

Conductive Plastic Angle Sensor

MIDORI CP-2FKJ Series



General

- Conductive Plastic Angle Sensor
- Effective Electrical Travel: 340°
- Independent Linearity: $\pm 1\%FS / \pm 0.5\%$
- Servo Mount

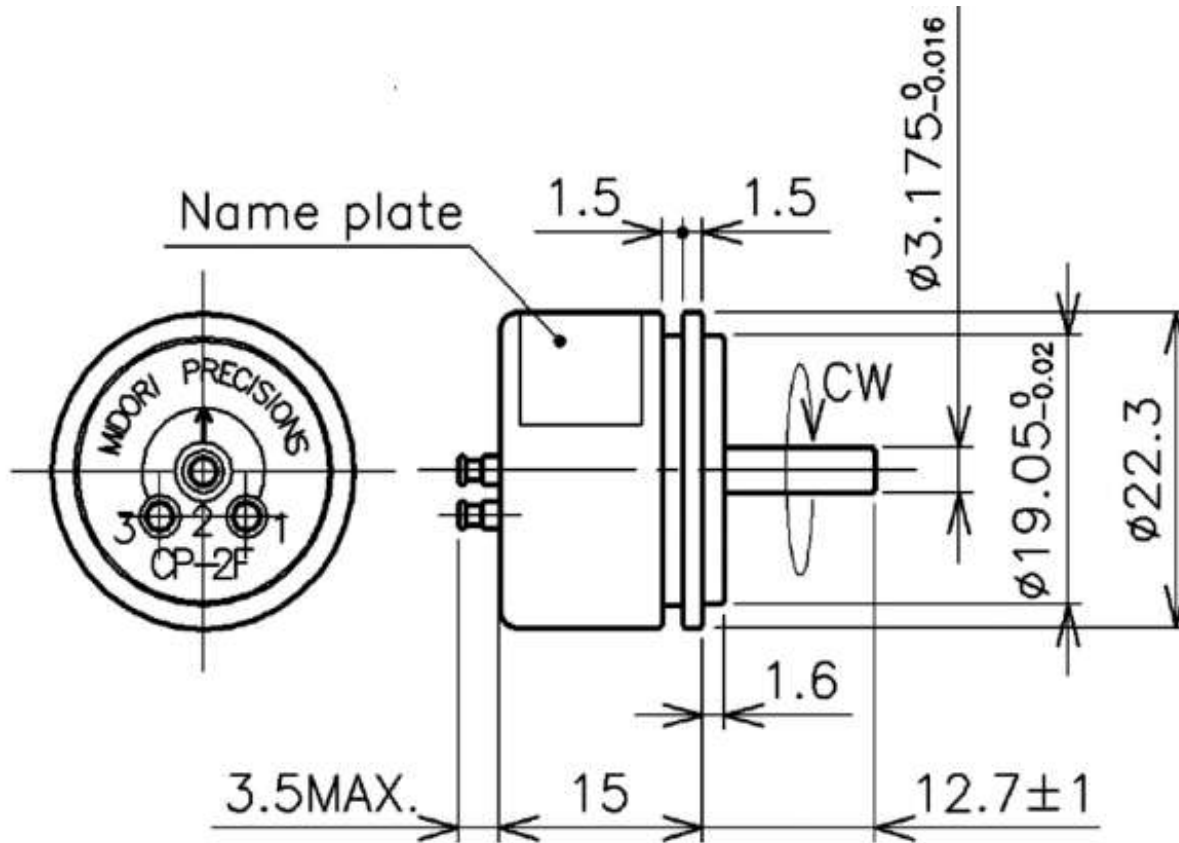
CP-2FK(b)J: Ball Bearing

CP-2FK(m)J: Metal Sleeve Bearing

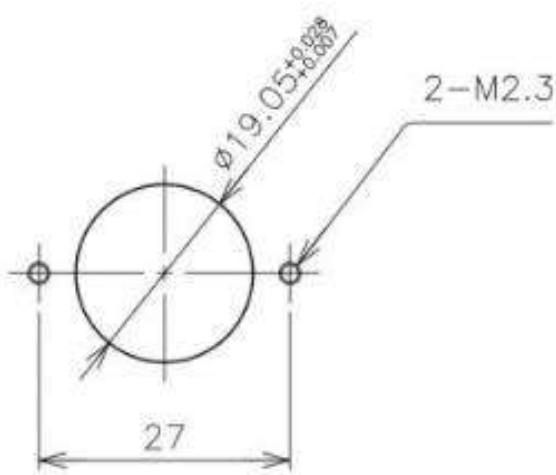
Material

- Housing: Aluminum
- Shaft: Stainless Steel
- Bearing: CP-2FK(b)J --- Stainless Steel
CP-2FK(m)J --- Copper Alloy

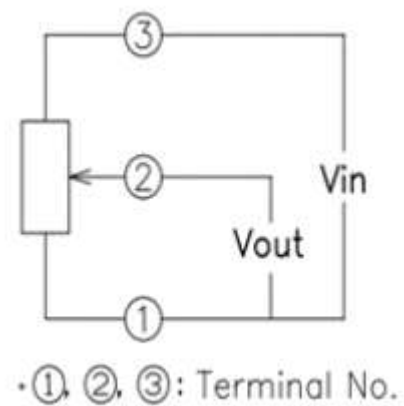
Dimension (mm)



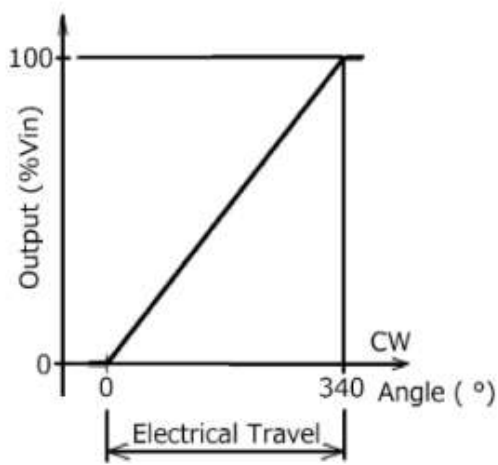
Mounting(mm)



Schematic



Output Characteristics



Specifications

Electrical Specifications

	CP-2FK(b)J <Ball Bearing>	CP-2FK(m)J <Metal Sleeve Bearing>
Effective Electrical Travel		340° +2°, -3°
Output Range		1K, 2K, 5K, 10K Ω
Total Resistance Tolerance		±20%
Independent Linearity		±1%, ±0.5%
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

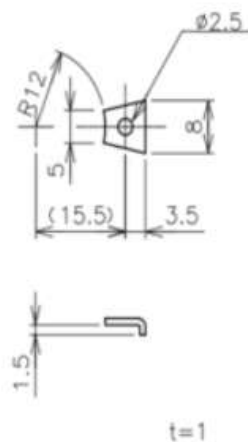
Total Mechanical Travel	360° Endless	
Running Torque	0.5mN · m MAX.	2mN · m MAX.
Thrust Load Tolerance	2N	
Radial Load Tolerance	5N	
Weight	Approx. 20g	

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

Mounting Cleats: 2 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.