

TXFA331-VE Series

Premium, Low Frequency, Piezo Velocity Triaxial Sensor, Side Exit 4 Pin Connector, Follows Cartesian Phase Coordinate System, 500 mV/in/sec, $\pm 5\%$



Product Features

Collect Three Channels of Data Simultaneously for Faster Data Collection

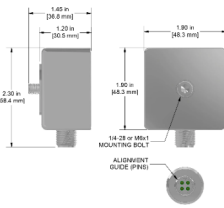
Follows Cartesian Coordinate Phase Configuration (Right-Hand Rule)

- Integrates to Velocity in the Sensor
- TXFA331-VE Mini-MIL Connector Exit Option Compatible CTC J Series Mini-MIL Connectors
- TXFA231-VE M12 Connector Exit Option Compatible with CTC M4 Series Connectors

TXFA231-VE

4 Pin M12 Connector

Connector Pin	Polarity
1 (Axis Y)	(+) Signal/Power
2 (Axis X)	(+) Signal/Power
3 (Axis Z)	(+) Signal/Power
4	(-) Common

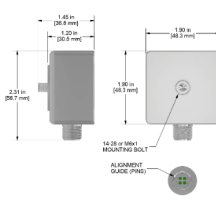


Stock Product

TXFA331-VE

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

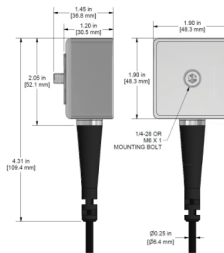


Stock Product

TXFA431-VE

CB105 Integral Cable

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

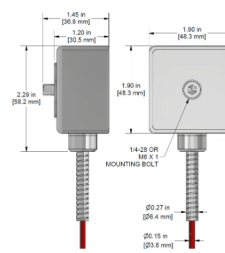


Built To Order

TXFA531-VE

CB218 Armored Integral Cable

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



Built To Order

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	TXFA331-VE	M/TXFA331-VE	<u>Environmental</u>		
Sensitivity ($\pm 5\%$)	500 mV/in/sec		Operating Temperature Range	-58 to 250 °F	-50 to 121 °C
Frequency Response ($\pm 3\text{dB}$)	60 to 270,000 CPM	1 Hz to 4.5 kHz	Maximum Shock Protection	5,000 g, peak	
Frequency Response ($\pm 10\%$)	120 to 240,000 CPM	2 Hz to 4 kHz	Electromagnetic Sensitivity	CE	
Dynamic Range	+10 in/sec pk *Vsource $\geq 22\text{V}$, 12Vbias		Sealing	Welded, Hermetic	
Transverse Sensitivity	$\leq 5\%$		SIL Rating	SIL 2	
<u>Electrical</u>			<u>Physical</u>		
Settling Time	<4 Seconds		Sensing Element	PZT Ceramic	
Voltage Source	18-30 VDC		Sensing Structure	Shear Mode	
Constant Current Excitation	2-10 mA		Weight	13.4 oz	380 grams
Spectral Noise @ 10 Hz	200 $\mu\text{IPS}/\sqrt{\text{Hz}}$		Case Material	316L Stainless Steel	
Spectral Noise @ 100 Hz	6 $\mu\text{IPS}/\sqrt{\text{Hz}}$		Connector (Non-Integral)	TXFA331-VE: 4 Pin Mini-MIL TXFA231-VE: 4 Pin M12	
Spectral Noise @ 1000 Hz	0.7 $\mu\text{IPS}/\sqrt{\text{Hz}}$		Resonant Frequency	720,000 CPM	12 kHz
Output Impedance	<100 ohm		Mounting Torque	2 to 5 ft. lbs	2.7 to 6.8 Nm
Bias Output Voltage	10-14 VDC		Mounting Hardware Supplied	1/4-28 Captive Bolt	M6x1 Captive Bolt
Case Isolation	>10 ⁸ ohm		Calibration Certificate	CA10	

Typical Frequency Response

