

General purpose dual output sensor

787T

SPECIFICATIONS

Sensitivity, $\pm 5\%$, 25°C		100 mV/g
Acceleration range, VDC > 25 V		80 g peak
Amplitude nonlinearity		1%
Frequency response:	$\pm 5\%$	1.0 - 5,000 Hz
	$\pm 10\%$	0.7 - 10,000 Hz
	± 3 dB	0.5 - 12,000 Hz
Resonance frequency		22 kHz
Transverse sensitivity, max		5% of axial
Temperature response:	-25°C	-10%
	+120°C	+10%
Temperature sensor:		
Output sensitivity		10 mV/°C
Measurement range		2° to 120°C
Power requirement:		
Voltage source¹		18 - 30 VDC
Current regulating diode^{1,2}		2 - 10 mA
Electrical noise, equiv. g, nominal:		
Broadband	2.5 Hz to 25 kHz	700 μ g
	10 Hz	10 μ g/ $\sqrt{\text{Hz}}$
	100 Hz	5 μ g/ $\sqrt{\text{Hz}}$
	1,000 Hz	5 μ g/ $\sqrt{\text{Hz}}$
Spectral		
Output impedance, max		100 Ω
Bias output voltage, nominal		12 VDC
Grounding		case isolated, internally shielded
Temperature range		-50° to +120°C
Vibration limit		500 g peak
Shock limit		5,000 g peak
Electromagnetic sensitivity, equiv. g, max		70 μ g/gauss
Sealing		hermetic
Base strain sensitivity, max		0.002 g/ μ strain
Sensing element design		PZT ceramic / shear
Weight		145 grams
Case material		316L stainless steel
Mounting		1/4-28 captive screw w/ 0.046" diameter safety wire hole
Output connector		3 pin, MIL-C-5015 style
Mating connector		3 socket, MIL-C-5015 style
Recommended cabling		3 conductor, shielded

Notes: ¹ To minimize the possibility of signal distortion during high vibration signals, 24 to 28 VDC powering is recommended. The higher level constant current source should be used when driving long cables.

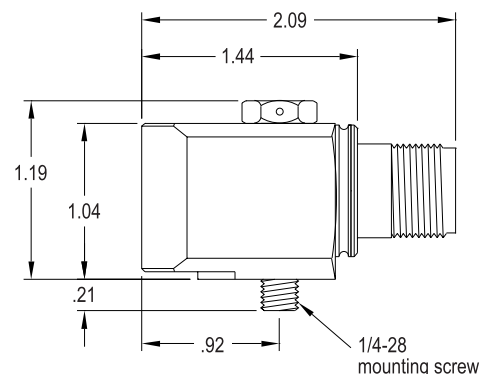
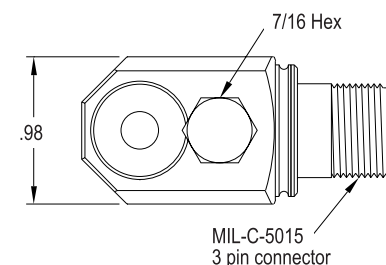
² A maximum current of 6 mA is recommended for operating temperatures in excess of 100°C.

Accessories supplied: 1/4-28 captive screw; calibration data (level 2)



Key features

- Accelerometer with internal temperature sensor
- Available with M12 connector
- Manufactured in ISO 9001 facility



Connections	
Function	Connector pin
accelerometer power/signal	A
accelerometer and temp sensor common	B
temp sensor signal	C
ground / case	shell



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