

Conductive Plastic Angle Sensor

CP-2F-S-RB Series



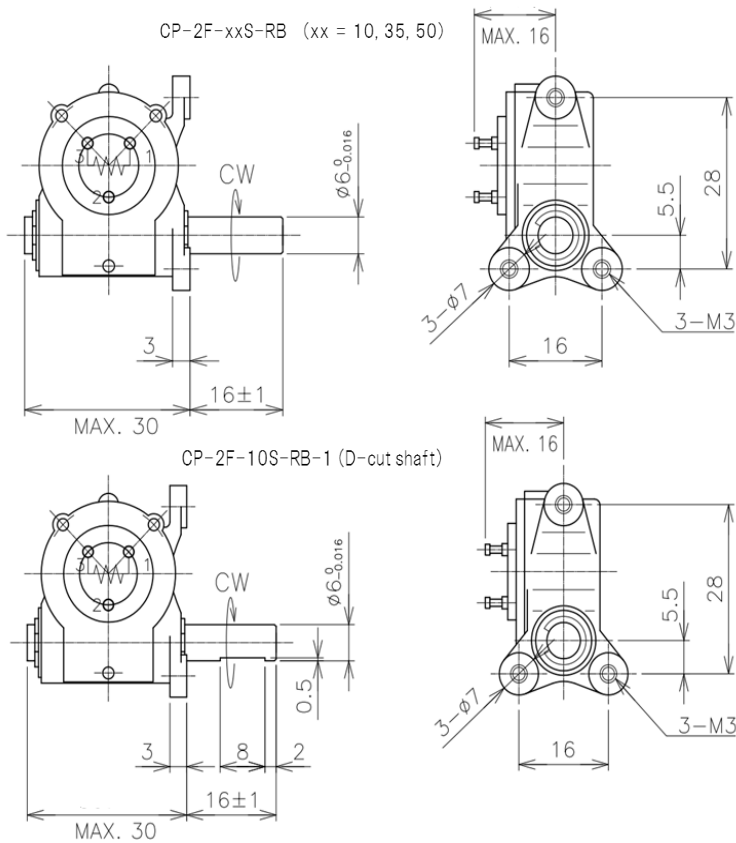
- Conductive Plastic Multi-turn Angle Sensor
- Effective Electrical Travel
 - : 3400°(10-Turn) CP-2F-10S-RB / CP-2F-10S-RB-1
 - : 11900°(35-Turn) CP-2F-35S-RB
 - : 17000°(50-Turn) CP-2F-50S-RB

- Independent Linearity : ±1.5%
- Ball Bearing

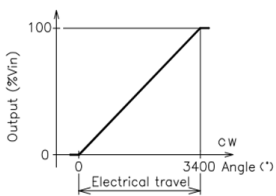
[Material]

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

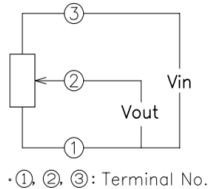
■ Dimension (mm)



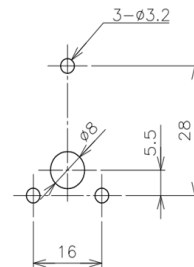
■ Output Characteristics



■ Schematic



■ Mounting



Model No.	CP-2F-10S-RB-1	CP-2F-10S-RB	CP-2F-35S-RB	CP-2F-50S-RB
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Electrical Specifications

Effective Electrical Travel	3400 +20, -30	11900 +70, -105	17000 +100, -150
Total Resistance	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	100MΩ/ DC1000V MIN.		
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.		
Repeatability	0.5% MAX.		
Thrust Load Tolerance	3N		
Radial Load Tolerance	5N		
Mass	Approx. 30g		

Environmental Specifications

Category Temperature Range	-40~+100°C		
Storage Temperature Range	-40~+100°C		

■ Handling Instruction

- To avoid burnout of resistive element, do not supply more than 1mA current to terminal 2.
- To remain IP level of CP-2FWP-xxS, please sealed terminal area by potting.
- In the case wear debris come into contact with the surface of resistive element, it might cause electrical noise.
- 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.