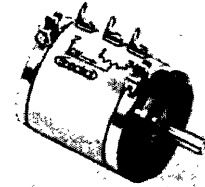
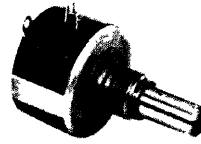
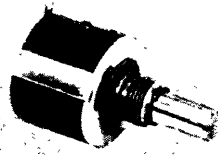


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MULTI-TURN POTENTIOMETERS

THREE TURN WIREWOUND



MODEL	533 *	537	552
Description	Three Turn 7/8" Dia., 1/4" Shaft	Three Turn 7/8" Dia., 1/4" Shaft	Three Turn 7/8" Dia., 1/8" Shaft
Mounting	Bushing	Bushing	Bushing or Servo
Element Technology	Wirewound	Wirewound	Wirewound
Specifications, Ordering Information	Page 38	Page 38	Page 32

ELECTRICAL

Resistance:			
Standard Range, Ohms	50Ω to 20KΩ	50Ω to 20KΩ	5Ω to 20KΩ
Capability Range, Ohms	5Ω to 60KΩ	5Ω to 60KΩ	5Ω to 45KΩ
Tolerance:			
Standard, %	±5%	±5%	±3%, 50Ω ≤ Rt ≤ 45KΩ ±5%, 5Ω ≤ Rt < 50Ω
Special to, %	±2%	±2%	±1%, 50Ω ≤ Rt ≤ 45KΩ ±3%, 5Ω ≤ Rt < 50Ω
Linearity:			
Standard, %	±0.25%	±0.25%	±0.25%
Special to, %			±0.125%, 2KΩ ≤ Rt ≤ 45KΩ ±0.20%, 500Ω ≤ Rt < 2KΩ ±0.25%, 5Ω ≤ Rt < 500Ω
TC, PPM / °C	±20, Standard Values	±20	±20, 100Ω ≤ Rt ≤ 45KΩ ±180, 50Ω ≤ Rt < 100Ω ±800, 5Ω ≤ Rt < 50Ω
Power Rating:*			
Watts at °C	1.55 W at 40°C	1.55 W at 40°C	1.55 W at 40°C
Derate to 0 W at °C	125°C	125°C	125°C
Electrical Travel	1,080° +10° -0°	1,080° +10° -0°	1,080° +10° -0°
End Voltage	0.25% E	0.25% E	Lin x E, 20Ω < Rt ≤ 45KΩ 2% E, 5Ω ≤ Rt ≤ 20Ω
Taps (Special Order)	Center	Center	16 Max, Location ±2°
Phasing, To Section 1	±2°, CCW Taps	±2°, CCW Taps	±2°, CCW Taps

PHYSICAL

Temperature	-55°C to +125°C	-55°C to +125°C	-55°C to +125°C
Rotational Life: Shaft Revolutions	300,000	300,000	600,000 Revs
Stop Strength	75 oz-in	75 oz-in	100 oz-in
Mechanical Angle	1,080° +10° -0°	1,080° +10° -0°	1,080° +10° -0°
Moment Of Inertia, Each Section			0.30 gm-cm ²
Ganging:			
Sections Maximum	2	2	3
Terminal Alignment	±10°	±10°	±10°
Weight: First Sec/ Each Add Sec	0.75 oz/0.50 oz	0.75 oz/0.50 oz	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 Shafts	1/8" 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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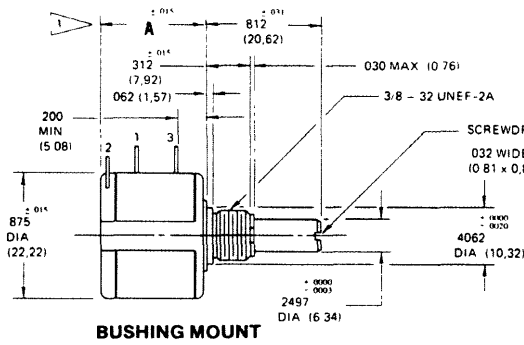
NOTES

* Additional sections derated to 75% of section 1

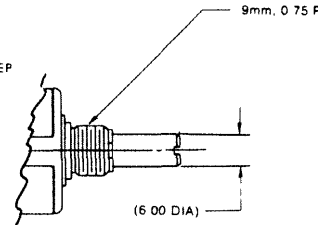
* Standard Distributor Product

533, 534, 535, 537

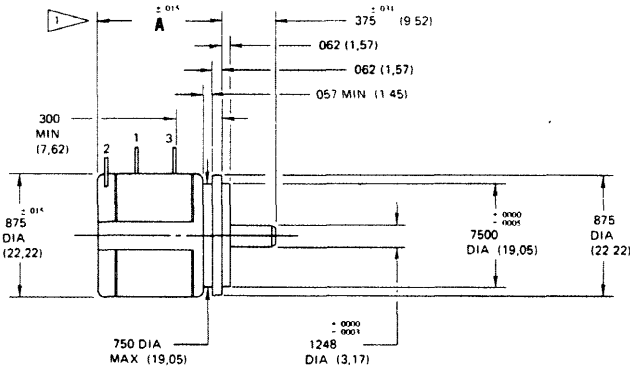
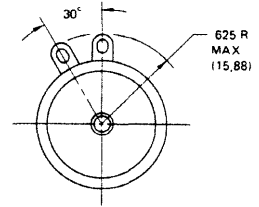
MULTI-TURN POTENTIOMETERS



BUSHING MOUNT



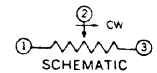
METRIC SHAFT/BUSHING THREAD



SERVO MOUNT

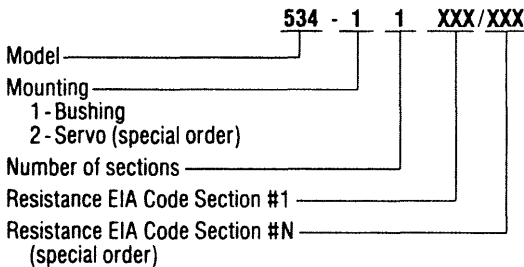
Model	Dimension A			Maximum Sections
	Bushing Mount Single Section	Servo Mount Single Section	Add for each Additional Section	
533, 534, 535	0.750	0.850	0.695	2
537	0.590	--	0.545	2

TOLERANCES UNLESS OTHERWISE NOTED
DECIMALS ± 0.05 ANGLES ± 2°
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:



EIA Code	Standard Resistance	533, 537	534	535
		3 Turn	10 Turn	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	1,000MΩ, 500v dc	1,000MΩ, 500v dc		
Peak Noise/Output Smoothness	100Ω ENR	100Ω 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	Servo	Bushing	Servo
Shaft Runout (TIR/in)	0.003	0.002	0.003	0.002
Pilot dia. Runout (TIR)	0.003	0.002	0.003	0.002
Lateral Runout (TIR)	0.005	0.003	0.005	0.003
Shaft End Play	0.010	0.005	0.010	0.005
Shaft Radial Play	0.003	0.002	0.003	0.002



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