

# WITH A DUSTPROOF AND SPLASHPROOF CASE, HIGH ACCURACY CONDUCTIVE PLASTIC ROTARY ANGLE SENSOR

# CP-45FRBN

RoHS compliant



## FEATURES

- Conductive Plastic Angle Sensor
- New process, Greater precision
- Effective Electrical Travel : 350°
- Ratio Output
- Screw Mount
- Dustproof and splashproof: IP54

## OPTIONS

- Additional Center Tap :
- C.T(A) : No shorted angle
- C.T(B) : Shorted on Tap (Shorted angle 3° approx.)

## STANDARD SPECIFICATIONS

### Electrical characteristics

Effective Electrical Travel	350° +3, -2
Total Resistance	1, 2, 5 kΩ
Total Resistance Tolerance	±15%
Independent Linearity	±0.1%
Rated Dissipation	3 W / 70°C
Output Smoothness	0.1% max.
Insulation Resistance	100 MΩ min. / 1000 VDC
Dielectric Strength	1000 VAC / 1 Minute
Temperature Coefficient of Resistance	±400 ppm/K

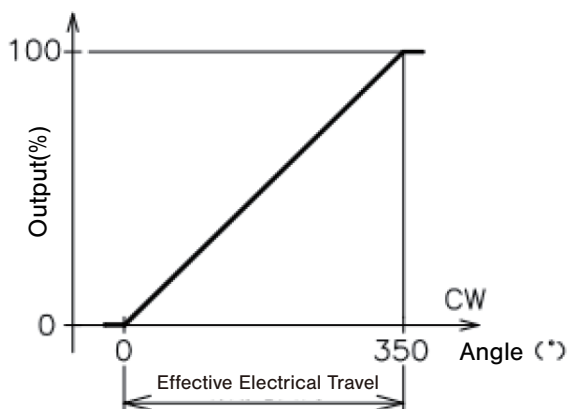
### Mechanical characteristics

Total Mechanical Travel	360° Endless
Torque	25 mN·m max.
Net weight	Approx. 600 g
IP Rating	IP54

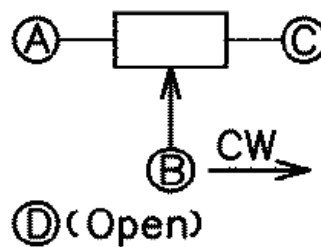
### Environmental characteristics

Operating Temp. Range	-20 ~ +80°C
Storage Temp. Range	-20 ~ +80°C
Vibration	200 m/s <sup>2</sup> , 2000 Hz 3 axis 2 hours each
Shock	600 m/s <sup>2</sup> , 11 ms 6 directions 3 times

## OUTPUT CHARACTERISTICS



## SCHEMATIC

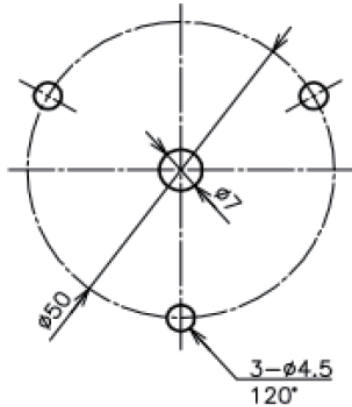


Ⓐ, Ⓑ, Ⓒ, Ⓓ Connector Pin No.

# CP-45FRBN POTENTIOMETERS

## ■ MOUNTING

(Unit:mm)



## ■ ACCESSORIES

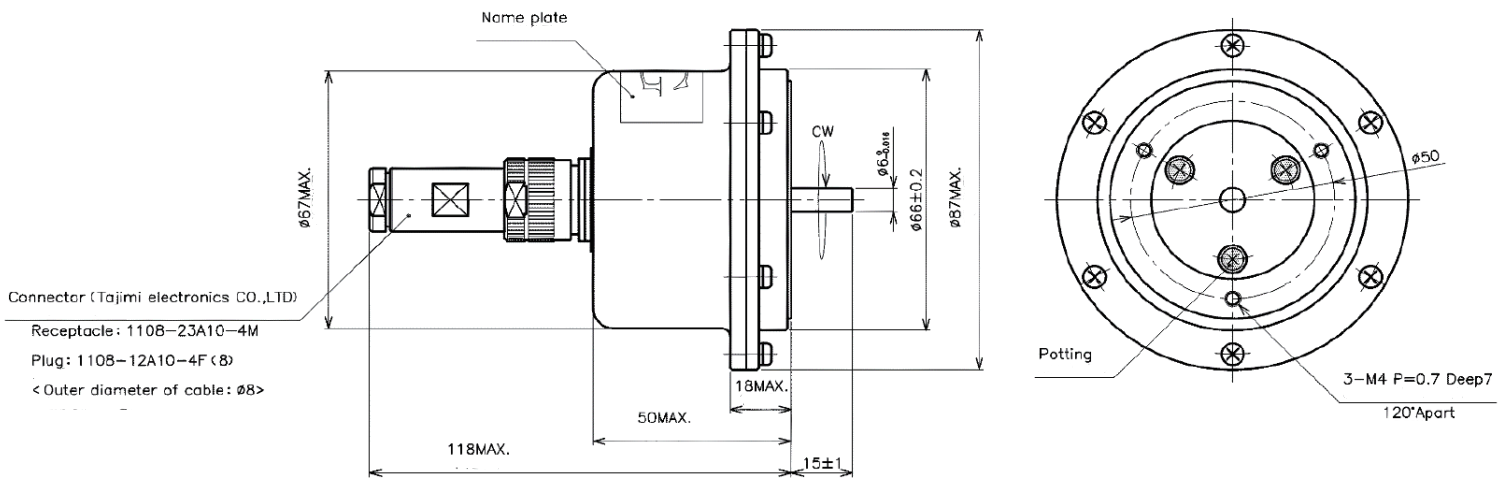
Connector plug:TAJIMI ELECTRICS

Model No : TC1108-12A10-4F8

Applicable cable : φ8

## ■ OUTLINE DIMENSIONS

(Unit:mm)



## ■ HANDLING INSTRUCTION

- To avoid burnout of resistive element, do not supply more than 1mA current to terminal B.
- Miswiring might cause burnout of resistive element.
- To reduce sliding noise, add load resistance should be more than 100 times and less than 1000 times of total resistance.
- Slight continuous vibration such as dither might cause short lifetime of the sensor.