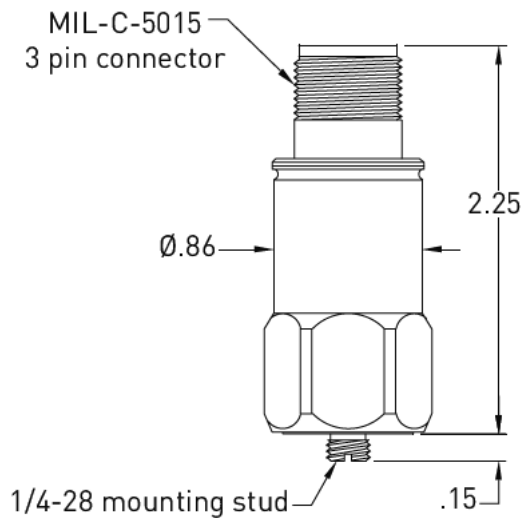


Intrinsically safe certified accelerometer with internal temperature sensor

786T-IS



Connections		
Function	Connector pin	Color
ground / case	shell	
accel power / signal	A	red
accel and sensor common	B	black
sensor signal	C	white

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

Wilcoxon Sensing Technologies
20511 Seneca Meadows Parkway
Germantown, MD 20876
info@wilcoxon.com

Tel: (301) 330 8811
Fax: (301) 330 8873
www.wilcoxon.com

Key features

- Hazardous area certified - intrinsically safe
- Measures both acceleration and temperature
- Rugged design
- Corrosion resistant
- Hermetically sealed
- Case isolated
- ESD-protected
- Reverse wiring protection

Certifications



Class I, Div 1 Groups A, B, C, D
Class II, Div 1 Groups E, F, G
Class III, Div 1
Class I, Zone 0, Ex ia IIC T4
Class I, Zone 0, Aex ia IIC T4



Ga Ex ia IIC T4



For hazardous area locations, sensor must be installed in accordance with installation instructions or local code requirements. Electrical safety barrier required for hazardous area installations.



Intrinsically safe certified accelerometer with internal temperature sensor

786T-IS

SPECIFICATIONS

Sensitivity, ±5%, 25° C	100 mV/g
Acceleration range	60 g peak
Amplitude nonlinearity	1%
Frequency response:	
± 5%	3 - 5,000 Hz
± 10%	1 - 7,000 Hz
± 3 dB	0.5 - 12,000 Hz
Resonance frequency	30 kHz
Transverse sensitivity, max	5% of axial
Temperature response:	
-50° C	-10%
+120° C	+10%
Temperature sensor:	
Output sensitivity	10 mV/°C
Measurement range	2 to 120° C (36 to 248° F)
Power requirement:	
Voltage source	18 - 28 VDC
Current regulating diode	2 - 10 mA
Electrical noise, equiv. g:	
Broadband	2.5 Hz to 25 kHz
Spectral	10 Hz
	100 Hz
	1,000 Hz
	700 µg
	10 µg/√Hz
	5 µg/√Hz
	5 µg/√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 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

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

Contact

Wilcoxon Sensing
Technologies

20511 Seneca Meadows Parkway
Germantown MD 20876, USA

Tel: +1 301 330 8811
Fax: +1 301 330 8873

info@wilcoxon.com

www.wilcoxon.com

Accessories supplied:

- Calibration data (level 2)
- SF6 mounting stud (international customers specify mounting requirements)

Optional accessories available: ISBS-STD-08:
MTL 7728 + safety barrier