

TA916 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, 100 mV/g, 10 mV/°C, ±10%



Regulatory Information

CSA 221421
CSA 26CA80263367X
CLI, DIV 1, GRP A, B, C and D
CLII, DIV 1, GRP E, F and G; CLIII
Ex ia IIC T3-T4 Ga
Ex ib IIIC T135°C...T147°C Db
CLI, ZN 0, AEx ia IIC T3-T4 Ga
ZN 21, AEx ib IIIC T135°C...T147°C Db
T3: Ta = -40°C to +121°C
T4: Ta = -40°C to +80°C
T147°C: Ta = -40°C to +121°C
T135°C: Ta = -40°C to +80°C
Install per drawing INS10187
Refer to product manual MNX10127

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

IECEx SIR 15.0060X
Ex ia IIC T3-T4 Ga
Ex ib IIIC T135°C ... T147°C Db
Ex ia I Ma
T3: Ta @ -40°C to +121°C

T4: Ta @ -40°C to +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 IIIC 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

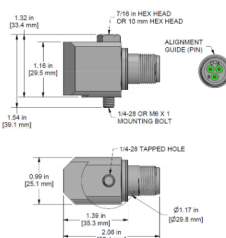
Connector Exit Entity Parameters
Ui = 28 VDC Ii = 120mA
Ci = 1.5nF Li = 0uH Pi = 1W

Integral Cable Entity Parameters
Ui = 28 VDC Ii = 120mA
Ci = 82nF Li = 336uH Pi = 1W

TA916-1A

3 Pin Connector

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

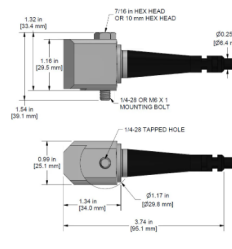


Stock Product

TA916-2C

CB191 Molded Integral Cable

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

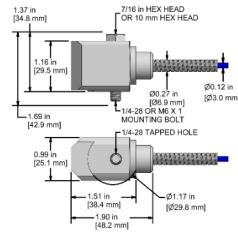


Built To Order

TA916-3C

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	TA916	M/TA916	Environmental		
Sensitivity (±10%)	100 mV/g		Operating Temperature Range	-40 to 250 °F	-40 to 121 °C
Frequency Response (±3dB)	30-516,000 CPM	0.5-8600 Hz	Physical		
Dynamic Range	± 80 g, peak *Vsource ≥ 22V, 12V Bias		Sensing Element	PZT Ceramic	
Temperature Measurement Range	36.5 to 212 °F	2.5 to 100 °C	Sensing Structure	Shear Mode	
Temperature Output	10 mV/°C		Weight	5.3 oz	151 grams
Transverse Sensitivity	≤5%		Case Material	316L Stainless Steel	
Electrical			Mounting Thread	1/4-28	
Settling Time	<3 Seconds		Connector (Non-Integral)	3 Pin MIL-C-5015	
Voltage Source	18-28 VDC		Resonant Frequency	1,260,000 CPM	21000 Hz
Spectral Noise @ 10 Hz	30 µg/√Hz		Mounting Torque	2 to 5 ft. lbs	2.7 to 6.8 Nm
Spectral Noise @ 100 Hz	19 µg/√Hz		Mounting Hardware Supplied	1/4-28 Captive Bolt	M6x1 Captive Bolt
Spectral Noise @ 1000 Hz	15 µg/√Hz		Calibration Certificate	CA10	
Output Impedance	<100 ohm				
Bias Output Voltage	10-14 VDC				
Case Isolation	>10 ⁸ ohm				

Typical Frequency Response

