

Precision Conductive Plastic Potentiometer WI27



Specification:

◆ Electrical

Resistance range: 1K to 100K Ohms

Standard resistance tolerance: $\pm 10\%$

Minimum practical resistance tolerance: $\pm 5\%$

Independent linearity: $\pm 1\%$

Minimum practical independent linearity: $\pm 0.5\%$

Input voltage: 400 VDC maximum, not to exceed power rating

Power rating: 1 & 2 Watt at 70°C, derating to 0 at 125°C

Dielectric strength: 750 V rms

Insulation resistance: 1,000 Megohms minimum

Output smoothness: 0.1% maximum

Actual electrical travel: 340°C nominal (300° with stop feature)

Electrical continuity travel: 350°C nominal (320°C with stop feature)

End voltage: Maximum 0.5% of input voltage

Resolution: Essentially infinite

Temperature coefficient of resistance: +100 ppm/°C typical

Temperature coefficient of output voltage: ± 10 ppm/°C typical

◆ Mechanical

Total mechanical travel: 360° continuous (320° $\pm 3^\circ$ with stop feature)

Number of gangs: 1 maximum

Backlash: 1° maximum

Static stop strength: 40 oz.-in.

Panel nut tightening torque: 25 lb.-in. maximum

Start/run torque: 1.0 oz.-in.

◆ Environmental

Operating temperature range: -40°C to +125°C dynamic, -65°C to +125°C static

Temperature cycling: 5 cycles, -65°C to +125°C, maximum 10% ΔR

Shock: 6 ms Saw-tooth, 100 G's, 0.1 ms maximum discontinuity

Vibration: 10 G's, 10 to 500 Hz, maximum 2% ΔR , 0.1 ms maximum discontinuity

Moisture resistance: Five 24 hour cycles, maximum 25% ΔR

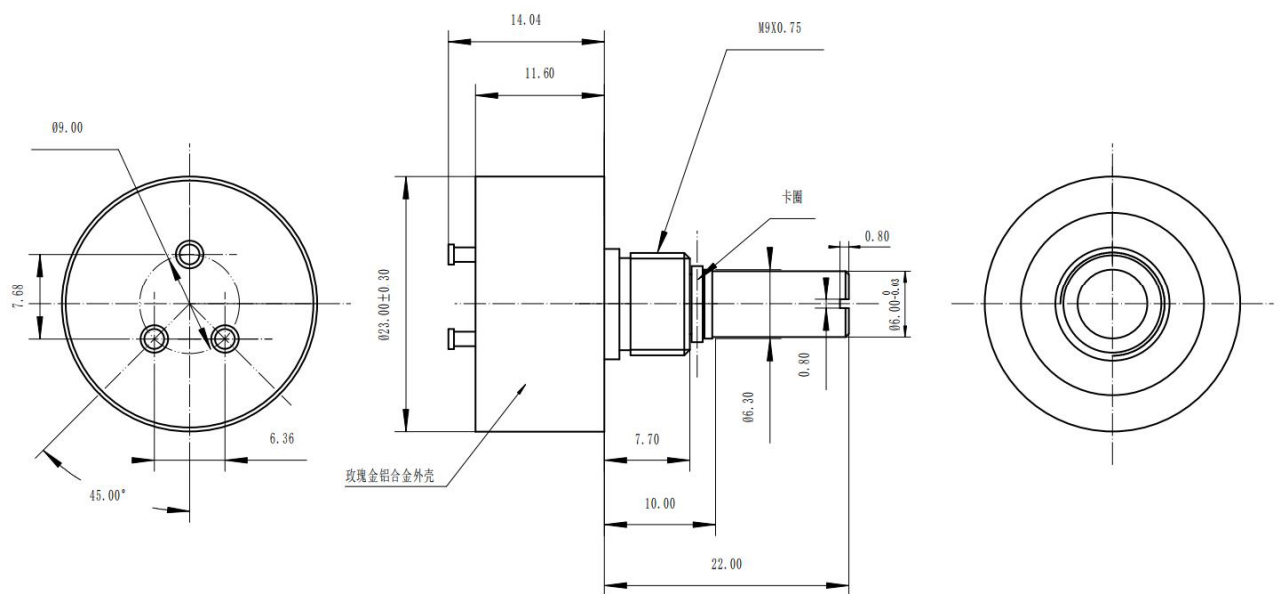
High temperature exposure: 1,000 hours at 125°C, maximum 0.5% ΔVR

Rotational life: 5 million shaft revolutions (no sideload)

Rotational load life: 5 million shaft revolutions, maximum 10% ΔR

Ingress protection rating (IP code): IP50, IP66 available as option

Dimension:



Application:

- Pedal position
- Joystick controls
- Valve control
- Wind vane
- Panel control
- Test and measurement
- Medical equipment
- Angular position