

Intrinsically safe triaxial accelerometer

993B-7-M12 [CERT]

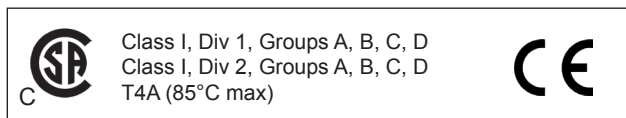
SPECIFICATIONS

Sensitivity, $\pm 10\%$, 25°C	100 mV/g
Acceleration range	60 g peak
Amplitude nonlinearity	1%
Frequency response¹:	
Z axis, ± 3 dB	2 - 10,000 Hz
X and Y axes, ± 3 dB	2 - 7,000 Hz
Resonance frequency	>35 kHz
Transverse sensitivity, max	7% of axial
Power requirement:	
Voltage source	18 - 30 VDC
Current regulating diode	2 - 5 mA
Electrical noise, equiv. g, nominal:	
Broadband 2.5 Hz to 25 kHz	160 μ g
Spectral 10 Hz	10 μ g/ $\sqrt{\text{Hz}}$
100 Hz	2.0 μ g/ $\sqrt{\text{Hz}}$
1,000 Hz	1.5 μ g/ $\sqrt{\text{Hz}}$
Output impedance, max	400 Ω
Bias output voltage	12 VDC
Grounding	case isolated, internally shielded
Turn-on time	<1 sec
Temperature range	-50° to +120°C
Vibration limit	500 g peak
Shock limit	5,000 g peak
Electromagnetic sensitivity, equiv. g, max	100 μ g/gauss
Sealing	hermetic
Base strain sensitivity, max	0.0005 g/ μ strain
Weight (excluding cable)	124 grams
Case material	316L stainless steel
Mounting	10-32 captive screw
Output connector	4 pin, M12 style
Mating connector	RM12S
Recommended cabling	4 conductor, shielded

Notes: ¹ As measured using the TCC-993 mounting screw.

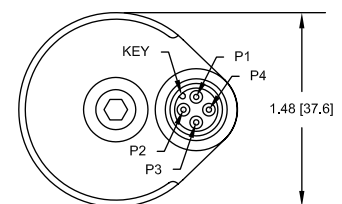
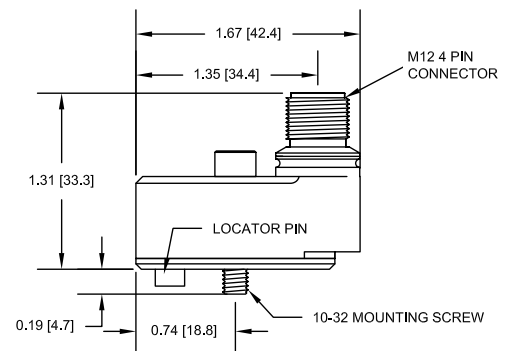
Accessories supplied: Captive screw; calibration data

Certifications



Key features

- Three axis simultaneous sensing
- Hazardous area certified - intrinsically safe
- Manufactured in ISO 9001 facility



Connections	
Function	Connector pin
X axis, power/signal	1
Y axis, power/signal	2
Z axis, power/signal	3
common (all channels)	4
ground	shell

Note: Due to continuous process improvement, specifications are subject to change without notice. This document is cleared for public release.