

TA938 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, Side Exit 3 Pin Connector, M8x1.25 Captive Bolt, 100 mV/g, 10 mV/°C, ±10%



Regulatory Information

CSA 221421
CSA 25CA80263368X
CLI, DIV 2, GRP A, B, C and D T3/T4
CLII, DIV 1, GRP E, F and G T135°C
CLIII
Ex ec IIC T* Gc
Ex tc IIIC T135°C Dc
CLI, ZN 2, AEx ec IIC T* Gc
ZN 22, AEx tc IIIB T135°C Dc
*Temperature Class depends on the ambient temperature
T4, T135°C for ambient temperature range of -40°C to +80°C
T3 for ambient temperature range of -40°C to +121°C
Vmax = 28VDC Imax = 10mA
Reference Product Manual MNX10128 Install per INS10191

IECEx CSA 24.0015X
Ex ec IIC T*°C Gc
Ex tc IIIC T135°C Dc

T4, T135°C for ambient temperature range of -40°C to +80°C
T3 for ambient temperature range of -40°C to +121°C
*Temperature Class depends on the ambient temperature
Vmax=28VDC Imax=10mA
Install per INS10208
Reference Product Manual MNX10132

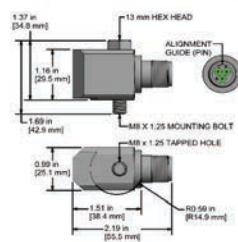
CSACa 24 ATEX1004X
Ex ec IIC T*°C Gc
Ex tc IIIC T135°C Dc
T4, T135°C for ambient temperature range of -40°C to +80°C
T3 for ambient temperature range of -40°C to +121°C
*Temperature Class depends on the ambient temperature
Vmax=28VDC Imax=10mA
Install per INS10209
Reference Product Manual MNX10133

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

TA938-1A

3 Pin Connector

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

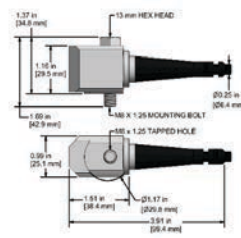


Stock Product

TA938-2C

CB191 Integral Cable

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

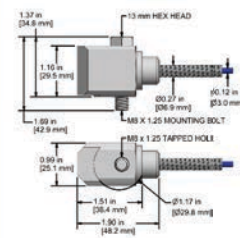


Built To Order

TA938-3C

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
Sensitivity (±10%)		100 mV/g	Environmental		
Frequency Response (±3dB)	30-600,000 CPM	0.5-10000 Hz	Operating Temperature Range	-40 to 250 °F	-40 to 121 °C
Frequency Response (±10%)	120-300,000 CPM	2.0-5000 Hz	Maximum Shock Protection	5,000 g, peak	
Dynamic Range		± 50 g, peak	Sealing	Welded, Hermetic	
Temperature Measurement Range	36.5 to 212 °F	2.5 to 100 °C	Physical		
Temperature Output		10 mV/°C	Sensing Element	PZT Ceramic	
Transverse Sensitivity		≤5%	Sensing Structure	Shear Mode	
Electrical			Weight	6.3 oz	180 grams
Settling Time	<2.5 seconds		Case Material	316L Stainless Steel	
Voltage Source	18-28 VDC		Mounting Thread	M8x1.25	
Constant Current Excitation	2-10 mA		Connector (Non-Integral)	3 Pin MIL-C-5015	
Spectral Noise @ 10 Hz	8 µg/√Hz		Resonant Frequency	1,260,000 CPM	21000 Hz
Spectral Noise @ 100 Hz	.82 µg/√Hz		Mounting Torque	2 to 5 ft. lbs.	2.7 to 6.8 Nm
Spectral Noise @ 1000 Hz	.3 µg/√Hz		Mounting Hardware Supplied	M8x1.25 Captive Bolt	
Output Impedance	<100 ohm		Calibration Certificate	CA10	
Bias Output Voltage	10-14 VDC				
Case Isolation	>10 ⁸ ohm				

Typical Frequency Response

