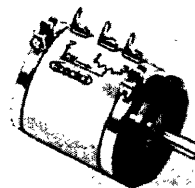
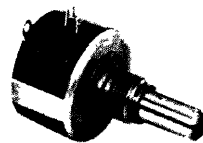
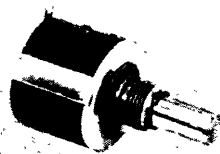


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MULTI-TURN POTENTIOMETERS

THREE TURN WIREWOUND



MODEL

Description

Mounting

Element Technology

Specifications, Ordering Information

533 *

Three Turn
7/8" Dia., 1/4" Shaft

Bushing

Wirewound

Page 38

537

Three Turn
7/8" Dia., 1/4" Shaft

Bushing

Wirewound

Page 38

552

Three Turn
7/8" Dia., 1/8" Shaft

Bushing or Servo

Wirewound

Page 32

ELECTRICAL

Resistance:

Standard Range, Ohms

Capability Range, Ohms

Tolerance:

Standard, %

Special to, %

Linearity:

Standard, %

Special to, %

TC, PPM / °C

Power Rating: *

Watts at °C

Derate to 0 W at °C

Electrical Travel

End Voltage

Taps (Special Order)

Phasing, To Section 1

50Ω to 20KΩ

5Ω to 60KΩ

±5%

±2%

±0.25%

±20, Standard Values

1.55 W at 40°C
125°C

1,080° + 10° - 0°

0.25% E

Center

±2°, CCW Taps

50Ω to 20KΩ

5Ω to 60KΩ

±5%

±2%

±0.25%

±20

1.55 W at 40°C
125°C

1,080° + 10° - 0°

0.25% E

Center

±2°, CCW Taps

5Ω to 20KΩ

5Ω to 45KΩ

±3%, 50Ω ≤ Rt ≤ 45KΩ

±5%, 5Ω ≤ Rt < 50Ω

±1%, 50Ω ≤ Rt ≤ 45KΩ

±3%, 5Ω ≤ Rt < 50Ω

±0.25%

±0.125%, 2KΩ ≤ Rt ≤ 45KΩ

±0.20%, 500Ω ≤ Rt < 2KΩ

±0.25%, 5Ω ≤ Rt < 500Ω

±20, 100Ω ≤ Rt ≤ 45KΩ

±180, 50Ω ≤ Rt < 100Ω

±800, 5Ω ≤ Rt < 50Ω

1.55 W at 40°C
125°C

1,080° + 10° - 0°

Lin x E, 20Ω < Rt ≤ 45KΩ

2% E, 5Ω ≤ Rt ≤ 20Ω

16 Max, Location ±2°

±2°, CCW Taps

PHYSICAL

Temperature

Rotational Life: Shaft Revolutions

Stop Strength

Mechanical Angle

Moment Of Inertia,
Each Section

Ganging:

Sections Maximum

Terminal Alignment

Weight: First Sec / Each Add Sec

-55°C to +125°C

300,000

75 oz-in

1,080° + 10° - 0°

1,080° + 10° - 0°

0.30 gm-cm²

2

±10°

0.75 oz / 0.50 oz

-55°C to +125°C

300,000

75 oz-in

1,080° + 10° - 0°

1,080° + 10° - 0°

2

±10°

0.75 oz / 0.50 oz

-55°C to +125°C

600,000 Revs

100 oz-in

1,080° + 10° - 0°

1,080° + 10° - 0°

3

±10°

0.75 oz / 0.60 oz

OPTIONS

6mm Shaft & 9mm Bushing
1/8" Shaft & 1/4" Bushing
Non-linear Functions
Plastic Shaft, Non-turn Pin
Rear Shaft Ext, High Torque
Dual Concentric Shafts1/8" Shaft & 1/4" Bushing
Non-linear Functions
Plastic Shaft, Non-turn Pin
Rear Shaft Ext, High Torque
Dual Concentric Shafts

150° Rating



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Ontario, California 91761

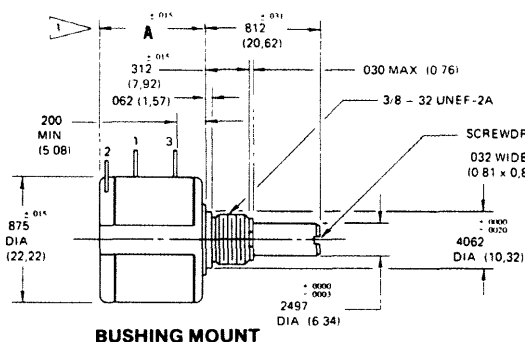
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NOTES

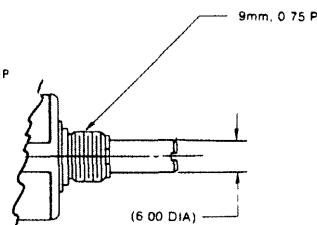
* Additional sections derated to 75% of section 1

* Standard Distributor Product

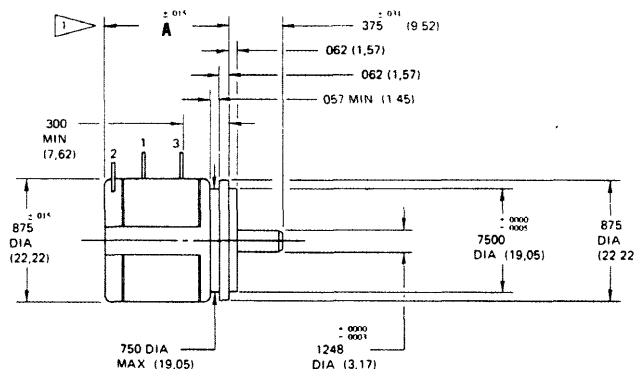
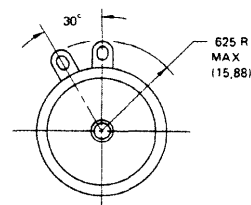
MULTI-TURN POTENTIOMETERS



BUSHING MOUNT



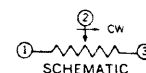
METRIC SHAFT/BUSHING THREAD



SERVO MOUNT

Model	Dimension A			Maximum Sections
	Bushing Mount Single Section	Servo Mount Single Section	Add for each Additional Section	
533, 534, 535	0.750	0.850	0.695 ▢	2
537	0.590	--	0.545 ▢	2

TOLERANCES UNLESS OTHERWISE NOTED
DECIMALS $\pm .005$ ANGLES $\pm 2^\circ$
BASIC DIMENSIONS ARE IN INCHES
MILLIMETER DIMENSIONS IN PARENTHESES



HOW TO ORDER THE MODEL 533, 534, 535 OR 537

Models can be ordered from this specification sheet by stating:

534 - 1 1 XXX/XXX

Model				

Mounting			
----------	--	--	--

1-Bushing			
-----------	--	--	--

2 - Servo (special order)			
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Number of sections _____

Resistance EIA Code Section #1 _____

Resistance EIA Code Section #N _____

(special order)

EIA Code	Standard Resistance	533, 537 3 Turn	534 10 Turn	535 5 Turn
		Resolution %	Resolution %	Resolution %
500	50Ω	0.149		0.120
101	100Ω	0.111	0.060	0.075
201	200Ω	0.097	0.037	0.061
501	500Ω	0.069	0.031	0.049
102	1KΩ	0.063	0.025	0.041
202	2KΩ	0.041	0.021	0.031
502	5KΩ	0.044	0.018	0.034
103	10KΩ	0.034	0.017	0.030
203	20KΩ	0.031	0.015	0.020
503	50KΩ		0.009	0.015
104	100KΩ		0.007	

	533, 535, 537	534
Materials		
Housing	Glass filled Thermoset Plastic	Glass filled Thermoset Plastic
Bushing/Servo	Brass, Nickel Plated	Brass, Nickel Plated
Lids: Rear	Thermoset Plastic	Thermoset Plastic
Front	Stainless Steel	Stainless Steel
Shaft	Stainless Steel	Stainless Steel
Terminals	Brass, Plated, Solderable	Brass, Plated, Solderable
Bushing Mount Hardware		
Lockwasher, Internal Tooth	Steel, Nickel Plated	Steel, Nickel Plated
Panel Nut	Brass, Nickel Plated	Brass, Nickel Plated
Electrical Specifications		
Dielectric Withstanding	1,000v RMS, 60Hz	1,000v RMS, 60Hz
Insulation Resistance	1,000M Ω , 500v dc	1,000M Ω , 500v dc
Peak Noise/Output Smoothness	100 Ω ENR	100 Ω ENR
Environmental Specifications		
Moisture Resistant	Yes	Yes
Vibration	15g, 10 to 2,000Hz	15g, 10 to 2,000Hz
Shock	50g	50g
Salt Spray	96 Hours	96 Hours
Load Life	900 Hours	900 Hours
Temperature Range	-55°C to +125°C	-55°C to +125°C
Sealing	Available	Available
Mechanical Specifications		
Bearing Type:		
Servo Mount	Ball/Sleeve	Ball/Sleeve
Bushing Mount	Sleeve	Sleeve
Operating Torque: oz-in	Starting	Starting
Servo: 1 Section	0.70	0.50
Bushing: 1 Section	0.70	0.50
Each Add Section	0.40	0.40
Mechanical Tolerance: in. Max	Bushing	Bushing
Shaft Runout (TIR/in)	0.003	0.002
Pilot dia. Runout (TIR)	0.003	0.002
Lateral Runout (TIR)	0.005	0.003
Shaft End Play	0.010	0.010
Shaft Radial Play	0.003	0.002
	Servo	Servo
	0.002	0.002
	0.002	0.002
	0.003	0.003
	0.005	0.005
	0.010	0.010
	0.002	0.002



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