1 5/16" (33.3 mm) Low Cost Industrial Single Turn Wirewound, Bushing Mount Type Potentiometer

FEATURES

- Suitable model for all industrial applications
- Center tap available
- Continuous rotation and mechanical stops both standard
- Large electrical angle: 352° ± 2°
- Material categorization: For definitions of compliance please see www.vishay.com/doc?99912

RoHS COMPLIANT

QUICK REFERENCE DATA

Sensor type	ROTATIONAL, single turn wirewound
Output type	Output by turrets
Market appliance	Industrial
Dimensions	1 5/16" (33.3 mm)

ELECTRICAL SPECIFICATIONS

PARAMETER	MIL-PRF-12934 TEST PROCEDURES APPLY	
	STANDARD	**SPECIAL**
Total Resistance	5 Ω to 20 kΩ	to 35 kΩ
Tolerance: 50 Ω and Above	± 3 %	± 1 %
Below 50 Ω	± 5 %	± 3 %
Linearity (independent)	**STANDARD**	**BEST PRACTICAL**
Total Resistance		
5 Ω to 20 Ω	± 1.0 %	± 0.75 %
20 Ω to 200 Ω	± 1.0 %	± 0.50 %
200 Ω and above	± 0.5 %	± 0.25 %
Noise	100 Ω ENR	
Power Rating	40 °C ambient 2.75 W derated to zero at 125 °C	
Electrical Angle		
Continuous Rotation	352° ± 2°	
Stops	340° ± 5°	
Insulation Resistance	1000 MΩ minimum at 500 V_{DC}	
Dielectric Strength	1000 V_{RMS}, 60 Hz	
Absolute Minimum Resistance	1.0 % of total resistance or 0.5 W whichever is greater	
Minimum Voltage	0.5 % maximum	
Temperature Coefficient of Resistance	Refer to standard resistance element data	

MATERIAL SPECIFICATIONS

Housing	Molded glass filled thermoplastic
Rear Lid	Glass filled thermoset plastic
Shaft	Stainless steel, non-magnetic
Terminals	Brass, plated for solderability, Non-passivated
Mount Hardware Lockwasher Internal Tooth: Panel Nut:	 Steel, nickel plated Brass, nickel plated

ENVIRONMENTAL SPECIFICATIONS

Vibration	15 *g* thru 2000 Hz
Shock	50 *g*
Salt Spray	48 h
Rotational Life Shaft Revolutions	 500 000
Operating Temperature Range	- 55 °C to + 125 °C

ORDERING INFORMATION/DESCRIPTION

132	B	0	0	20K	BO10
MODEL	BUSHING MOUNT	MECHANICAL OPTIONS 0. Continuous 2. Stops	OTHER OPTIONAL FEATURES 0. Standard (end taps) 1. Center tap (within 5° of electrical center)	OHMIC VALUE	PACKAGING Box of 10 pieces

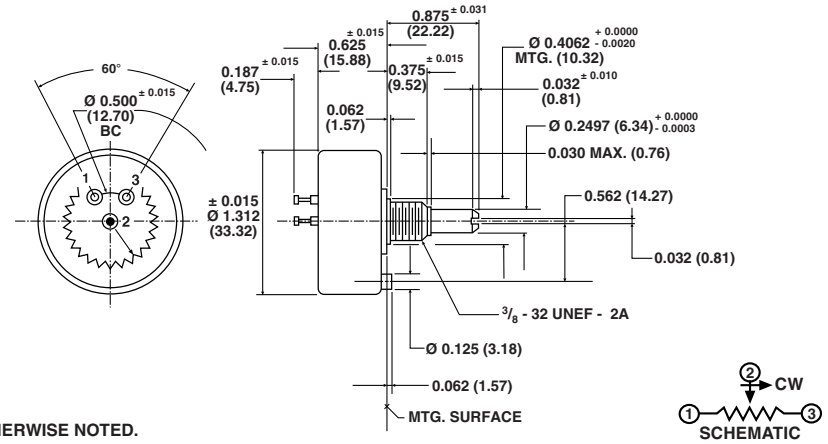
Other characteristics will be standard as described on this specification sheet. If special characteristics are required such as special linearity tolerance, special resistance tolerance, non-linear functions, etc., please state these on your order.

SAP PART NUMBERING GUIDELINES

132	B	2	1	103	B10
MODEL	STYLE	MECHANICAL OPTIONS	ELECTRICAL OPTIONS	OHMIC VALUE	PACKAGING
		2: With stops	1: With center tap	103: 10K	Box of 10 pieces

DIMENSIONS in inches (millimeters)

MODEL 132B/132-...

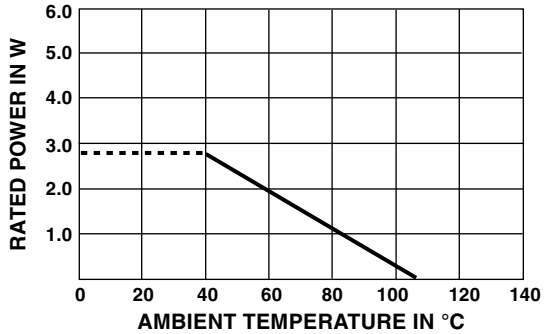


TOLERANCES: UNLESS OTHERWISE NOTED.
DECIMALS ± 0.005 ANGLES ± 2°

MECHANICAL SPECIFICATIONS

PARAMETER		
Rotation	360° (continuous) or 340° ± 5° (stops)	
Bearing Type	Sleeve	
Torque (maximums)	**STARTING** 1.0 oz. - in (72 g - cm)	**RUNNING** 0.7 oz.- in (50.40 g - cm)
Runouts (maximums)		
Shaft Runout (TIR)	0.002" (0.05 mm)	
Pilot Dia. Runout (TIR)	0.003" (0.08 mm)	
Lateral Runout (TIR)	0.005" (0.13 mm)	
Shaft End Play	0.008" (0.20 mm)	
Shaft Radial Play	0.003" (0.08 mm)	
Weight	1.0 oz. maximum (28.35 g)	
Stop Strength	8.0 in - lbs (9.21 kg - cm) (stops version only)	

POWER RATING CHART



RESISTANCE ELEMENT DATA

RESISTANCE VALUES (Ω)	RESOLUTION (%)	OHMS PER TURN	MAXIMUM CURRENT AT 40 °C AMBIENT (mA)	MAXIMUM VOLTAGE ACROSS COIL (V)	WIRE TEMP. COEF. (ppm/°C)
5	0.419	0.021	742	3.71	800
10	0.327	0.032	524	5.24	800
20	0.280	0.056	371	7.42	800
50	0.290	0.145	234	11.7	20
100	0.251	0.251	166	16.6	20
200	0.212	0.424	122	24.4	20
500	0.161	0.806	74.2	37.1	20
1K	0.150	1.50	52.4	52.4	20
2K	0.132	2.64	37.1	74.2	20
5K	0.107	5.34	23.4	117	20
10K	0.080	7.98	16.6	166	20
20K	0.067	13.4	12.2	244	20
35K	0.057	20.0	8.88	311	20

MARKING

Unit Identification	Units shall be marked with Vishay Spectrol name, model number, resistance and tolerance, linearity, terminal identification, and data code Applicable test procedures: MIL-R-12934. Example of a marking for a standard part: 132-0-0-103

Disclaimer

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Material Category Policy

Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as RoHS-Compliant fulfill the definitions and restrictions defined under Directive 2011/65/EU of The European Parliament and of the Council of June 8, 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (EEE) - recast, unless otherwise specified as non-compliant.

Please note that some Vishay documentation may still make reference to RoHS Directive 2002/95/EC. We confirm that all the products identified as being compliant to Directive 2002/95/EC conform to Directive 2011/65/EU.

Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as Halogen-Free follow Halogen-Free requirements as per JEDEC JS709A standards. Please note that some Vishay documentation may still make reference to the IEC 61249-2-21 definition. We confirm that all the products identified as being compliant to IEC 61249-2-21 conform to JEDEC JS709A standards.

Общество с ограниченной ответственностью «МосЧип» ИНН 7719860671 / КПП 771901001
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Данный компонент на территории Российской Федерации

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Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

http://moschip.ru/get-element

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

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Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

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