MODEL SERIES 5710

3″ Diameter
Single Turn
Wirewound
Precision Potentiometer



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 (MIL-R-12934)

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

Specifications subject to change without notice.

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"
	5711	**5713**
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

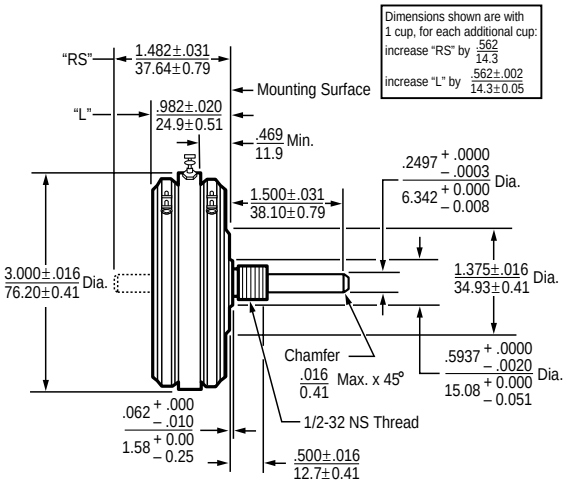
Total Resistance	Theoretical Resolution (% Nominal)	Tempco of Wire
1K	0.062	±130 ppm/°C
2K	0.050	±130 ppm/°C
5K	0.038	±130 ppm/°C
10K	0.031	±130 ppm/°C
20K	0.027	±130 ppm/°C
50K	0.024	± 20 ppm/°C
100K	0.022	± 20 ppm/°C

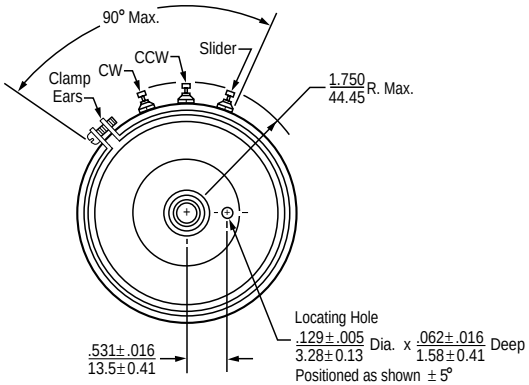
METRIC CONVERSIONS

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

OUTLINE DIMENSIONS (Inch/mm)

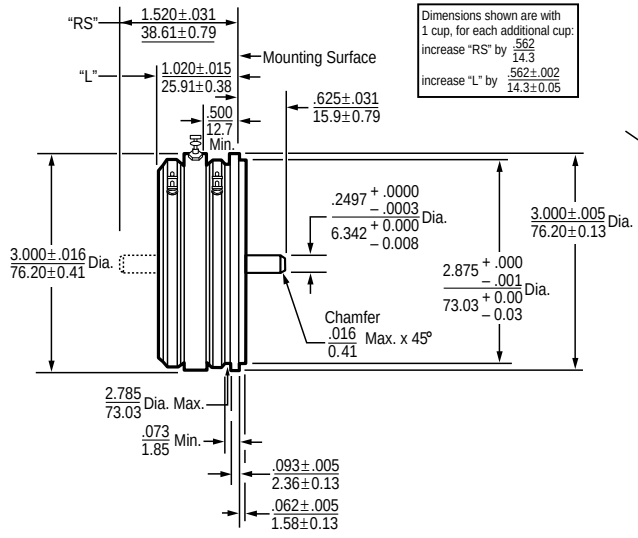
Model 5711 - Bushing Mount

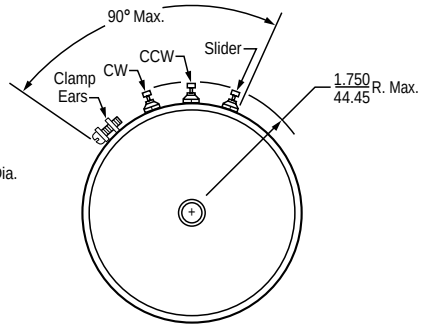




OUTLINE DIMENSIONS (Inch/mm)

Model 5713 - Servo Mount

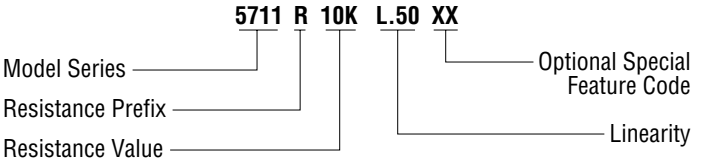




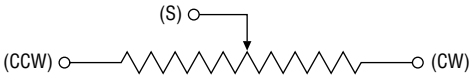
SPECIAL FEATURES

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

ORDERING INFORMATION



CIRCUIT DIAGRAM



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

