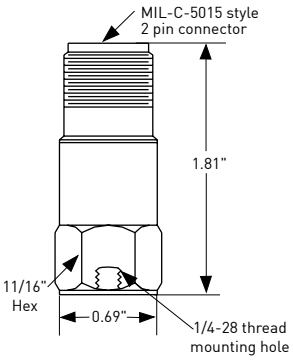
Model 780A
General purpose accelerometer

Features
- Rugged design
- Corrosion resistant
- Hermetic seal
- Case isolated
- ESD protection
- Reverse wiring protection
- EMI / RFI shielded

Benefits
- Able to fit in small spaces
- Light weight for walk around programs
- Cross wiring will not harm sensor
- Prevents ground loops in permanent mount applications
- Can be hosed down or submersed with proper connector
- Magnet or permanent mount applications



Dynamic

Sensitivity, ±5%, 25°C	100 mV/g
Acceleration range	80 g peak
Amplitude nonlinearity	1%
Frequency response:	
± 5%	1 - 7,000 Hz
±10%	0.7 - 9,000 Hz
± 3 dB	0.4 - 14,000Hz
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	500 µg
Spectral	10 Hz	7 µg/√Hz
	100 Hz	4 µg/√Hz
	1000 Hz	2 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	62 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

Connections

Connector pin	Function
Shell	ground
A	power/ signal
B	common

Note: Frequency response and spectral noise values are typical
Accessories supplied: SF6 mounting stud (International customers specify mounting requirements); calibration data (level 2)

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ALTHEN reserves the right to vary the foregoing details without prior notice

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