

TA916 Series

Intrinsically Safe Accelerometer, Dual Output, Temperature/Acceleration, Side Exit Connector/Cable, 100 mV/g, 10 mV/°C

CSA/ATEX/IECEX Approved

REGULATORY INFORMATION

Ex ia IIC T3 Ga
 AEx ia IIC T3 Ga
 CLI Groups A, B, C, D
 CLII Groups E, F, G; CLIII
 CLI, Zone 0
 Operating Temperature Code: T3
 Ambient Temperature Range = -40°C to +121°C
 Control Drawing INS10012

Uj = 28 Vdc li = 112 mA
 Pi = 1W, Ci = 1.5nF, Li = 0µH
 CSA 221421
 Sira 15ATEX2152X
 Ex ia IIC T3 Ga
 IECEx SIR 15.0060X
 Ex ia IIC T3 Ga

Requires Intrinsically Safe Barrier IS131

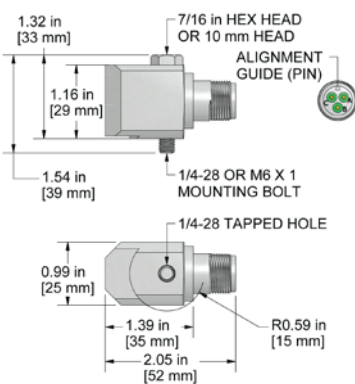
Actual Product Size Shown



TA916-1A

3 Pin Connector

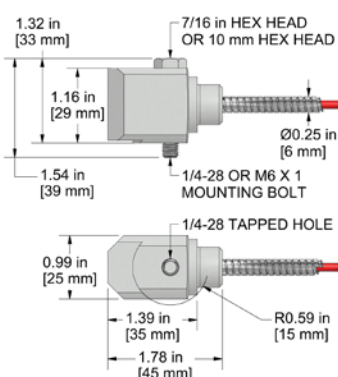
Connector Pin	Polarity / Power
A	(+) Signal / Power
B	(-) Common
C	(+) Temperature Voltage



TA916-3C

Armored Integral Cable

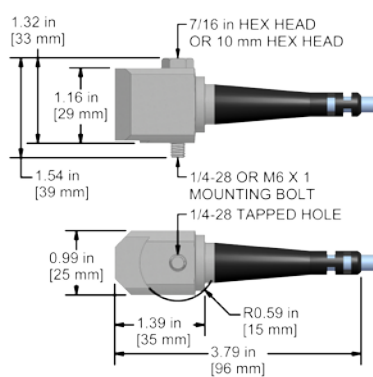
Conductor	Polarity / Power
Red	(+) Signal / Power
Black	(-) Common
White	(+) Temperature Voltage
Shield	Cable Drain Wire



TA916-9C

Integral Cable

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



Specifications	Standard	Metric
Part Number	TA916	M/TA916
Vibration		
Sensitivity (±10%)	100 mV/g	
Frequency Response (±3dB)	30-516,000 CPM	0.5-8600 Hz
Frequency Response (±10%)	60-360,000 CPM	1.0-6000 Hz
Dynamic Range	± 80 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 ⁹ 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	5.3 oz	151 grams
Case Material	316L Stainless Steel	
Mounting	1/4-28	
Connector (TA916-1A)	3 Pin MIL-C-5015	
Armored Cable (TA916-3C)	Armor Jacketed Cable	
Integral Cable (TA916-9C)	Blue TPE Cable	
Resonant Frequency	1,260,000 CPM	21000 Hz
Mounting Torque	2 to 5 ft. lbs.	2.7 to 6.8 Nm
Mounting Hardware	1/4-28 Captive Bolt	M6x1 Captive Bolt
Calibration Certificate	CA10	

Ordering Information

Standard	TA916-1A	TA916-3C /	TA916-9C /
	(1/4-28 Captive Bolt)	(1/4-28 Captive Bolt)	(1/4-28 Captive Bolt)
		(maximum armor length 100 ft) / (cable length in feet) - (termination)	(length in feet) - (termination)
Metric	M/TA916-1A	M/TA916-3C /	M/TA916-9C /
	(M6x1 Captive Bolt)	(M6x1 Captive Bolt)	(M6x1 Captive Bolt)
		(maximum armor length 30 m) / (cable length in meters) - (termination)	(length in meters) - (termination)

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

Cable Terminations: **L** **Z**

