

Vishay Spectrol

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

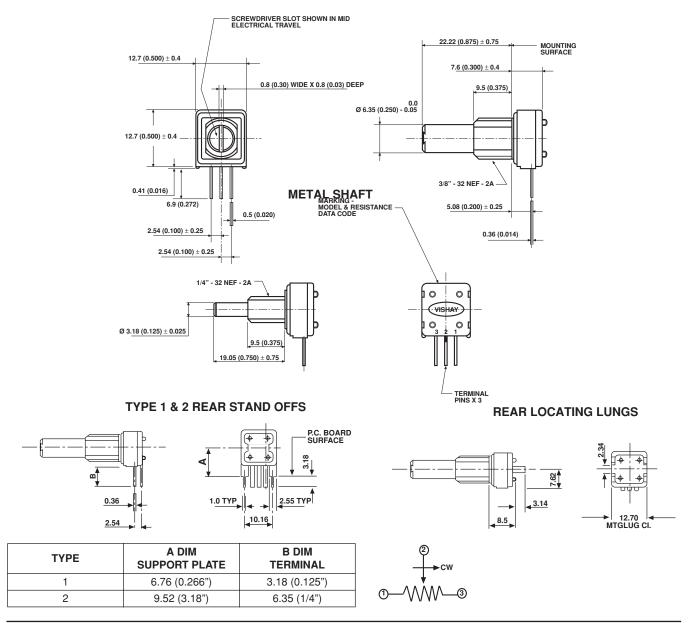


#### **FEATURES**

- Model 248/249 Retains the Proven High performance characteristics in a more cost effective package
- This model is destined to become the first choice when seeking high quality
- Cost Effective Panel Potentiometers
- . P.C.B. Mounting Potentiometers

#### **DIMENSIONS** in millimeters (inches)

#### **METAL OR PLASTIC SHAFTS**



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



ELECTRICAL SPECIFICATIONS		
PARAMETER	MODEL 248	MODEL 249
Element Type	Conductive Plastic	Cermet
Total Resistance Range	$500\Omega$ to $500$ KΩ	
Resistance Tolerance	± 20%	± 10%
Power rating	0.5 watts at 70°C	1.0 watts at 70°C
	Both derated to zero at 125°C	
Temperature Coefficient of Resistance	± 1000ppm/°C	± 100ppm/°C
Linearity Tolerance	± 5% Independent	
Contact Resistance Variation	Both 3% of the Total Resistance	
Insulation Resistance	1000MΩ minimum, 500VDC	
Dielectric Strength	750V <sub>RMS</sub> minimum 50/60Hz	
End Resistance	$2\Omega$ maximum each end	
Effective Electrical Angle	265° ± 5°	

#### **MECHANICAL SPECIFICATIONS**

Rotation **Torque** Starting and Running

1.5 to 18.75mNm **End Stop Torque** 0.35Nm (50 oz-in) Weight 8.3q's (0.29 oz)

(1/4" x 7/8" FMF metal shaft) 0.50Nm (1/4" Bush) **Max Tightening Torque** 0.70Nm (3/8" Bush)

#### STANDARD RESISTANCE ELEMENT DATA

500R, 1K, 2K, 5K, 10K, 25K, 50K, 100K, 250K, Ohms 248/249: 500K, 1M

#### **ENVIRONMENTAL SPECIFICATIONS**

**Temperature Range** - 55°C to + 125°C Shock 390 meters/sec/sec, 1000 bumps **Vibrations** 98 meters/sec/sec.

**Rotational Life (Electrical)** 

248: 249:

Load Life at 70°C **Materials** Shaft:

Housing & Rear Lid: Terminals:

**Mounting Hardware** 

0.75mm, 10 to 500Hz

50,000 cycles 25,000 cycles 1000 hours

Plated brass or plastic Plastic flame retardant Phosphor bronze, solder plated Lockwasher: Steel, nickel plated

Panel nut: Brass, nickel

plated

#### **MARKING**

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

#### **PACKAGING**

Carton box of 50, code: BO50

#### **ORDERING INFORMATION** 248 JΕ 08 103 MODEL SHAFT OPTIONS **FMF SHAFT OPTIONS** EIIA RESISTANCE CODE SPECIAL FEATURES 248/249 08: 19.05 (3/4") for D: Rear locating lugs 7: 6.35 (1/4") plastic E: Type 1 rear stand offs 8: 3.18 (1/8") plated brass 3.18 (1/8") plated brass 9: 6.35 (1/4") plated brass **F:** Type 2 rear stand offs 10: 22.22 (7/8") for J: CW audio taper 6.35 (1/4") plated brass or plastic versions 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 LEADS PACKAGING OHMIC VALUE/TOL/LAW OR SPECIAL
See the end of this data book for conversion tables

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For technical questions, contact: sfer@vishay.com

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Vishay

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