Cooka (Zhongshan) Technology Co., Ltd.

- 28mm diameter
- Ceramic base element
- 5,000,000 cycles
- ±1% precision Linearity
- Aluminium alloy shell
- Hollow structure
- Low temperature coefficient
- Continuous rotation available



CRS28 – 28mm Precision Rotary Sensor Specification

Electrical

Standard Resistance Range 1kΩ, 2KΩ, 5KΩ, 10kΩ

Resistance Tolerance . . . . . 10% standard

End Resistance . . . . . 10Ω max.

Resistance Taper . . . . . .linear

Linearity . . . . . ±1% max.

Noise (C.R.V.) . . . . . 100 mV Max.

Power Rating . . . . . 0.5 watt at 40℃, 0 watt at 85℃

Temperature coefficient . . . . . 500PPM/℃

Maximum Input Voltage . . . . . 200VDC Max.

Insulation Resistance . . . .100MΩ minimum at 1,000VDC

Dielectric Strength . . . . . 1,000VAC, 1 minute

Mechanical

Mechanical Angle . . . . . 360°

Electrical Angle . . . . . 350°±5°

Rotaotion Torque. . . . . .5g.cm~80g.cm

Push Strength On Rotor . . . . . .10 kgf Min.

IP Rating. IP40

Soldering Condition

Manual Soldering . . . . . .350 °C ± 10 °C for 3.5 ± 0.5 sec.

Environmental

Working Temperature . . . . . -50℃ to 125℃

Storage Temperature . . . . . -55℃ to 135℃

Durability Test

Temperature Characteristics Test . . . . . .125℃, 5 hours

ΔT/R ≤±5%

Temperature Cycle Test . . . . . -55℃, 125℃,30 minutes each, 5 cycles

ΔT/R ≤±10%

Load Life Test. . . . . 40℃, 0.25 watt, 1,000 hours

ΔT/R ≤±10%

Moisture and Load Life Test . . . . 40℃, 90-95%RH,0.25 watt, 500 hours

ΔT/R≤±10%

Vibration Test . . . . . 10-55Hz, 1.5mm amplitude, 3 directions

ΔT/R ≤±5%

Soldering Heat Resistance Test . . . . . 350℃±5℃, 3 seconds

ΔT/R≤±2%

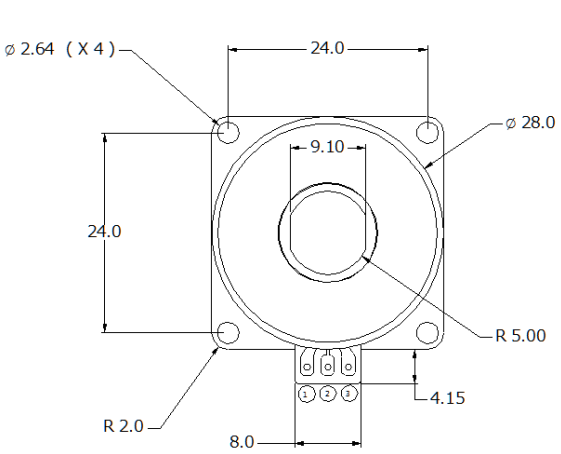
Rotational Life Test. . . . . .2,000,000 cycles without load

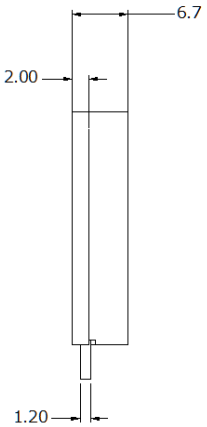
Special: 5,000,000 cycles

ΔT/R≤±5%

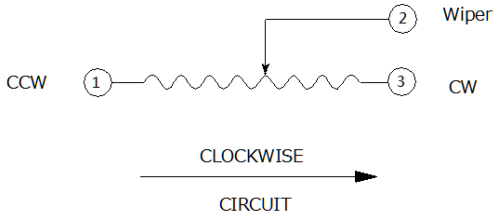
ΔT/R = Total Resistance Change

CRS28 Series Product Dimension





Unit: mm



CRS28 Series Part Numbering System

CRS28	S	103	B	A	A	01

Series Code

Life Code
E = 2,000,000 cycles
S = 5,000,000 cycles

Resistance Code(Ω)

Resistance Tolerance Code
A = ±10%
B = ±20%

Linearity Code
S = ±0.5%
A = ±1%
B = ±2%

Effe. Angle
350° = Blank
340° = A
80° = B

Wire Series
01
02
03

Resistance Code

Resistance Code	102	202	502	103
Resistance Value	1kΩ	2KΩ	5KΩ	10kΩ