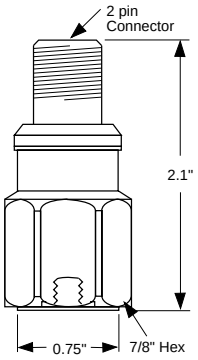
w i l c o x o n

Model 786A
General Purpose Accelerometer

FEATURES:
- Rugged design
- Corrosion resistant
- Hermetic seal
- Case isolated
- ESD protection
- Reverse wiring protection



DYNAMIC

Sensitivity, ±5%, 25°C	100 mV/g
Acceleration Range	80 g peak
Amplitude Nonlinearity	1%
Frequency Response:	
± 5%	3 - 5,000 Hz
±10%	1 - 9,000 Hz
± 3 dB	0.5 - 14,000 Hz
Resonance Frequency	30 kHz
Transverse Sensitivity, max	5% of axial
Temperature Response	–50°C –5% +120°C +5%

ELECTRICAL

Power Requirement: voltage source	18 - 30 VDC
current regulating diode	2 - 10 mA
Electrical Noise, equiv. g:	
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	12 VDC
Grounding	case isolated, internally shielded

ENVIRONMENTAL

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

PHYSICAL

Sensing Element Design	PZT ceramic / shear
Weight	90 grams
Case Material	316L stainless steel
Mounting	1/4 - 28 UNF tapped hole
Output Connector	2 pin, MIL-C-5015 style
Mating Connector	R6 type
Recommended Cabling	J10 / J9T2A

CONNECTOR PIN	FUNCTION
SHELL	ground
A	power/ signal
B	common

ACCESSORIES SUPPLIED: SF6 mounting stud (International customers specify mounting requirements); Calibration data (level 2).

ISO 9001

98692 Rev.A.1 3/00

Due to continued research and development, Wilcoxon Research reserves the right to amend this specification without notice.

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