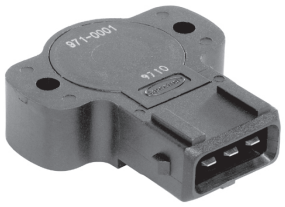
Throttle Position Sensor with Integrated Spring Return System



FEATURES

- High performance, compact potentiometric sensor
- Rugged construction, suitable for under-bonnet engine management and closed loop feedback applications
- Through-hole actuation capability
- Integral connector or flying lead versions
- Actuator and mounting configuration options

Spectrol Model 971 series Rotary Position Sensors are suitable for demanding environments where high life and consistant linearity performance is required. Typical applications include Electrical Industrial Vehicles. Off-Road Vehicle Steering and Transmission, Automotive Engine Management Systems and Controls.

The 971 Rotational Position Sensor can be supplied with options for electrical track length, resistance, flying leads, integral connector and actuator drive direction

ELECTRICAL SPECIFICATIONS	
PARAMETER	
Total Resistance Optional	5 kΩ at + 25 °C 1 kΩ to 25 kΩ
Resistance Tolerance	± 20 %
Linearity (Independent)	± 2 %
Electrical Travel	106° optional to 130° max.
Maximum Power Rating	1 W at 40 °C derated to zero at 135 °C
Output Smoothness	0.3 % max.
Temperature Coefficient	± 600 ppm/°C
Index Point (e/E)	3 % ± 2 %
Maximum Voltage	13.5 V_{DC}

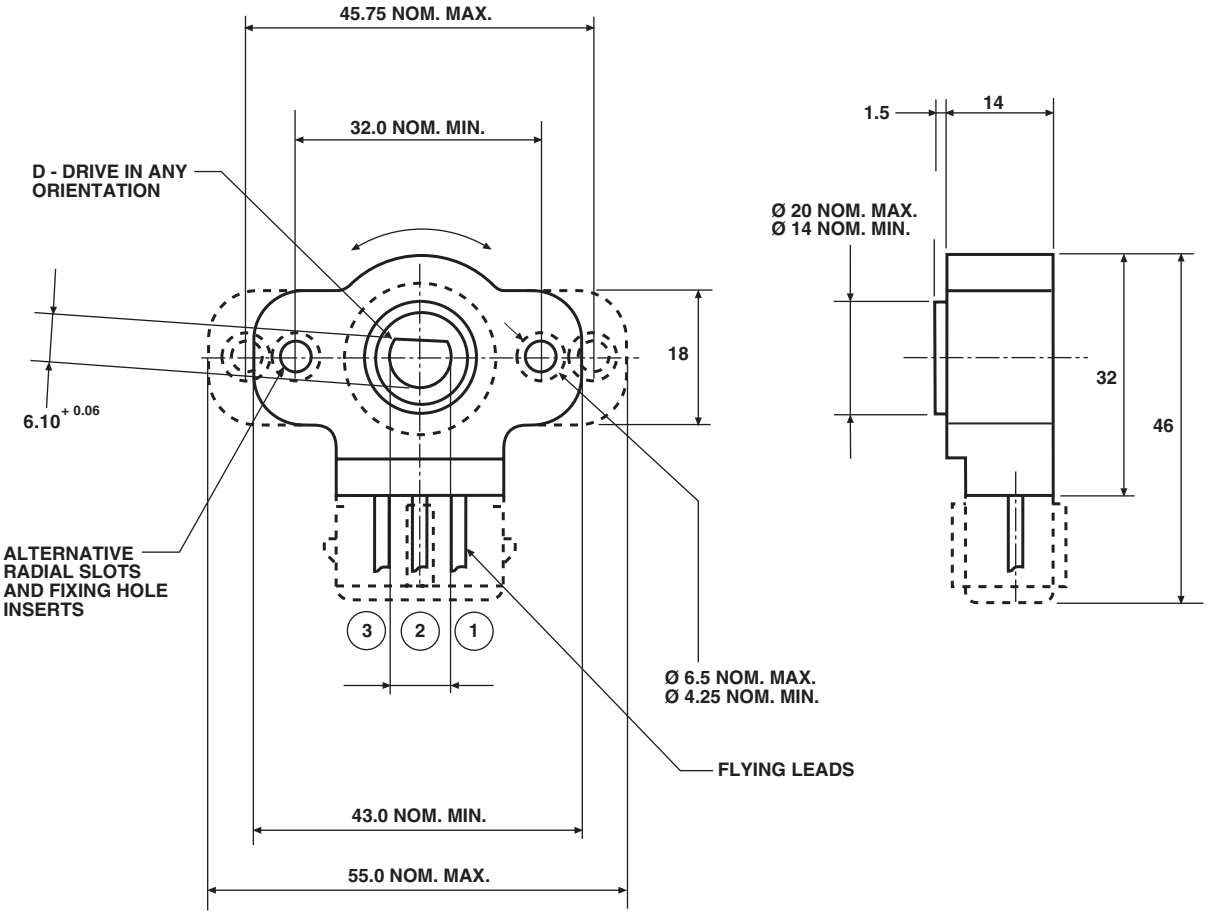
MECHANICAL SPECIFICATIONS	
PARAMETER	
Rotation Optional	130° ± 5° CCW CCW or CW up to 140° max. ± 5 %
Spring Torque	120 mNm max.
Stop Strength	680 mNm min.
End Play	0.25 mm max.
Lead Wires	Nominal Ø 1.8 mm length optional
Wire Pull Strength	10 kg max. (3 wires)

ORDERING INFORMATION/DESCRIPTION		
971	**0001**	**BO100**
MODEL	OUTPUT TYPE 0001: Amp connector 0002: Flying leads	PACKAGING Box of 100 pieces

SAP PART NUMBERING GUIDELINES		
971	**0001**	**B30**
MODEL	STYLE	PACKAGING

For technical questions, contact: sfer@vishay.com
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DIMENSIONS in inches (millimeters)



ENVIRONMENTAL SPECIFICATIONS	
Rotational Life	5 x 10^6 full cycles
Dither	10 x 10^6 (2° rotation)
Vibration	15 g, 50 to 1000 Hz
Shock	50 g
Temperature Range: Standard Operating Optional Operating	 - 40 °C to + 85 °C - 40 °C to + 130 °C
Materials: Housing	 Polyester PBT
Leads: Standard PVC High Temperature PVC	 + 85 °C + 130 °C

OPTIONAL INTEGRAL CONNECTOR	
AMP style Junior Timer Mates: Housing Terminals	 1 - 8275782 - 1 (unsealed) 927845- 2
Housing Terminals Wire Seals	282191 - 1 (sealed) 929939 - 3 828904 - 1

Disclaimer

All product specifications and data are subject to change without notice.

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