

TA918 Series



Nonincendive, Intrinsically Safe, CSA North America Class 1 Div 1, Class II Div 1, Class III and IECEx/ATEX Zone 0,1 Approved Dual Output Accelerometer, Acceleration and Temperature, Side Exit 3 Pin Connector, M8x1.25 Captive Bolt, 100 mV/g, 10 mV/°C, ±10%



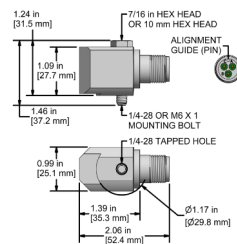
Regulatory Information

CSA 221421 Ex ia IIC T3/T4 Ga; Ex ia I Ma AEx ia IIC T3/T4 Ga CLI GPS A,B,C,D CLII, GPS E,F,G CLIII CLI, Zone 0 Operating Temp Code: T3 Ambient Temp Range = -40°C TO +121°C Operating Temp Code: T4 Ambient Temp Range = -40°C TO +80°C Control Drawing INS10012 Ex ia IIC T3 -40°C < Ta < +121°C Ex ia IIC T4 -40°C < Ta < +80°C	Mining Group I: Ta @ -40°C to +121°C T147°C: Ta @ -40°C to +121°C T135°C: Ta @ -40°C to +80°C Install per drawing INS10210 Refer to product manual MNX10134 Sira 15ATEX2152X Ex ia IIC T3 -T4 Ga T3: Ta @ -40°C to +121°C T4: Ta @ -40°C to +80°C Ex ib IIC T135°C ... T147°C Db T147°C: Ta @ -40°C to +121°C T135°C: Ta @ -40°C to +80°C Ex ia I Ma Ta @ -40°C to +121°C Install per drawing INS10211 Refer to product manual MNX10135
1600 ft (488 m) Maximum Allowable Integral Cable Length Approved Cabling: CB112, CB191*, CB298 (*Approved for Use in T4 Applications Only) Requires One IS111-1B Intrinsic Safety Barrier Per Sensor	Connector Exit Entity Parameters Ui = 28 VDC li = 120mA Ci = 1.5nF Li = 0uH Pi = 1W Integral Cable Entity Parameters Ui = 28 VDC li = 120mA Ci = 82nF Li = 336uH Pi = 1W
IECEx SIR 15.0060X Ex ia IIC T3-T4 Ga Ex ib IIC T135°C ... T147°C Db Ex ia I Ma T3: Ta @ -40°C to +121°C T4: Ta @ -40°C to +80°C	

TA918-1A

3 Pin Connector

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

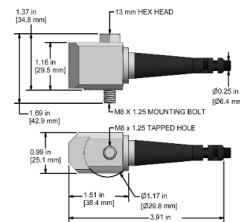


Stock Product

TA918-2C

CB191 Molded Integral Cable

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

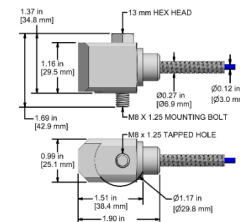


Built To Order

TA918-3C

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)	30-516,000 CPM	0.5-8600 Hz	Operating Temperature Range	-40 to 250°F (-40 to 121°C)	
Dynamic Range	± 80 g, peak *Vsource ≥ 22V, 12V Bias		Physical		
Temperature Measurement Range	36.5 to 212°F	2.5 to 100°C	Sensing Element	PZT Ceramic	
Temperature Output	10 mV/°C		Sensing Structure	Shear Mode	
Transverse Sensitivity	≤5%		Weight	6.3 oz	180 grams
Electrical			Case Material	316L Stainless Steel	
Settling Time	<2.5 seconds		Mounting Thread	M8x1.25	
Voltage Source	18-28 VDC		Connector (Non-Integral)	3 Pin MIL-C-5015	
Constant Current Excitation	2-10 mA		Resonant Frequency	1,380,000 CPM	23000 Hz
Spectral Noise @ 10 Hz	8 µg/√Hz		Mounting Torque	2 to 5 ft. lbs	2,7 to 6,8 Nm
Spectral Noise @ 100 Hz	0.82 µg/√Hz		Mounting Hardware Supplied	M8x1.25 Captive Bolt	
Spectral Noise @ 1000 Hz	0.3 µg/√Hz		Calibration Certificate	CA10	
Output Impedance	<100 ohm				
Bias Output Voltage	10-14 VDC				
Case Isolation	>10 ⁸ ohm				

Typical Frequency Response

