

Class I Div 2 certified dual output, low-frequency sensor

786T-500-D2




SPECIFICATIONS

Sensitivity, ±5%, 25°C		500 mV/g
Acceleration range, VDC > 22 V		10 g peak
Amplitude nonlinearity		1%
Frequency response¹:	±5%	0.7 - 5,000 Hz
	±10%	0.5 - 9,000 Hz
	±3 dB	0.2 - 14,000 Hz
Resonance frequency		30 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 source		18 - 30 VDC
Current regulating diode		2 - 10 mA
Electrical noise, equiv. g¹:		
Broadband	2.5 Hz to 25 kHz	250 µg
Spectral	10 Hz	2.5 µg/√Hz
	100 Hz	1.5 µg/√Hz
	1,000 Hz	1.5 µg/√Hz
Output impedance, max		300 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 µg/gauss
Sealing		hermetic
Base strain sensitivity, max		0.0002 g/µstrain
Sensing element design		PZT ceramic/shear
Weight		90 grams
Case material		316L stainless steel
Mounting		1/4-28 UNF tapped hole
Output connector		3 pin, MIL-C-5015 style
Mating connector		R6G
Recommended cabling		J9T3A

Notes: ¹ Frequency response limits and spectral noise values are typical.

Accessories supplied: SF6 mounting stud (metric mounting available); calibration data (level 2)

Certifications

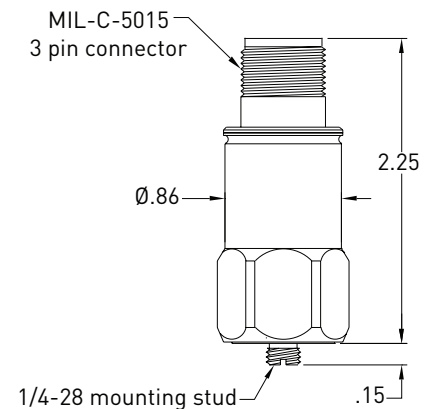
	Class I, Div 2 Groups A, B, C, D		II 3 G	
	Class I, Zone 2		Ex nA IIC T4 Gc	
	AEx/Ex nA II T4			
	Ta = -50°C to 120°C			

Must be installed per 13029. • Ambient temperature range depends on the type cable used during installation. • Cable with FEP jacket, Ta=-50°C to +120°C. • Cable with Santoprene jacket, Ta=-45°C to +115°C.



Key features

- Accelerometer with internal temperature sensor
- Clear signals at low vibration levels
- Certified for use in Class I, Div 2 hazardous areas
- Ideal for slow-speed machinery
- 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.