Model 787A

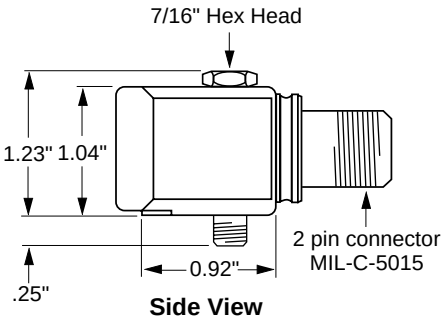
Low Profile Industrial Accelerometer

COMMON APPLICATIONS

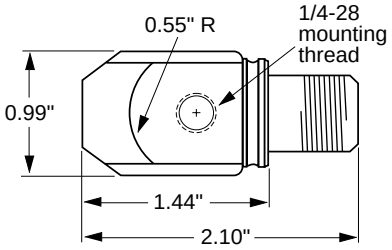
- General Purpose
- Moderate Industrial Environments
- Conveyors and Drives

FEATURES

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



Side View



Bottom View

SPECIFICATIONS

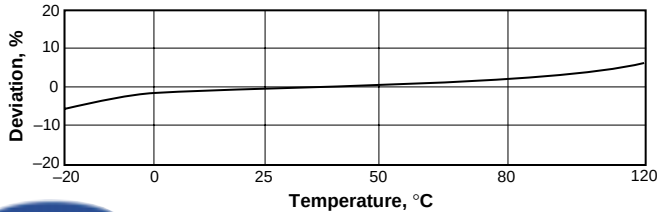
DYNAMIC		
Sensitivity, ±10%, 25°C		100 mV/g
Acceleration Range[1]		80 g peak
Amplitude Nonlinearity		1%
Frequency Response:		
±10%		1.0 - 5,000 Hz
±3 dB		0.7 - 10,000 Hz
Resonance Frequency, mounted, minimum		22 kHz
Transverse Sensitivity, max		5% of axial
Temperature Response		see graph
ELECTRICAL		
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		100% tested for hermeticity to 10^{-8} cc/sec
Base Strain Sensitivity, max		0.002 g/µstrain
PHYSICAL		
Weight		145 grams
Case Material		316L stainless steel
Mounting		1/4 - 28 captive hex head screw with 0.046" diameter safety wire hole
Connector		2 pin MIL-C-5015
Connections:		
Pin A		Power/Signal
Pin B		Common
Mating Connector		R6 type
Recommended Cabling		J9T2A, two conductor shielded, Teflon jacketed

NOTES:

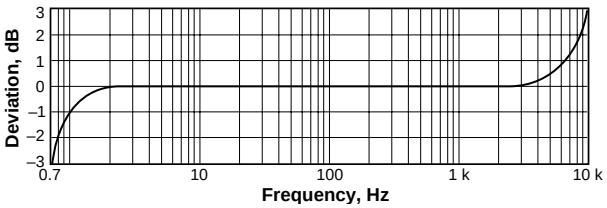
1. To minimize the possibility of signal distortion when driving long cables or high vibration signals, 24 to 30 VDC powering is recommended. The higher level constant current source should be used when driving long cables (please consult Wilcoxon Customer Service).
2. A maximum current of 6 mA is recommended for operating temperatures in excess of 100 °C.

ACCESSORIES SUPPLIED: Calibration data; SC6125 captive screw

TYPICAL TEMPERATURE RESPONSE



TYPICAL FREQUENCY RESPONSE



ISO 9001

#98493 Rev.D 5/98

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

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