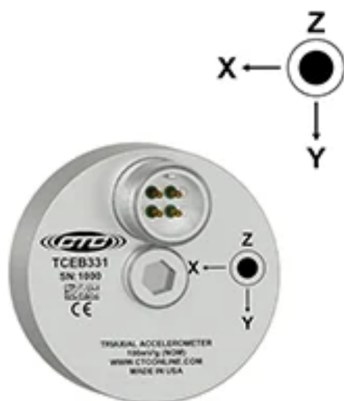


TCEB331 Series

Premium, Miniature Industrial Circular Triaxial Accelerometer, Top Exit 4 Pin Mini-MIL Connector, Follows Cartesian Phase Coordinate System, 100 mV/g, $\pm 5\%$



VIBRATION ANALYSIS HARDWARE



Product Features

Collect Three Channels of Data Simultaneously for Faster Data Collection

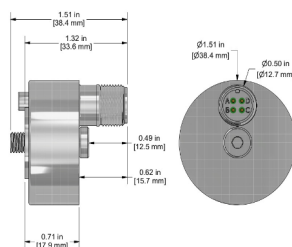
Follows Cartesian Coordinate Phase Configuration (Right-Hand Rule)

- ▶ High-Performance Triaxial Sensor with High End Frequency Response of 12 kHz (+3dB)
- ▶ Low-Profile, Top-Exit Case is Ideally Suited for Route-Based Measurements
- ▶ Compatible with CTC J Series Mini-MIL Connectors

TCEB331

4 Pin Connector

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



Stock Product

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	TCEB331	M/TCEB331	Environmental		
Sensitivity ($\pm 5\%$)		100 mV/g	Operating Temperature Range	-65 to 250 °F	-54 to 121 °C
Frequency Response ($\pm 3\text{dB}$)	120 to 720,000 CPM	2 Hz to 12 kHz	Maximum Shock Protection		10,000 g, peak
Frequency Response ($\pm 10\%$)	240 to 600,000 CPM	4 Hz to 10 kHz	Electromagnetic Sensitivity		CE
Dynamic Range	50 g		Sealing		Welded, Hermetic
	*Vsource $\geq$ 22V, 12Vbias		SIL Rating		SIL 2
Transverse Sensitivity	$\leq 5\%$		Physical		
Electrical			Sensing Element		PZT Ceramic
Settling Time	<2.5 Seconds		Sensing Structure		Shear Mode
Voltage Source	18-30 VDC		Weight	4.8 oz	136 grams
Constant Current Excitation	2-10 mA		Case Material		316L Stainless Steel
Spectral Noise @ 10 Hz	30 $\mu\text{g}/\sqrt{\text{Hz}}$		Connector (Non-Integral)		4 Pin Mini-MIL
Spectral Noise @ 100 Hz	4 $\mu\text{g}/\sqrt{\text{Hz}}$		Resonant Frequency	1,020,000 CPM ($\pm 12,000$ CPM)	17 kHz ($\pm 2\text{kHz}$)
Spectral Noise @ 1000 Hz	2 $\mu\text{g}/\sqrt{\text{Hz}}$		Mounting Torque	1 to 2 ft. lbs.	1.4 to 2.7 Nm
Output Impedance	<100 ohm		Mounting Hardware Supplied	1/4-28 Captive Bolt	M6x1 Captive Bolt
Bias Output Voltage	10-14 VDC		Calibration Certificate		CA10
Case Isolation	>10 ⁸ ohm				

Typical Frequency Response

