Conductive Plastic Angle Sensor

# CP-2FWP-10S Series



· Conductive Plastic Multi-Turn Angle Sensor •Effective Electrical Travel : 3400° (10-turn)

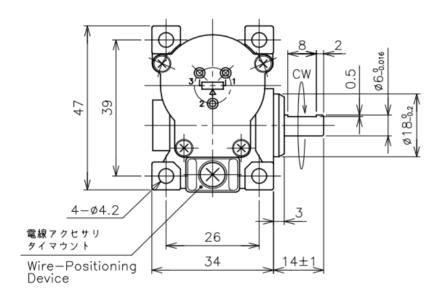
Independent Linearity : ±1.5%Dust and Drip Proof : IP65

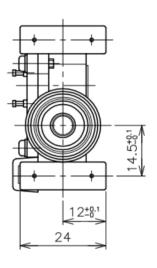
[Material]

Housing : Aluminum : Stainless Steel ●Shaft Bearing : Stainless Steel

**■**Dimension

[mm]

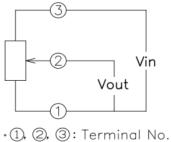




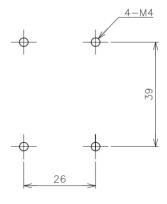
### **■**Output Characteristics

## 100 Output (%Vin) CW 0 3400 Ángle (\*) Electrical travel

### **■**Schematic



### **■**Mounting



[Model No.]	CP-2FWP-10S	
[Electrical Specifications]		
Effective Electrical Travel	3400 +20, -30	o
Total Resistance	1, 2, 5	kΩ
Total Resistance Tolerance	±20	%
Independent Linearity	±1.5	%
Rated Dissipation	0.5/50°C	W
Output Smoothness	MAX. 0.1	%
Insulation Resistance	MIN. 100/DC1000V	ΜΩ
Dielectric Strength	AC1000/1 Minute	V
Temperature Coefficient of Resistor	±400	ppm/K

### [Mechanical Specifications]

Gear Ratio	10:1 (10-turn)	
Torque	MAX. 25	mN·m
Repeatability	MAX. 0.5 (Including Backlash)	%
Thrust Load Tolerance	3	N
Radial Load Tolerance	5	N
Mass	Approx. 55	g

### [Environmental Specifications]

Category Temperature Range	-40 - +100	°C
Storage Temperature Range	-40 - +100	°C
IP Level	IP65	

### **■**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.