

TA234 Series

Dual Output Sensor, Temperature & Acceleration, Side Exit 3 Pin Connector, 500 mV/g, 10 mV/°C, ±10%



VIBRATION ANALYSIS HARDWARE



Product Features

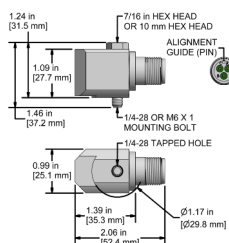
High Performance in a Low-Cost Sensor

Helps to Detect Bearing Defects and Temperature Changes

- ▶ Temperature (10 mV/°C) and Acceleration (500 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

TA234-1A 3 Pin Connector

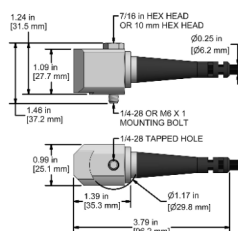
Connector Pin	Polarity
A	(+) Signal/Power
B	(-) Common
C	(+) Temperature Voltage



Stock Product

TA234-2A CB105 Integral Cable

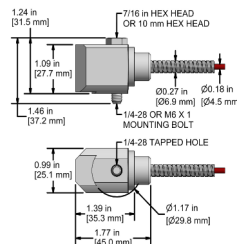
Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
White	(+) Temperature Voltage
Shield	Cable Drain Wire



Built To Order

TA234-3A CB218 Armored Integral Cable

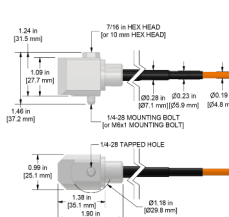
Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
White	(+) Temperature Voltage
Shield	Cable Drain Wire



Built To Order

TA234-6N 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	TA234		Environmental		
Sensitivity (±10%)		500 mV/g	Operating Temperature Range	-40 to 250 °F	-40 to 121 °C
Frequency Response (±3dB)	6-480,000 CPM	0.1-8000 Hz	Maximum Shock Protection	5,000 g, peak	
Dynamic Range	± 16 g, peak *Vsource ≥ 22V, 12Vbias		Electromagnetic Sensitivity	CE	
Temperature Measurement Range	-40 to 250°F	-40 to 121°C	Sealing	Welded, Hermetic	
Temperature Output	10 mV/°C		Physical		
Temperature Sensor	750 mV = 25 °C (±1)		Sensing Element	PZT Ceramic	
Transverse Sensitivity	≤5%		Sensing Structure	Shear Mode	
Electrical			Weight	5.6 oz	160 grams
Settling Time	<2.5 seconds		Case Material	316L Stainless Steel	
Voltage Source	18-30 VDC		Connector (Non-Integral)	3 Pin MIL-C-5015	
Constant Current Excitation	2-10 mA		Resonant Frequency	960,000 CPM	16000 Hz
Spectral Noise @ 10 Hz	14 µg/√Hz		Mounting Torque	2 to 5 ft. lbs	2.7 to 6.8 Nm
Spectral Noise @ 100 Hz	2.3 µg/√Hz		Mounting Hardware Supplied	1/4-28 Captive Bolt	M6x1 Captive Bolt
Spectral Noise @ 1000 Hz	2 µg/√Hz		Calibration Certificate	CA10	
Output Impedance	<100 ohm				
Bias Output Voltage	10-14 VDC				
Case Isolation	>10 ⁸ ohm				

Typical Frequency Response

