cooka

QUALITY, INNOVATION AND RELIABLE

- 22mm diameter
- FR4 TG170 base element
- 5,000,000 cycles life
- ±0.5% precision linearity
- Lower temperature coefficient
- Water resistant IP65
- Continuous rotation available



FVR22 – 22mm Precision Rotary Sensor Specification

Electrical

Standard Resistance Range ····· 500Ω, 1kΩ, 2KΩ, 5KΩ, 10kΩ

Resistance Tolerance ·····10% standard

End Resistance ·····20Ω max.

Resistance Taper ····· Linear

Linearity ····· ±0.5%

Noise (C.R.V.) ·····100 mV

Temperature Coefficient ····· 300ppm/℃

Power Rating ·····0.25 watt @ 40℃

····· 2 & 5 watt @ 40℃(Special Requirement)

Maximum Input Voltage ····· 50VDC Max.

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

Mechanical

Mechanical Angle ····· 300°, 312°,360°

Shaft Torque ····· 30 gf•cm Max.

Stop Strength ····· 12 kgf•cm Min.

Shaft Strength (push) ·····20 kgf Min.

Shaft Strength (tensile) ····· 20 kgf Min.

Mounting Nut Torque ····· 15 kgf•cm Min.

IP Rating ····· IP65

Soldering Condition

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

Environmental

Working Temperature ····· -40℃ to 105℃

Storage Temperature ·····-45℃ to 125℃

Durability Test

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

ΔT/R ⩽±5%

Temperature Cycle Test ····· -45℃, 125℃,30 minutes each, 5 cycles

ΔT/R ⩽±5%

Load Life Test ····· 40℃, 2watt, 1,000 hours

ΔT/R ⩽±5%

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

ΔT/R ⩽±5%

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

ΔT/R ⩽±5%

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

ΔT/R ⩽±1%

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

ΔT/R ⩽±5%

····· Special: 5,000,000 cycles

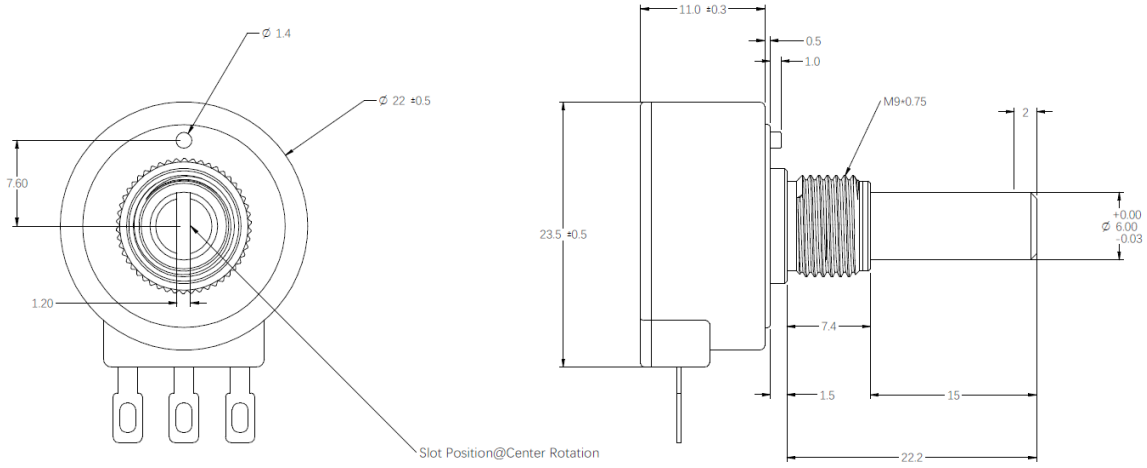
ΔT/R ⩽±10%

ΔT/R = Total Resistance Change

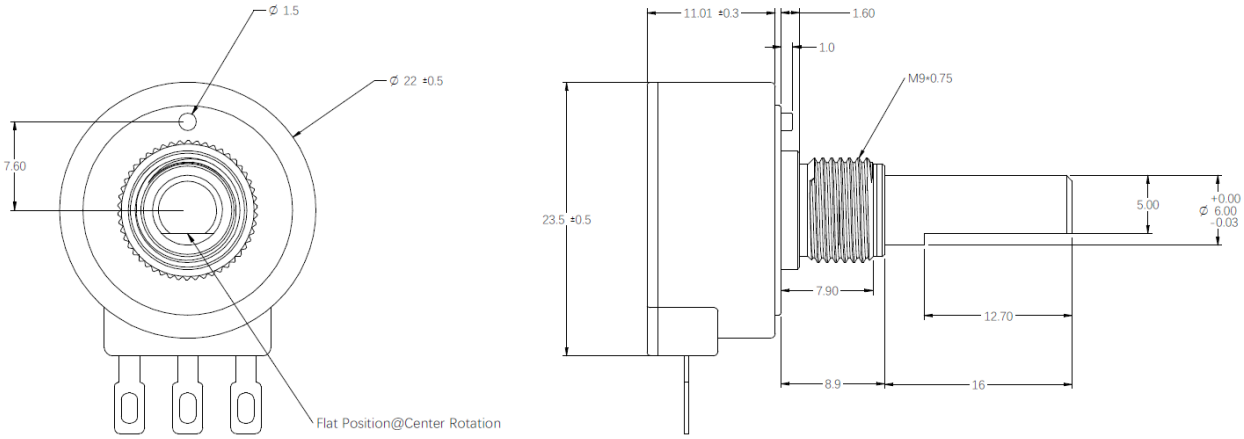
FVR22 Series Product Dimension

A Type Shaft:

Unit: mm



B Type Shaft:



FVR22 Series Part Numbering System

FVR22 | Q | A | 1K | B | A | A

Series Code

Life Code
Q = 2,000,000 cycles
P = 5,000,000 cycles

Shaft Type Code

Resistance Code(Ω)

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

Linearity Code
A = ±0.5%
B = ±1%
C = ±1.5%
D = ±2%

Angle Code

	Mech.	Effe.
Blank	360°	320°
A =	360°	340°
B =	360°	280°
C =	300°	280°
D =	312°	280°