

TA931 Series

Class I, Division 2/Zone 2 Accelerometer, For Use In "Non-Arcing, Non-Sparking" Environments, Dual Output High g Accelerometer, Temperature/Acceleration, Top Exit Connector/Cable, 10 mV/g, 10 mV/°C

CSA/ATEX Approved

Actual Product Size Shown



Must Use "Class I, Division 2" CB191 or CB212 Cable and D3Q Connector

REGULATORY INFORMATION

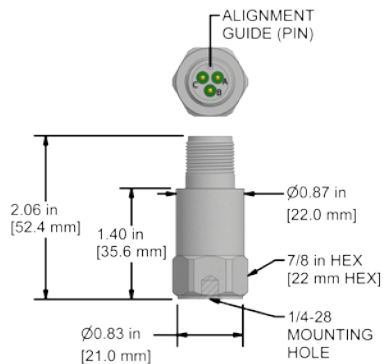
Ex nA IIC T3 Gc
AEx nA IIC T3 Gc
CLI Groups A, B, C, D
CLII Groups E, F, G; CLIII
CLI, Zone 2

Operating Temperature Code: T3
Ambient Temperature Range = -40°C to +121°C
Ui = 28 Vdc li = 100 mA
CSA 221421
Sira 15ATEX2152X
Ex nA IIC T3 Ga

TA931-1A

3 Pin Connector

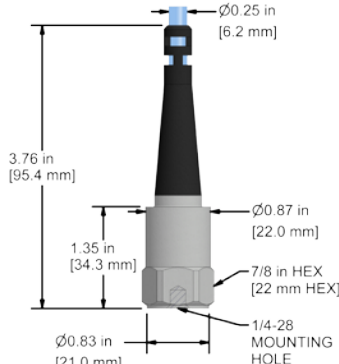
Connector Pin	Polarity
A	(+) Signal / Power
B	(-) Common
C	(+) Temperature Voltage



TA931-2C

Integral Cable

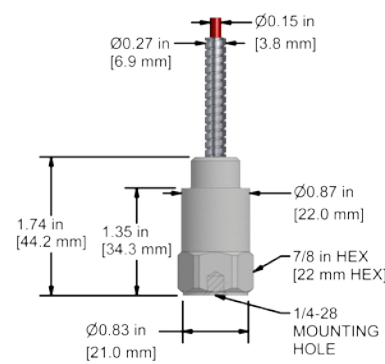
Conductor	Polarity
Red	(+) Signal / Power
Black	(-) Common
White	(+) Temperature Voltage
Shield	Cable Drain Wire



TA931-3C

Armored Integral Cable

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



Specifications	Standard	Metric
Part Number	TA931	M/TA931
Vibration		
Sensitivity (±10%)		10 mV/g
Frequency Response (±3dB)	72-900,000 CPM	1,2-15000 Hz
Frequency Response (±10%)	150-360,000 CPM	2,5-6000 Hz
Dynamic Range		± 800 g, peak
Temperature		
Temperature Measurement Range	38° to 250° F	3° to 121° C
Temperature Output		10 mV/°C
Electrical		
Settling Time		<2 seconds
Voltage Source (IEPE)		18-28 VDC
Constant Current Excitation		2-10 mA
Spectral Noise @ 10 Hz		30 µg/√Hz
Spectral Noise @ 100 Hz		19 µg/√Hz
Spectral Noise @ 1000 Hz		15 µg/√Hz
Output Impedance		<100 ohm
Bias Output Voltage		10-14 VDC
Case Isolation		>10 ⁸ ohm

Specifications	Standard	Metric
Environmental		
Temperature Range	-40 to 250°F	-40 to 121°C
Maximum Shock Protection		5,000 g, peak
Electromagnetic Sensitivity		CE
Sealing		Welded, Hermetic
Physical		
Sensing Element		PZT Ceramic
Sensing Structure		Shear Mode
Weight	3.2 oz	90 grams
Case Material		316L Stainless Steel
Mounting		1/4-28
Connector (TA931-1A)		3 Pin MIL-C-5015
Integral Cable (TA931-2C)		Blue TPE Cable
Armored Cable (TA931-3C)		Armor Jacketed Cable
Resonant Frequency	1,380,000 CPM	23000 Hz
Mounting Torque	2 to 5 ft. lbs.	2,7 to 6,8 Nm
Mounting Hardware	1/4-28 Stud	M6x1 Adapter Stud
Calibration Certificate		CA10

Ordering Information

Standard	TA931-1A (1/4-28 Stud)	TA931-2C / (1/4-28 Stud)	TA931-3C / (1/4-28 Stud)

Read Before Purchasing
Important information on Regulatory Approvals and Requirements on Page 87

Cable Terminations: L Z



SECTION 1 - VIBRATION SENSORS
Class 1, Division 2/Zone 2 Accelerometers