

TA931 Series

Nonincendive, CSA North America Class I, Division 2, Class II, Division 1, Class III, ATEX/IECEx Zone 2, 22 Approved Dual Output Sensor, Acceleration and Temperature, Top Exit 3 Pin Connector, 10 mV/g, 10 mV/°C, ±10%



Regulatory Information

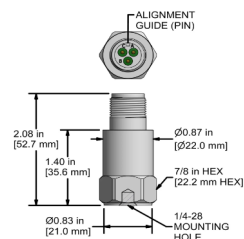
CSA 221421	T4, T135°C for ambient
CSA 25CA80263368X	temperature range of -40°C to +80°C
CL I, DIV 2, GRP A, B, C and D T3/T4	T3 for ambient temperature range of -40°C to +121°C
CL II, DIV 1, GRP E, F and G T135°C	*Temperature Class depends on the ambient temperature
CL III	Vmax=28VDC Imax=10mA
Ex ec IIC T* Gc	Install per INS10208
Ex tc IIIC T135°C Dc	Reference Product Manual MNX10132
CL I, ZN 2, AEx ec IIC T* Gc	CSA Ca 24 ATEX1004X
ZN 22, AEx tc IIIB T135°C Dc	Ex ec IIC T*°C Gc
*Temperature Class depends on the ambient temperature	Ex tc IIIC T135°C Dc
T4, T135°C for ambient temperature range of -40°C to +80°C	T4, T135°C for ambient temperature range of -40°C to +80°C
T3 for ambient temperature range of -40°C to +121°C	T3 for ambient temperature range of -40°C to +121°C
Vmax = 28VDC Imax = 10mA	*Temperature Class depends on the ambient temperature
Reference Product Manual MNX10128 / Install Per INS10191	Vmax=28VDC Imax=10mA
IECEx CSA 24.0015X	Install per INS10209
Ex ec IIC T*°C Gc	Reference Product Manual MNX10133
Ex tc IIIC T135°C Dc	

Approved Cabling: CB212, CB191*, CB298 (*Approved for Use in T4 Applications Only)

TA931-1A

3 Pin Connector

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

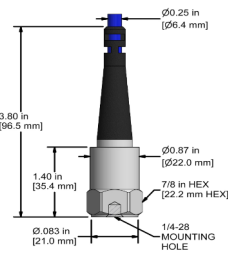


Stock Product

TA931-2C

CB191 Integral Cable

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

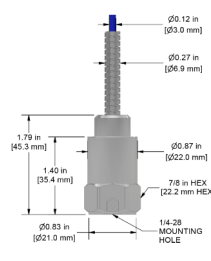


Built To Order

TA931-3C

CB298 Armored 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	TA931	M/ or M8/TA931	Environmental		
Sensitivity (±10%)	10 mV/g		Operating Temperature Range	-40 to 250 °F	-40 to 121 °C
Frequency Response (±3dB)	72-900,000 CPM	1.2-15000 Hz	Maximum Shock Protection	5,000 g, peak	
Dynamic Range	± 800 g, peak		Electromagnetic Sensitivity	CE	
Temperature Measurement Range	36.5 to 212 °F	2.5 to 100 °C	Sealing	Welded, Hermetic	
Temperature Output	10 mV/°C		Physical		
Transverse Sensitivity	≤5%		Sensing Element	PZT Ceramic	
Electrical			Sensing Structure	Shear Mode	
Settling Time	<2 seconds		Weight	3.2 oz	90 grams
Voltage Source	18-28 VDC		Case Material	316L Stainless Steel	
Constant Current Excitation	2-10 mA		Mounting Thread	1/4-28 Blind Tapped Hole	
Spectral Noise @ 10 Hz	30 µg/√Hz		Connector (Non-Integral)	3 Pin MIL-C-5015	
Spectral Noise @ 100 Hz	19 µg/√Hz		Resonant Frequency	1,380,000 CPM	23000 Hz
Spectral Noise @ 1000 Hz	15 µg/√Hz		Mounting Torque	2 to 5 ft. lbs.	2.7 to 6.8 Nm
Output Impedance	<100 ohm		Mounting Hardware Supplied	1/4-28 Stud	M6x1 or M8x1.25 Adapter Stud
Bias Output Voltage	10-14 VDC		Calibration Certificate	CA10	
Case Isolation	>10 ⁸ ohm				

Typical Frequency Response

