

Wire Wound Element-3540

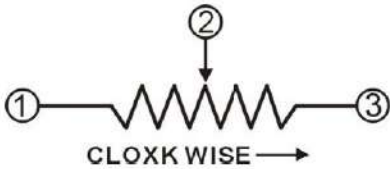
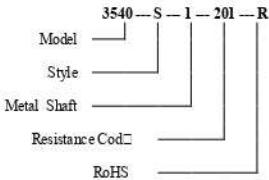


Electrical Characteristics	3540S Wire Wound Element
Standard Resistance Range	100 to 100K ohms
Total Resistance Tolerance	±5%
Independent Linearity	±0.5%
Effective Electrical Angle	≥3600° - 10°
Terminal Resistance	≤0.2%R or 5Ω
Absolute Minimum Resistance/ Minimum Voltage	1 ohm or 0.2% max (Whichever 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)	2 watts 0 watt
Insulation Resistance (500 VDC)	R _i ≥1GΩ
Resolution	See recommended part#

Environmental Characteristics	3540S Wire Wound Element
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	Δ R≤±2%R , Δ (Uab /Uac)≤±1%
Vibration	10—500HZ,0.75mm or 98m/s2,6h , Δ R≤±1%R,Δ (Uab /Uac)≤±2%
Collision	390m /s2,4000 cycles , Δ R≤±1%R
Climate Category	Δ R≤±3%R , R1≥100MΩ
Electrical Endurance at 70°C	2W,1000h,Δ R≤±3%R
Mechanical Endurance	10000 cycles,Δ R≤±3%R
Steadydamp-heat	Δ R≤±3%R , R1≥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) Total Resistance Shift	±2% maximum
IP Rating	IP 40

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

How to Order



BOLDFACE LISTINGS ARE IN STOCK AND READILY AVAILABLE THROUGH DISTRIBUTION

FOR SERVO MOUNT VERSION AND OTHER OPTIONS CONSULT FACTORY.

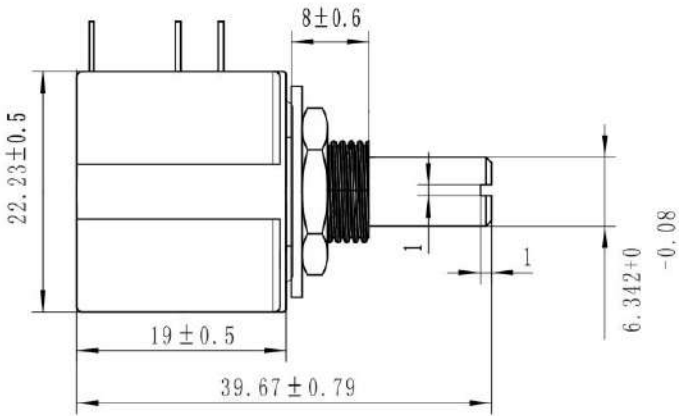
FOR OTHER OPTIONS CONSULT FACTORY.

ROHS IDENTIFIER:
L = COMPLIANT
BLANK = NON-COMPLIANT

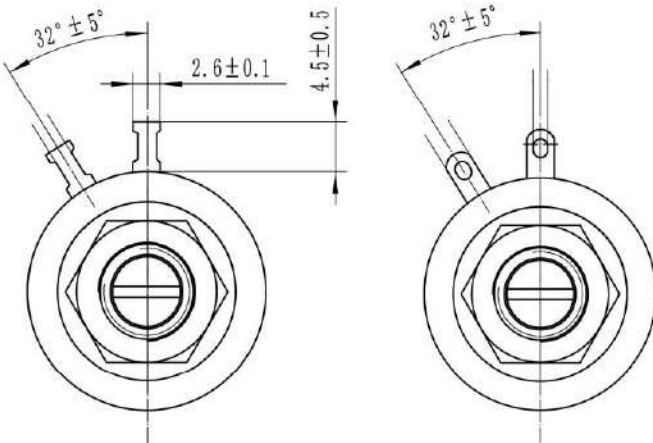
Standard Resistance table

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

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±	0.25 (0.010)	XXX± 0.13 (0.005)
FRACTIONS: ±1/64		
DIMENSIONS:	MM	(IN.)

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 21gm
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) shipped with each potentiometer