

# 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

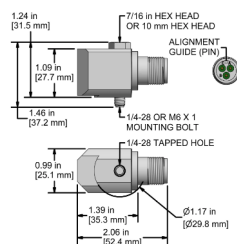
Helps to Detect Bearing Defects and Temperature Changes

- ▶ 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

### TA234-1A

3 Pin Connector

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

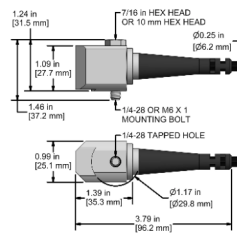


Stock Product

### TA234-2A

CB105 Integral Cable

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

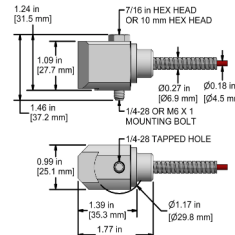


Built To Order

### TA234-3A

CB218 Armored Integral Cable

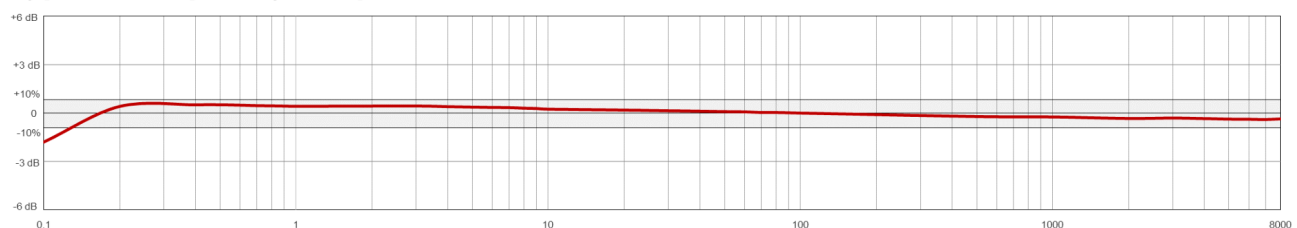
Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
White	(+) Temperature Voltage
Shield	Cable Drain Wire



Built To Order

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	TA234		<b>Environmental</b>		
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	
Frequency Response (±10%)	36-180,000 CPM	0.6-3000 Hz	Electromagnetic Sensitivity	CE	
Dynamic Range	± 10 g, peak *Vsource ≥ 22V, 12V/bias		Sealing	Welded, Hermetic	
Temperature Measurement Range	-40 to 250°F		-40 to 121°C	<b>Physical</b>	
Temperature Output	10 mV/°C		Sensing Element	PZT Ceramic	
Temperature Sensor	750 mV = 25 °C (±1)		Sensing Structure	Shear Mode	
<b>Electrical</b>			Weight	5.6 oz	160 grams
Settling Time	<2.5 seconds		Case Material	316L Stainless Steel	
Voltage Source (IEPE)	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 <sup>8</sup> ohm				

## Typical Frequency Response



Backed by our Unconditional Lifetime Warranty & Free Annual Recalibration Service

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