

Kingtronics®

RKT-3540

Wire Wound Element

FEATURES

At room ambient: +25°C nominal
and 50% relative Humidity nominal, except as noted.
Consult manufacturer for complete specification details
Wire wound element

Electrical Characteristics

Standard Resistance Range	100 to 100K ohms
Total Resistance Tolerance	±5%
Independent Linearity	±0.5%
Effective Electrical Angle	≥3600° - 10°
Terminal Resistance	≤0.2%R or 5Ω
Absolute Minimum Resistance/ Minimum Voltage	1 ohm or 0.2% max (Whichever is greater)
Noise/ Output Smoothness	≤3%R or 3Ω
Dielectric Withstanding Voltage (MIL-STD-202, Method 301) Sea Level	101.3Pa 710V, 8.5kPa 470V
Power Rating (Voltage Limited By Power Dissipation or 447VAC, Whichever is Less) +70°C, +125°C	2 watts 0 watt
Insulation Resistance	R _i ≥ 1GΩ
Resolution	See recommended part#

Environmental Characteristics

Rated Power	+70°C 2W, +125°C 0W
Operating Temperature Range	+1°C to +125°C
Storage Temperature Range	-55°C to +125°C
Temperature Coefficient Over Storage Temperature Range	±100ppm/°C
Temperature Variation	ΔR ≤ ±2%R, Δ(Uab/Uac) ≤ ±1% 10—500HZ, 0.75mm or 98m/s ² , 6h, ΔR ≤ ±1%R, Δ(Uab/Uac) ≤ ±2%
Vibration	
Collision	390m/s ² , 4000 cycles, ΔR ≤ ±1%R
Climate Category	ΔR ≤ ±3%R, R ₁ ≥ 100MΩ
Electrical Endurance at 70°C	2W, 1000h, ΔR ≤ ±3%R
Mechanical Endurance	10000 cycles, ΔR ≤ ±3%R
Steady-damp-heat	ΔR ≤ ±3%R, R ₁ ≥ 100MΩ
Wiper Bounce	0.1 millisecond maximum
Shock	50G
Wiper Bounce	0.1 millisecond maximum
Load Life	1000 hours, 2 watts
Total Resistance Shift	±2%
Rotational Life (No Load)	10,000 cycles, speed 5~10 cycles/min Starting Torque ≤ 50mN.m
Total Resistance Shift	±5% maximum
Moisture Resistance (MIL-STD-202, Method 103, Condition B)	±2% maximum
Total Resistance Shift	
IP Rating	IP 40

Physical Characteristics

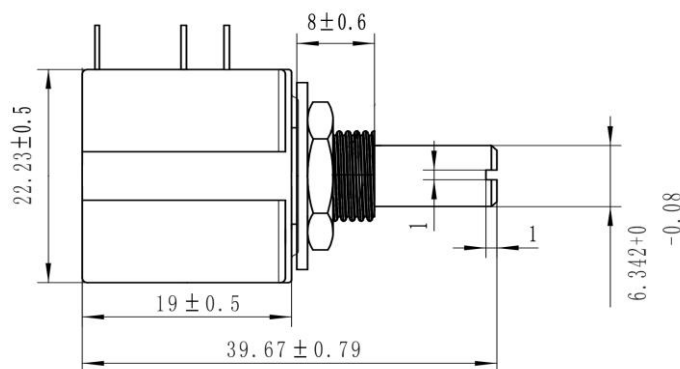
Total Mechanical Travel	3600° ± 10°
Starting Torque	≤ 36mN.m
Clutch Torque	≥ 300mN.m

PICTURE

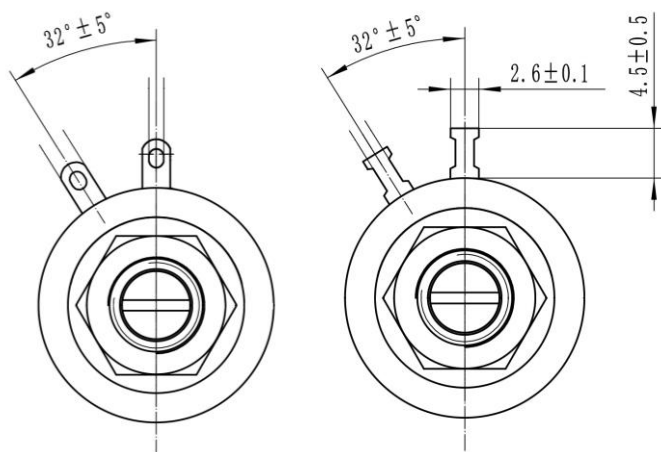


Common Dimensions

RKT-3540S-1



OPTIONAL ANTIROTATION LUG
(-91) 1.42x0.50 ON 7.4 RADIUS.
LENGTH 1.27 FROM MOUNTING SURFACE.
(SUGGESTED PANEL HOLE 1.6 DIA.)



TOLERANCE: EXCEPT WHERE NOTED

DECIMALS: XX ± $\frac{0.25}{(0.010)}$ XXX ± $\frac{0.13}{(0.005)}$

FRACTIONS: ± 1/64

DIMENSIONS: $\frac{MM}{(IN.)}$

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Mechanical Characteristics

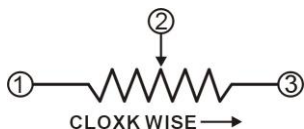
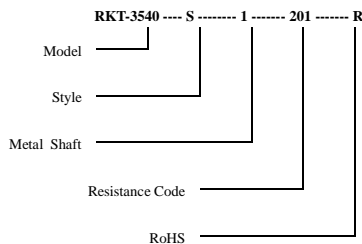
Stop Strength	53 N-cm (75 oz-in) minimum
Mechanical Angle	3600° ± 10°
Torque (Starting & Running)	0.35 N-cm (0.5 oz-in) max
Mounting	170-200 N-cm (15-18 lb.-in.) max
Backlash	1.0°C maximum
Weight	Approximately 21 gm
Soldering Condition Manual Soldering	96.5Sn/ 3.0Ag/ 0.5Cu solid wire or no-clean rosin cored wire; 370°C (700°F) max. for 3 seconds
Wash Processes	Not recommended
Marking	Manufacturer's name and part number, resistance value and tolerance, linearity tolerance, wiring diagram and date code
Ganging (Multiple Section Pots)	2 cups maximum
Hardware	One lockwasher (H-37-2) and one mounting nut (H-38-2) is shipped with each potentiometer

Resistance Table

RKT-3540S-1

Resistance (Ohms)	Resistance Code	Resolution (%)
200	201	0.042
500	501	0.031
1,000	102	0.027
2,000	202	0.021
5,000	502	0.021
10,000	103	0.019
20,000	203	0.014
50,000	503	0.011
100,000	104	0.008

How to Order



BOLDFACE LISTINGS ARE IN STOCK AND READILY AVAILABLE THROUGH DISTRIBUTION

FOR SERVO MOUNT VERSION AND OTHER OPTIONS CONSULT FACTORY.

FOR OTHER OPTIONS CONSULT FACTORY. ROHS IDENTIFIER:

L = COMPLIANT BLANK = NON-COMPLIANT

Note: Specifications are subject to change without notice.

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