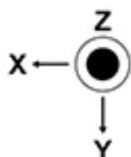


TRCA331 Series

Low Cost, Miniature Industrial Triaxial Accelerometer, Side Exit 4 Pin Mini-MIL Connector, Follows Cartesian Phase Coordinate System, 10 mV/g, $\pm 15\%$



VIBRATION ANALYSIS HARDWARE



Product Features

Collect Three Channels of Data Simultaneously for Faster Data Collection

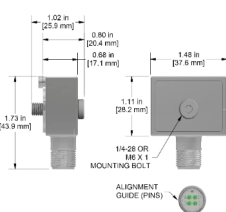
Follows Cartesian Coordinate Phase Configuration (Right-Hand Rule)

- ▶ High-Performance Triaxial Sensor with High End Frequency Response of 15 kHz (+3 dB)
- ▶ Low-Profile, Side-Exit Case is Ideally Suited for Route-Based Measurements
- ▶ Compatible with CTC J Series Mini-MIL Connectors

TRCA331

4 Pin Mini-MIL Connector

Connector Pin	Polarity
A (Axis Y)	(+) Signal/Power
B (Axis X)	(+) Signal/Power
C (Axis Z)	(+) Signal/Power
D	(-) Common

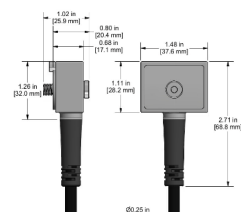


Stock Product

TRCA431

CB105 Cable

Conductor	Polarity
Red (Axis Y)	(+) Signal/Power
Green (Axis X)	(+) Signal/Power
White (Axis Z)	(+) Signal/Power
Black	(-) Common/GND

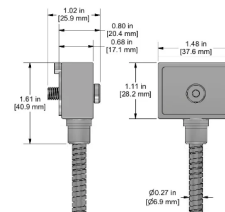


Built To Order

TRCA531

CB218 Armored Integral Cable

Conductor	Polarity
Red (Axis Y)	(+) Signal/Power
Green (Axis X)	(+) Signal/Power
White (Axis Z)	(+) Signal/Power
Black	(-) Common/GND



Built To Order

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	TRCA331	M/TRCA331	Environmental		
Sensitivity ($\pm 15\%$)	10 mV/g		Operating Temperature Range	-65 to 250 °F	-54 to 121 °C
Frequency Response ($\pm 3\text{dB}$)	30-900,000 CPM	0.5 Hz-15 kHz	Maximum Shock Protection	10,000 g, peak	
Dynamic Range	± 500 g, peak *V _{source} $\geq$ 22V, 12Vbias		Electromagnetic Sensitivity	CE	
Transverse Sensitivity	$\leq 5\%$		Sealing	Welded, Hermetic	
Electrical			Submersible Depth	200 ft.	60 m
Settling Time	<2.5 Seconds		SIL Rating	SIL 2	
Voltage Source	18-30 VDC		Physical		
Constant Current Excitation	2-10 mA		Sensing Element	PZT Ceramic	
Spectral Noise @ 10 Hz	100 $\mu\text{g}/\sqrt{\text{Hz}}$		Sensing Structure	Shear Mode	
Spectral Noise @ 100 Hz	19 $\mu\text{g}/\sqrt{\text{Hz}}$		Weight	3.9 oz	110 grams
Spectral Noise @ 1000 Hz	5 $\mu\text{g}/\sqrt{\text{Hz}}$		Case Material	316L Stainless Steel	
Output Impedance	<100 ohm		Connector (Non-Integral)	4 Pin Mini-MIL	
Bias Output Voltage	10-14 VDC		Resonant Frequency	2,640,000 CPM	44 kHz
Case Isolation	>10 ⁸ ohm		Mounting Torque	1 to 2 ft. lbs.	1.4 to 2.7 Nm
			Mounting Hardware Supplied	1/4-28 Captive Bolt	M6x1 Captive Bolt
			Calibration Certificate	CA10	

Typical Frequency Response

