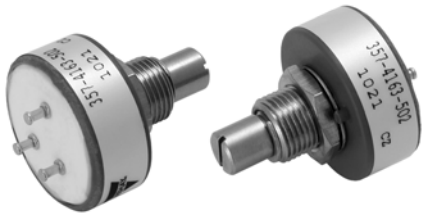
7/8" (22.2 mm) Conductive Plastic Potentiometer, Bushing Mount Type



FEATURES

- 7/8" diameter single turn
- Compact size, advanced design technology
- Offer a cost effective solution to your potentiometer requirements
- Suitable model for all industrial applications
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

RoHS COMPLIANT

QUICK REFERENCE DATA

Sensor type	ROTATIONAL, conductive plastic
Output type	Output by turrets
Market appliance	Industrial
Dimensions	7/8" (22.2 mm)

ELECTRICAL SPECIFICATIONS

PARAMETER		
Resistance	Standard range, 1 kΩ to 50 kΩ	
Tolerance	**STANDARD** ± 20 %	**SPECIAL TO** ± 10 %
Linearity (independent)	**STANDARD** ± 2.0 %	**SPECIAL** ± 1.0 %
Output smoothness	0.1 % maximum	
TCR	± 600 ppm/°C maximum	
Power rating	1.0 W at 70 °C derated to 0 W at 125 °C	
Electrical travel	340° ± 3°	
End voltage	0.5 % maximum	
Dielectric withstanding voltage	1000 V_{RMS}, 60 Hz	
Insulation resistance	1000 MΩ, 500 V_{DC}	

MECHANICAL SPECIFICATIONS

PARAMETER	
Rotation	360° continuous (optional mechanical stops 340° ± 3°)
Mounting	3/8 - 32 UNEF - 2A
Operating torque maximum	Starting and running 3.68 mNm (0.5 oz. - in)
Shaft tolerance maximum Runout End play Radial play	 0.13 mm (0.005") 0.25 mm (0.010") 0.13 mm (0.005")
Weight	17.5 g (0.62 oz.)

ORDERING INFORMATION/DESCRIPTION

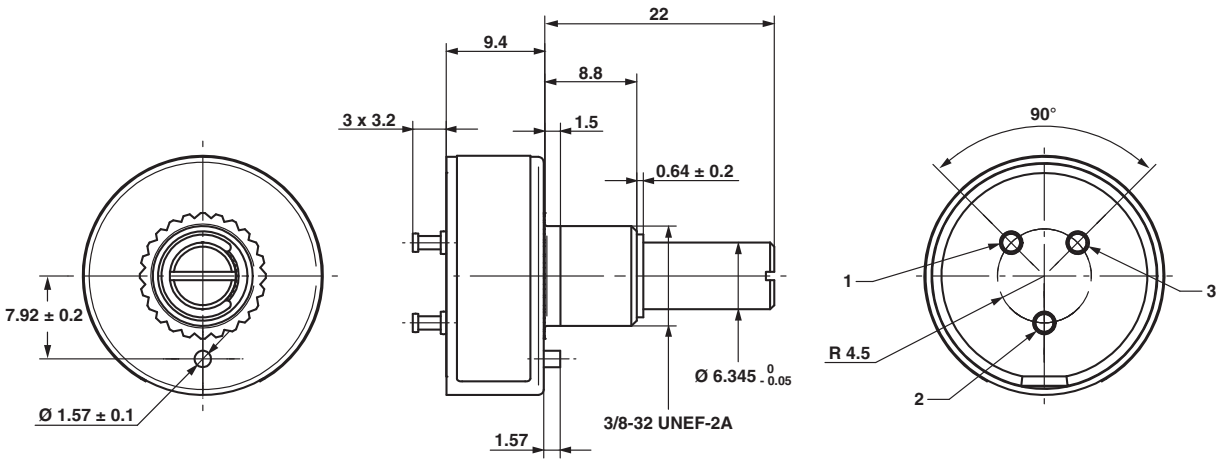
357	B	0	10K	20 %	A	BO50	0 P 22	e4
MODEL	STYLE	FEATURES	OHMIC VALUE	TOLERANCE ON OHMIC VALUE	LINEARITY	PACKAGING	SHAFT TYPE	LEAD FINISH
	Bushing	**0** Non turn pin and continuous rotation	From 1K to 50 K	± 10 % or ± 20 %	X: ± 2 % A: ± 1 %	Box of 50 pieces	Shaft diameter **0** = 6.0 mm or **1** = 6.35 mm (1/4") Shaft type **P** = Plain **S** = Slotted FMF (from mounting face) Range from 12 mm to 75 mm in 1 mm increments	
		1 No non turn pin and continuous rotation						
		2 Non turn pin, with stops on rotation						
		3 No non turn pin with stops on rotation						

SAP PART NUMBERING GUIDELINES

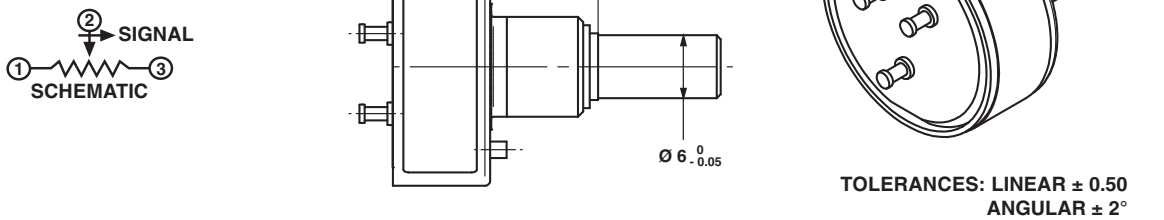
357B	2	203	M	X	B25	1S22
MODEL	FEATURES	OHMIC VALUE 203 = 20K	TOLERANCE ON OHMIC VALUE M: ± 20 %/K: ± 10 %	LINEARITY X: ± 2 %	PACKAGING Box of 50 pieces	SHAFT TYPE

DIMENSIONS in millimeters

Ø 6.35 mm SHAFT VERSION



Ø 6.0 mm SHAFT VARIATION: METRIC



TOLERANCES: LINEAR ± 0.50
ANGULAR ± 2°

ENVIRONMENTAL SPECIFICATIONS

Vibration	15 *g*, 10 Hz to 2000 Hz
Shock	50 *g*
Load Life	1000 h
Storage temperature range	-55 °C to +125 °C
Life	5 000 000 shaft revolutions
Materials	
Housing	Thermoplastic housing
Bushing	Brass, nickel plated
Rear lid	Alumina
Shaft	Stainless steel
Terminals	Turret type, solder plated
Bushing mount hardware	
Lockwasher internal tooth	Steel, nickel plated
Panel nut	Brass nickel plated

Note

- Nothing stated herein shall be construed as a guarantee of quality or durability.

MARKING

Unit Indentification	Manufacturer's name and model number, resistance value and tolerance, linearity specification date code and terminal identification. Example of a marking for a standard part: 357-0-0-1S22-103

RESISTANCE VALUE

Ohms	1K, 2K, 5K, 10K, 20K, 50K

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