



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# Single Turn Precision Potentiometer

## Model 5710 Series



### Features:

- 3" diameter
- Wirewound



### Model Styles

5711	1/4" Shaft, 1/2" Bushing
5713	1/4" Shaft, Servo

### Electrical

Resistance Range, Ohms	25 to 145K
Standard Resistance Tolerance	±5%
Minimum Practical Resistance Tolerance	±1%
Independent Linearity	±0.5%
Minimum Practical Independent Linearity	±0.5%, <75 Ohms ±0.25%, 75-249 Ohms ±0.15%, 250-6,999 Ohms ±0.075%, ≥7K Ohms
Power Rating, Watts	5.0 at 40°C derating to 0 at 105°C
Dielectric Strength	1,000V rms
Insulation Resistance, Minimum	1,000 Megohms
Noise, Maximum	100 Ohms
Actual Electrical Travel	358° ±1°
Tap Tolerance	±1°
End Voltage, Maximum	Within Std. Linearity Tolerance

### Environmental

Operating Temperature Range	Static: -65°C to +105°C Dynamic: -40°C to +125°C
Temperature Cycling	5 cycles, -65°C to +105°C
Shock, 6ms Half Sine	100G's
Vibration	5G's, 10 to 500 Hz
Moisture	Ten 24 hour cycles
High Temperature Exposure	1,000 hours at 105°C
Rotational Life	1 Mil. Shaft Rev.
Rotational Load Life	1 mil. shaft rev. plus 900 hrs. at rated wattage at 40°C

#### General Note

TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

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## Mechanical

Total Mechanical Travel	360° Continuous	
Number of Cups, Maximum	4	
Weight, Nominal	5.8 oz. Single Cup 1.3 oz. Each Added Cup	
Backlash, Maximum	1°	
Shaft End Play, Maximum	.005"	
	<b>5711</b>	<b>5713</b>
Shaft Runout, T.I.R., Maximum	.0005"	.001"
Pilot Diameter Runout, T.I.R., Maximum	.002"	.0015"
Lateral Runout, T.I.R., Maximum	.004"	.101"
Shaft Radial Play, Maximum	.004"	.002"
Starting Torque, Maximum	1.5 oz.-in.	1.3 oz.-in.
Running Torque, Maximum	1.2 oz.-in.	0.7 oz.-in.

## Standard Resistance Values, Ohms

Total Resistance	Theoretical Resolution (% Nominal)	Tempco of Wire
1K	0.062	±130 ppm/°C
2K	0.050	±130 ppm/°C
5K	0.038	±130 ppm/°C
10K	0.031	±130 ppm/°C
20K	0.027	±130 ppm/°C
50K	0.024	± 20 ppm/°C
100K	0.022	± 20 ppm/°C

### METRIC CONVERSIONS

1 in.	25.4 mm	1 oz.-in.	0,007 N-m
1 oz.	28.4 gm	1 lb.-in.	0,113 N-m

## Special Features

Center Tap	CT
Linearity Tape	LT
Rear Shaft Extension	RS
Flatted Shaft	FS
Slotted Shaft	SS
Anti-Fungus Treatment	AF

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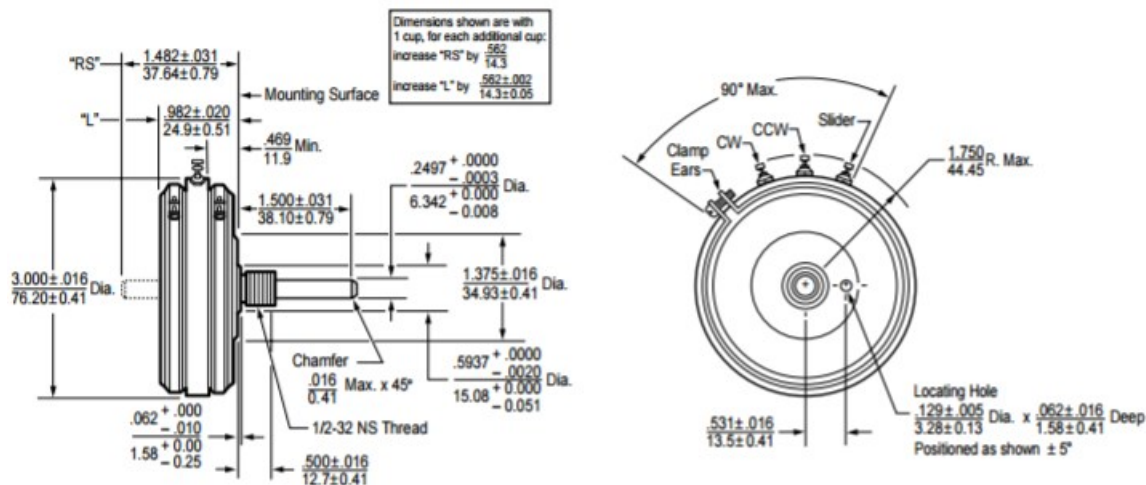
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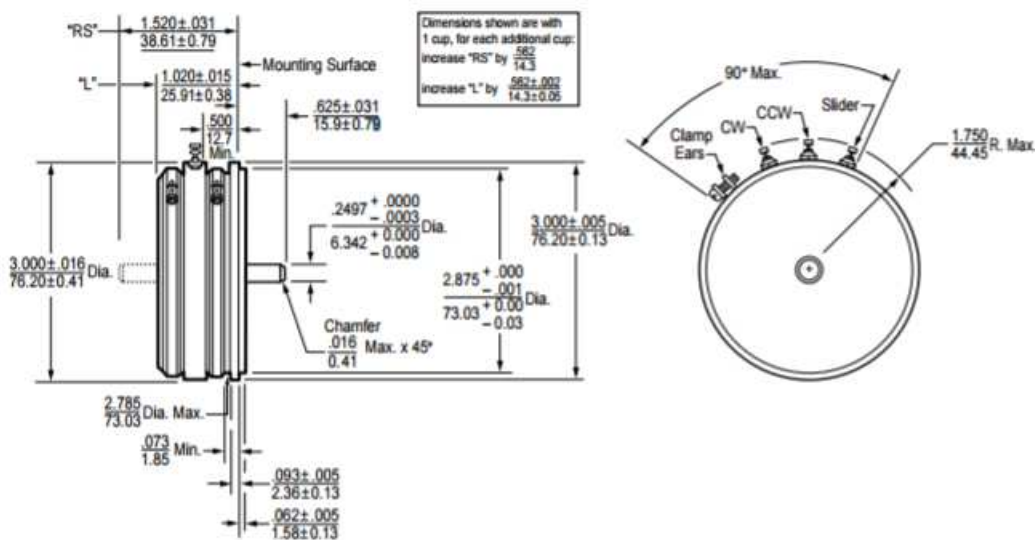


## Outline Drawings

**Model 5711 - Bushing Mount**



**Model 5713 - Servo Mount**



### General Note

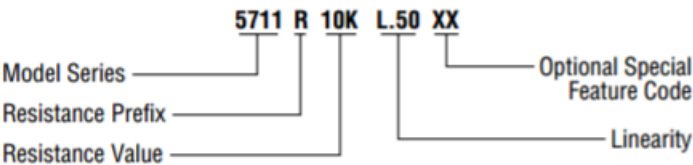
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## Ordering Information



**CIRCUIT DIAGRAM**  

The circuit diagram shows a potentiometer with three terminals: (CCW) on the left, (S) in the middle, and (CW) on the right. A wiper arm is connected to terminal (S).

**NOTES**  

Metric equivalents, based on 1 inch = 25.4mm are rounded to the same number of significant figures as in the original English units and are provided for general information only.

Tolerances unless otherwise specified:  
Linear = ± .01 inches (.25mm)  
Angular = ± 2 degrees

THIRD ANGLE PROJECTION