



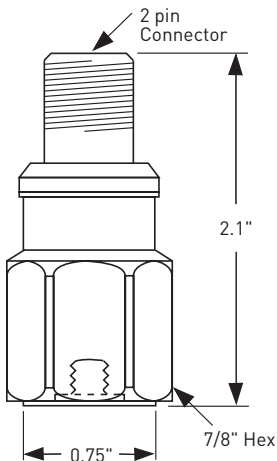
Model 782A Industrial piezoelectric accelerometer

Common applications

- General purpose
- Moderate industrial environments
- Conveyors and drives
- Bearing monitoring

Features

- Corrosion resistant
- Hermetic seal
- Ground isolated
- ESD protection
- Reverse wiring protection



Dynamic

Sensitivity, ±15%, 25°C	100 mV/g
Acceleration range ¹	80 g peak
Amplitude nonlinearity	1%
Frequency response:	
±3 dB	0.7 - 12,000 Hz
Resonance frequency, mounted, nominal	30 kHz
Transverse sensitivity, max	5% of axial
Temperature response:	
-50°C	-5%
+120°C	+7%

Electrical

Power requirement:	voltage source ¹	18 - 30 VDC
	current regulating diode ^{1,2}	2 - 10 mA
Electrical noise, equiv. g, nominal:		
Broadband 2.5 Hz to 25 kHz		700 µg
Spectral 10 Hz		10 µg/√Hz
100 Hz		5 µg/√Hz
1000 Hz		5 µg/√Hz
Output impedance, max		100 Ω
Bias output voltage, nominal		12 VDC
Grounding		case isolated, internally shielded

Environmental

Temperature range	-50 to 120°C
Vibration limit	500 g
Shock limit, min	5,000 g
Electromagnetic sensitivity, equiv. g, max	70 µg/gauss
Sealing	hermetic
Base strain sensitivity, max	0.0002 g/µstrain

Physical

Weight	90 grams
Case material	316L stainless steel
Mounting	1/4 - 28 UNF tapped hole
Connector	2 pin MIL-C-5015
Connections:	
Mating connector	R6 type
Recommended cabling	J9T2A

Connector pin	Function
A	power/ signal
B	common

Notes: ¹ To minimize the possibility of signal distortion when driving long cables or high vibration signals, 24 to 30 VDC powering is recommended. A higher level constant current source should be used when driving long cables (please consult Wilcoxon customer service).

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

Accessories supplied: Calibration data; SF6 (1/4-28) mounting stud
 Accessories available: SF6M-1 (1/4-28 to M6) mounting stud

Wilcoxon Research Inc
 20511 Seneca Meadows Parkway
 Germantown, MD 20876
 USA

Tel: 301 330 8811
 Fax: 301 330 8873
 Email: wilcoxon@meggitt.com

www.meggitt.com

MEGGITT
 smart engineering for
 extreme environments