

Industrial Sensor for Harsh Environment (Throttle Position/Through Hole)



FEATURES

- Fully “sealed” robust package
- Electrical connection: AMP superseal 1.5 series integrated connector
- Through hole D drive
- Mountable on both faces
- Reference index indent
- Return spring option
- Standard electrical resistance (and custom options)

The Model 970 has been specifically developed to operate and maintain high functional performance under harsh environmental conditions. These include: extremes of temperature, continuous vibration, chemical exposure and water immersion. This universal device is fully sealed to ingress protection IP67 providing high mechanical durability and long electrical life. This industrial sensor is suitable for a different variety of applications within the automotive, medical and robotic industries.

ELECTRICAL SPECIFICIATONS

PARAMETER	
Standard Resistance	5 k Ω , $\pm$ 20 °C
Resistance Tolerance	$\pm$ 30 %
Linearity (Absolute)	$\pm$ 2 %
Electrical Angle	Standard version 200° continuous rotation version 346°
Output Smoothness	0.5 %
Maximum Voltage	30.0 V _{DC}
Temperature Coefficient of Resistance	600 ppm/°C

MECHANICAL SPECIFICATIONS

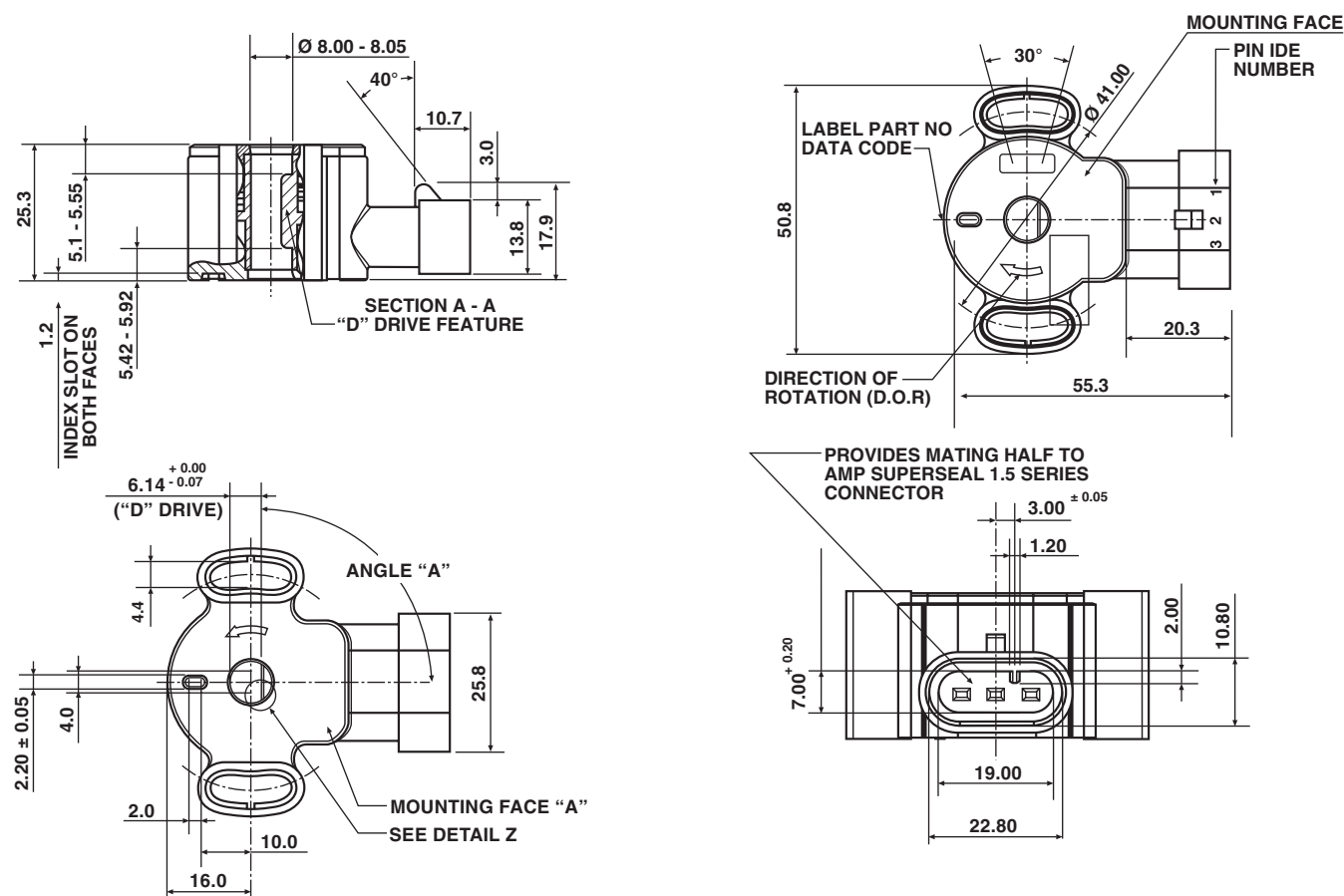
PARAMETER	
Rotation (Options)	190° with mechanical stops 190 with mechanical stops and return spring 360 continuous
Stop Strength	680 mNm minimum
Fixed Torque (Recommended)	2 to 3 Nm
Spring Torque	Minimum return 20 Nmm Maximum wind-up 115 Nmm
Mounting Pitch	41 mm

ORDERING INFORMATION/DESCRIPTION

970 - 1036 MODEL	0000 VERSION	BO100 PACKAGING
	0000 Without spring return 0001 With spring return 0002 Continuous rotation	Box of 100 pieces

SAP PART NUMBERING GUIDELINES

970 MODEL	1036 STYLE	0000 CONFIGURATION	B30 PACKAGING
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**DIMENSIONS** in inches (millimeters)**ENVIRONMENTAL SPECIFICATIONS**

PARAMETER	
Vibration	15 g thru 2000 Hz
Shock	50 g
Rotational Life	5 000 000 full cycles 10 000 000 dither cycles (second rotation)
Load Life	900 h
Temperature Range	- 40 °C to + 130 °C
Sealing	IP67
Humidity	96 % at 40 °C (500 h)
Salt Spray	5 % solution at 40 °C (300 h)

MARKING

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