

General purpose dual output sensor

787T-M12-KCF



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
Spectral	10 Hz	10 μ g/ $\sqrt{\text{Hz}}$
	100 Hz	5 μ g/ $\sqrt{\text{Hz}}$
	1,000 Hz	5 μ g/ $\sqrt{\text{Hz}}$
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, shear
Weight		145 grams
Case material		316L stainless steel
Mounting		1/4-28 captive screw w/ 0.046" diameter safety wire hole
Output connector		4 pin, M12
Mating connector		4 or 5 socket, M12
Recommended cabling		4 conductor, shielded

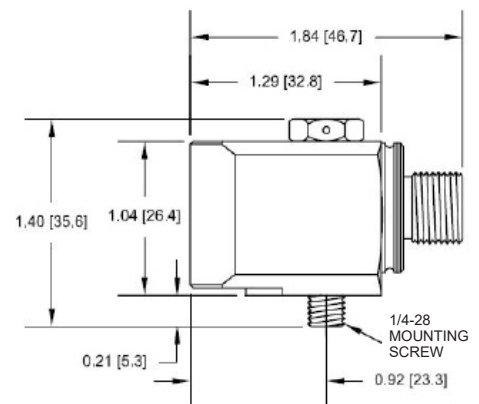
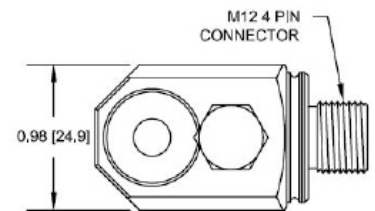
Notes: ¹ To minimize the possibility of signal distortion during high vibration signals, 24 to 28 VDC powering is recommended. The higher level constant current source should be used when driving long cables.

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

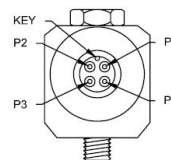
Accessories supplied: 1/4-28 captive screw (optional M6 captive screw)

Key features

- Accelerometer with internal temperature sensor
- Manufactured in ISO 9001 facility



Connections	
Function	Connector pin
accelerometer power/signal	1
accelerometer and temp sensor common	2
temp sensor signal	3
N/C	4
ground	shell



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