

# 1/2" (12.7 mm) Conductive Plastic & Cermet Potentiometers



## FEATURES

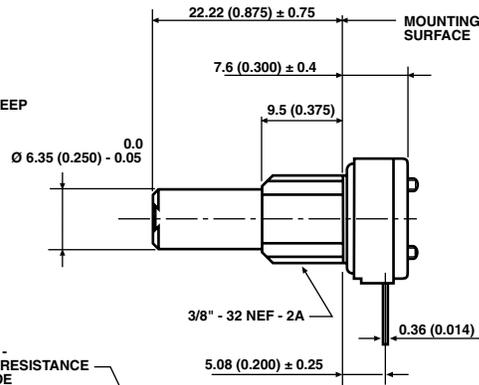
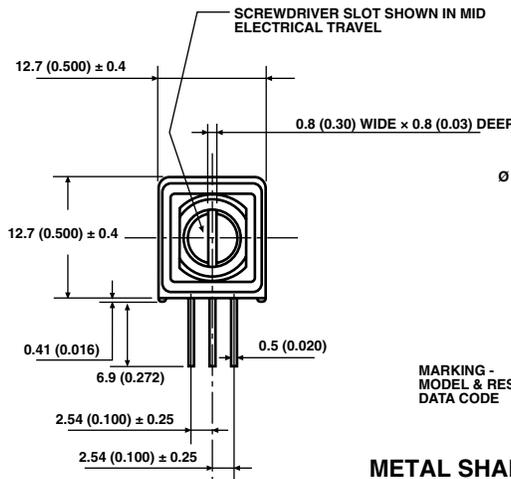
- Model 248/249 retains the proven high performance characteristics in a more cost effective package
- Cost effective panel potentiometers
- P.C.B. mounting potentiometers



## DIMENSIONS in millimeters (inches)

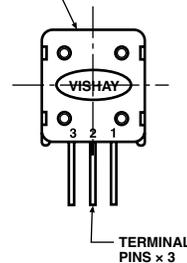
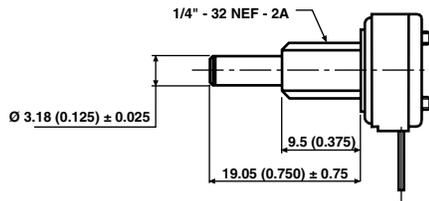
### METAL OR PLASTIC SHAFTS

#### X = STANDARD LEADS



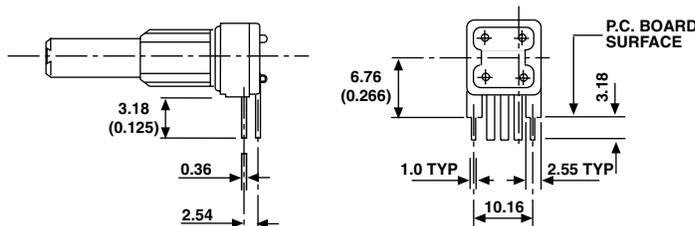
MARKING - MODEL & RESISTANCE DATA CODE

#### METAL SHAFT

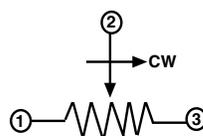
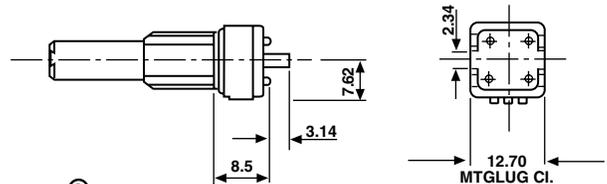


TERMINAL PINS x 3

#### E = REAR STAND OFF



#### D = REAR LOCATING LUGS



Tolerance unless otherwise specified ± 0.5



ELECTRICAL SPECIFICATIONS		
PARAMETER	MODEL 248	MODEL 249
Element Type	conductive plastic	cermet
Total Resistance Range	500 Ω to 1 MΩ	
Resistance Tolerance	± 20 %	± 20 % (on request ± 10 %)
Power rating	0.5 W at 70 °C	1.0 W at 70 °C
	Both derated to zero at 125 °C	
Temperature Coefficient of Resistance	± 1000 ppm/°C	± 100 ppm/°C
Linearity Tolerance	± 5 % Independent	
Contact Resistance Variation	5 % of the Total Resistance	
Insulation Resistance	1000 MΩ minimum, 500 VDC	
Dielectric Strength	750 V <sub>RMS</sub> minimum 50/60 Hz	
End Resistance	2 Ω maximum each end	
Effective Electrical Angle	265° ± 5°	

**MECHANICAL SPECIFICATIONS**

Rotation	295° ± 5°
Torque	Starting and Running 1.5 to 18.75 mNm
End Stop Torque	0.35 Nm (50 oz-in)
Weight	8.3 g's (0.29 oz) (1/4" × 7/8" FMF metal shaft)
Max Tightening Torque	0.50 Nm (1/4" Bush) 0.70 Nm (3/8" Bush)
Sealing	IP50

**ENVIRONMENTAL SPECIFICATIONS**

Temperature Range	- 55 °C to + 125 °C
Shock	390 meters/sec/sec. 1000 bumps
Vibrations	98 meters/sec/sec. 0.75 mm, 10 to 500 Hz
Rotational Life (Electrical)	25 000 cycles
Load Life at 70 °C	1000 hours

STANDARD RESISTANCE ELEMENT DATA	
Ω	500R, 1K, 2K, 5K, 10K, 25K, 50K, 100K, 250K, 500K, 1M
248/249:	

PACKAGING
Carton box of 50, code: BO50

**MARKING**

Unit identification: Manufacturer's name and model number, EIA resistance value coding, tolerance, data code and terminal identification.

ORDERING INFORMATION						
248	JE	8	08	103	e3	
MODEL	SPECIAL FEATURES	SHAFT OPTIONS	FMF SHAFT OPTIONS	EIA RESISTANCE CODE	LEAD FINISH	
248/249	D: Rear locating lugs E: Rear stand off J: CW audio taper	7: 6.35 (1/4") plastic 8: 3.18 (1/8") plated brass 9: 6.35 (1/4") plated brass	08: 19.05 (3/4") for 3.18 (1/8") plated brass 10: 22.22 (7/8") for 6.35 (1/4") plated brass or plastic versions		e3: pure Sn	
Example: 248 - JE - 8 - 08 - 103						

SAP PART NUMBERING GUIDELINES																
2	4	8	B	B	H	S	0	E	B	2	5	1	0	3	M	L
MODEL			BUSHING	SHAFT			SHAFT MATERIAL	LEADS	PACKAGING			OHMIC VALUE/TOL/LAW OR SPECIAL				
See the end of this data book for conversion tables																



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