

Conductive Plastic Angle Sensor

MIDORI CP-2F-S-RB Series



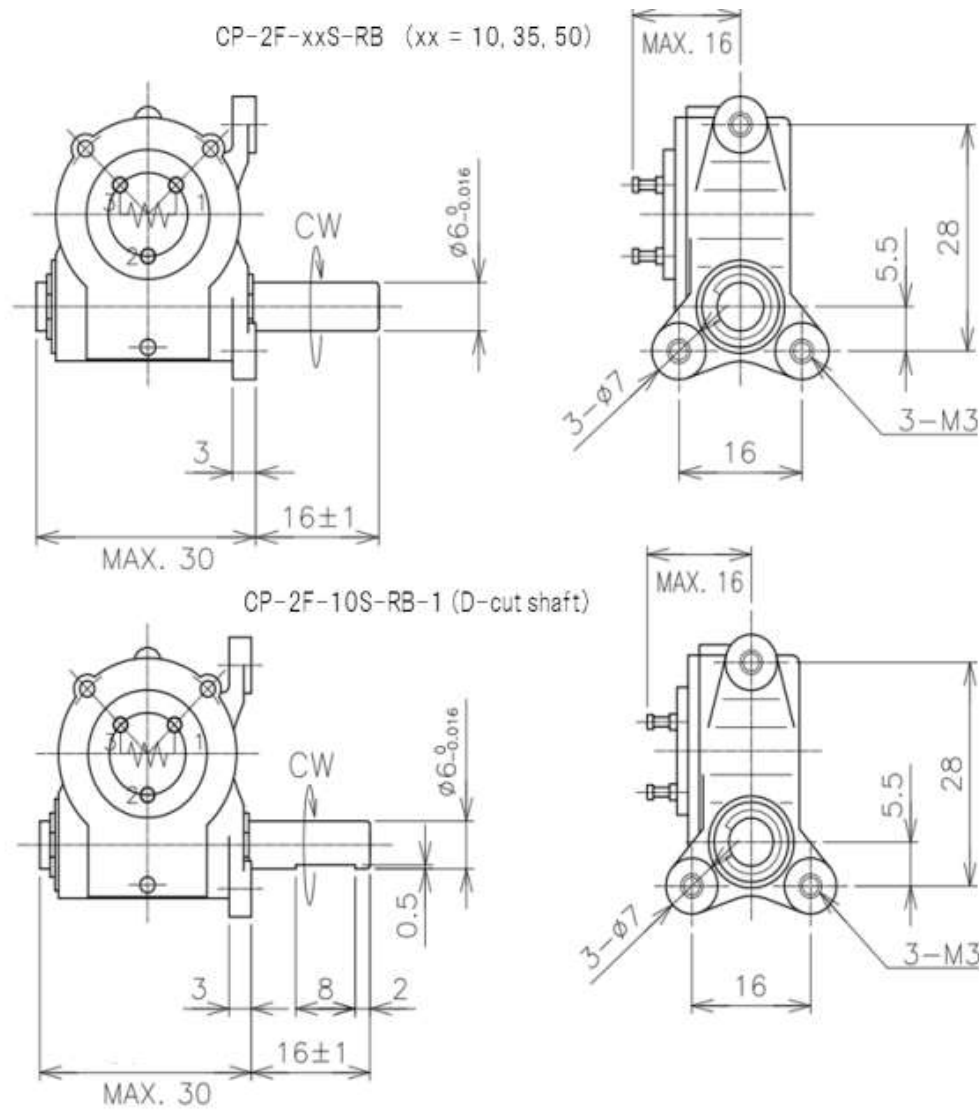
General

- Conductive Plastic Multi-turn Angle Sensor
- Effective Electrical Travel:
 - 3400°(10-turn): CP-2F-10S-RB/ CP-2F-10S-RB-1
 - 11900° (35-turn): CP-2F-35S-RB
 - 17000° (50-turn): CP-2F-50S-RB
- Independent Linearity: $\pm 1.5\%$
- Ball Bearing

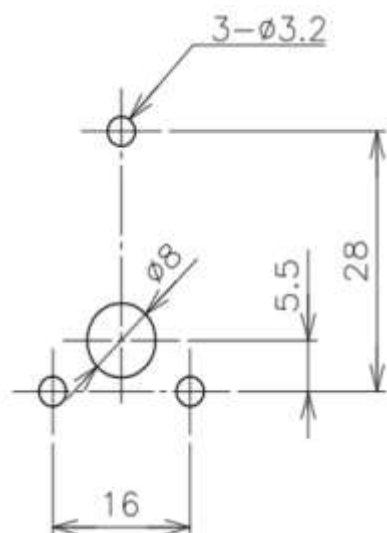
Material

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

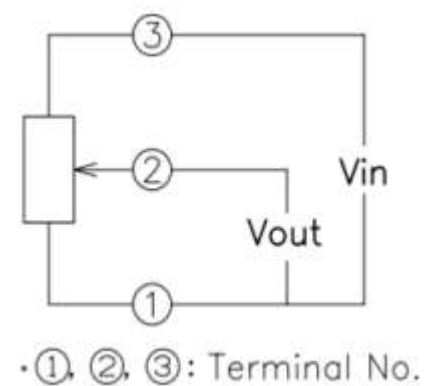
Dimension (mm)



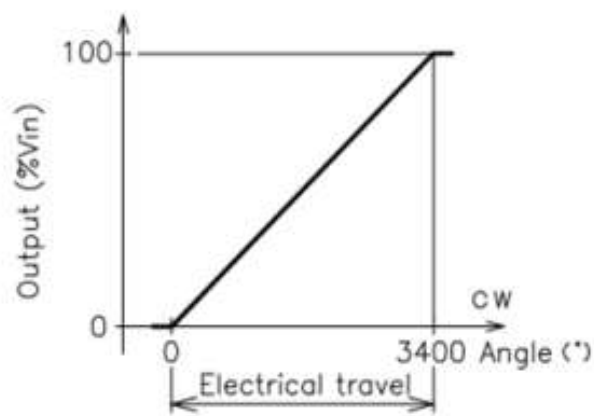
Mounting(mm)



Schematic



Output Characteristics



Specifications

	CP-2F-10S-RB-1	CP-2F-10S-RB	CP-2F-35S-RB	CP-2F-50S-RB
Electrical Specifications				
Effective Electrical Travel	3400° +20° , -30°		11900° +70° , -105°	17000°+100° , -105°
Output Range	1K, 2K, 5K Ω			
Total Resistance Tolerance	±20%			
Independent Linearity	±1.5%			
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				
Gear Ratio	10:1 (10-turn)		35:1 (35-turn)	50:1 (50-turn)
Starting Torque	4mN · m MAX.			
Thrust Load Tolerance	3N			
Radial Load Tolerance	5N			
Repeatability	0.5% MAX.			
Weight	Approx. 30g			
Environmental Specifications				
Category Temp. Range	-40~+100°C			
Storage Temp. 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.
- To remain IP level of CP-2FWP-xxS, please sealed terminal area by potting.