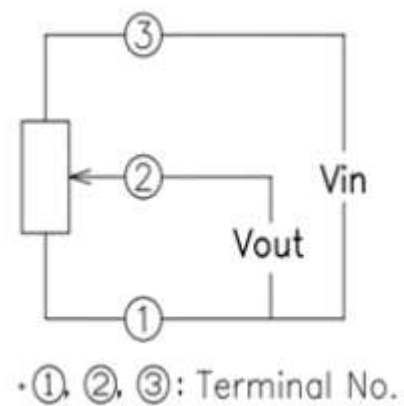
Dimension (mm)



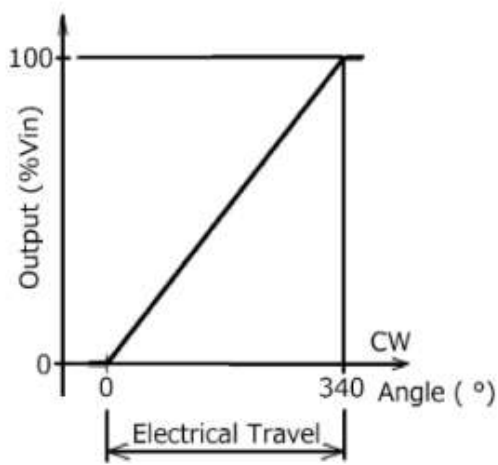
Mounting(mm)



Schematic



Output Characteristics



Specifications

	CP-2FL <Φ3.175mm Shaft>	CP-2FL-6 <Φ6mm Shaft>
Electrical Specifications		
Effective Electrical Travel	340° +2°, -3°	
Output Range	1K, 5K, 10K Ω	
Total Resistance Tolerance	±20%	
Independent Linearity	±2%, ±1%	
Rated Dissipation	0.5W/ 50°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	
Running Torque	2mN · m MAX.	
Thrust Load Tolerance	2N	
Radial Load Tolerance	5N	
Weight	Approx. 20g	
Environmental Specifications		
Life Cycles	10 Million cycles MIN.	
Category Temp. Range	-40~+100°C	
Storage Temp. Range	-40~+100°C	
Vibration	150m/S2 2000Hz 3axis 2hours each	
Shock	500m/S2 11ms 6directions 3times	

Accessories

M9 Nut and Inner Tooth Lock Washer: 1 piece each

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.