

TA233 Series

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



VIBRATION ANALYSIS HARDWARE



Product Features

High Performance in a Low-Cost Sensor

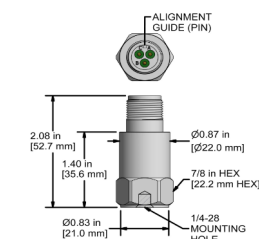
Helps to Detect Bearing Defects and Temperature Changes

- ▶ 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

TA233-1A

3 Pin Connector

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

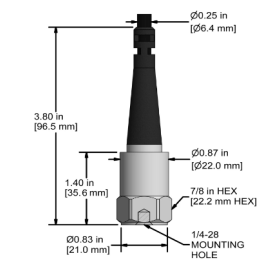


Stock Product

TA233-2A

CB105 Integral Cable

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

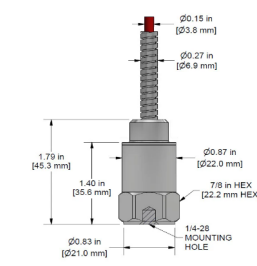


Built To Order

TA233-3A

CB218 Amored Integral Cable

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

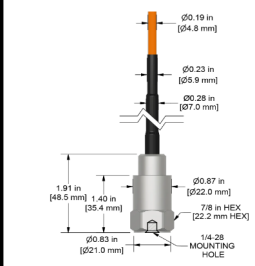


Built To Order

TA233-6N

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	TA233	M/ or M8/TA233	Environmental		
Sensitivity (±10%)	500 mV/g		Operating Temperature Range	-40 to 250 °F	-40 to 121 °C
Frequency Response (±3dB)	6-600,000 CPM	0,1-10000 Hz	Maximum Shock Protection	5,000 g, peak	
Frequency Response (±10%)	36-180,000 CPM	0,6-3000 Hz	Electromagnetic Sensitivity	CE	
Dynamic Range	± 16 g, peak *Vsource ≥ 22V, 12Vbias		Sealing	Welded, Hermetic	
Temperature Measurement Range	-40 to 250 °F	-40 to 121 °C	SIL Rating	SIL 2	
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	3.7 oz	104 grams
Settling Time	5 Seconds		Case Material	316L Stainless Steel	
Voltage Source	18-30 VDC		Mounting Thread	1/4-28 Blind Tapped Hole	
Constant Current Excitation	2-10 mA		Connector (Non-Integral)	3 Pin MIL-C-5015	
Spectral Noise @ 10 Hz	14 µg/√Hz		Resonant Frequency	960,000 CPM	16000 Hz
Spectral Noise @ 100 Hz	2.3 µg/√Hz		Mounting Torque	2 to 5 ft. lbs.	2,7 to 6,8 Nm
Spectral Noise @ 1000 Hz	2.3 µg/√Hz		Mounting Hardware Supplied	1/4-28 Stud	M6x1 or M8x1.25 Adapter Stud
Output Impedance	<100 ohm		Calibration Certificate	CA10	
Bias Output Voltage	10-14 VDC				
Case Isolation	>10 ⁸ ohm				

Typical Frequency Response

