

TA284 Series

Dual Output Sensor, Temperature & Acceleration, M8x1.25 Captive Bolt, Side Exit 3 Pin Connector, 100 mV/g, 10 mV/°C, ±10%



VIBRATION ANALYSIS HARDWARE



Product Features

High Performance in a Low-Cost Sensor

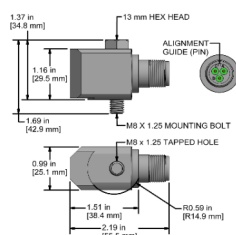
Helps to Detect Bearing Defects and Temperature Changes

- ▶ Temperature (10 mV/°C) and Acceleration (100 mV/g) Outputs in One Sensor via a Standard 3 Pin MIL Connection
- ▶ Popularly Sold with SC300 Series Signal Conditioners with Built-In Temperature Output
- ▶ -6N Integral Cable Option Features Food Safe FDA Compliant 21 CFR 177.1330 Polyolefin Heat Shrink

TA284-1A

3 Pin Connector

Connector Pin	Polarity
A	(+) Signal/Power
B	(-) Common
C	(+) Temperature Voltage

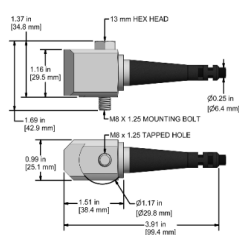


Stock Product

TA284-2A

CB105 Integral Cable

Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
White	(+) Temperature Voltage
Shield	Cable Drain Wire

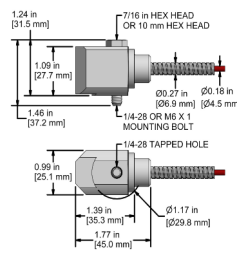


Built To Order

TA284-3A

CB218 Armored Integral Cable

Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
White	(+) Temperature Voltage
Shield	Cable Drain Wire

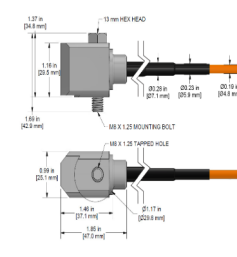


Built To Order

TA284-6N

CB119 FEP Jacketed Integral Cable

Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
White	(+) Temperature Voltage
Shield	Cable Drain Wire



Built To Order

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	TA284		<u>Environmental</u>		
Sensitivity (±10%)	100 mV/g		Operating Temperature Range	-40 to 250 °F	-40 to 121 °C
Frequency Response (±3dB)	30-600,000 CPM	0.5-10000 Hz	Maximum Shock Protection	5,000 g, peak	
Dynamic Range	± 50 g, peak *Vsource ≥ 22V, 12Vbias		Electromagnetic Sensitivity	CE	
Temperature Measurement Range	-40 to 250 °F	-40 to 121 °C	Sealing	IP68	
Temperature Output	10 mV/°C		Submersible Depth	200 ft.	60 m
Temperature Sensor	750 mV = 25 °C (±1)		SIL Rating	SIL 2	
Transverse Sensitivity	≤5%		<u>Physical</u>		
<u>Electrical</u>			Sensing Element	PZT Ceramic	
Settling Time	<2.5 seconds		Sensing Structure	Shear Mode	
Voltage Source	18-30 VDC		Weight	6.3 oz	180 grams
Constant Current Excitation	2-10 mA		Case Material	316L Stainless Steel	
Spectral Noise @ 10 Hz	14 µg/√Hz		Connector (Non-Integral)	3 Pin MIL-C-5015	
Spectral Noise @ 100 Hz	2.3 µg/√Hz		Resonant Frequency	1,380,000 CPM	23000 Hz
Spectral Noise @ 1000 Hz	2 µg/√Hz		Mounting Torque	2 to 5 ft. lbs.	2.7 to 6.8 Nm
Output Impedance	<100 ohm		Mounting Hardware Supplied	M8x1.25 Captive Bolt	
Bias Output Voltage	10-14 VDC		Calibration Certificate	CA10	
Case Isolation	>10 ⁹ ohm				

Typical Frequency Response

