

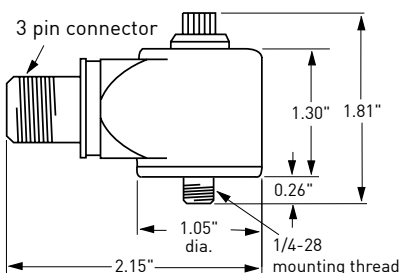
Model 797LT

Low frequency accelerometer with temperature sensor



Features

- Senses both acceleration and temperature
- Corrosion resistant
- Hermetic seal
- Ground isolated
- ESD protection
- Reverse wiring protection



Dynamic

Sensitivity, $\pm 5\%$, 25°C.....	500 mV/g
Acceleration range	10 g peak
Amplitude nonlinearity.....	1%
Frequency response:	
$\pm 5\%$	0.6 - 850 Hz
$\pm 10\%$	0.4 - 1,500 Hz
± 3 dB	0.2 - 3,700 Hz
Resonance frequency.....	18 kHz
Transverse sensitivity, max.....	7% of axial
Temperature response:	
-50°C.....	-5%
+120°C.....	+5%
Temperature output sensitivity, $\pm 5\%$	10 mV/K
Temperature measurement range.....	223 to 390K (-50 to 120°C)

Electrical

Temperature sensor		
Power requirement:	voltage source	18 - 30 VDC
	current regulating diode	2 - 4 mA
Grounding.....		case isolated, internally shielded
Accelerometer		
Power requirement:	voltage source.....	18 - 30 VDC
	current regulating diode	2 - 10 mA
Electrical noise, equiv. g:		
Broadband 2.5 Hz to 25 kHz.....		12 μ g
Spectral 2 Hz.....		2 μ g/ \sqrt Hz
	10 Hz.....	0.6 μ g/ \sqrt Hz
	100 Hz.....	0.2 μ g/ \sqrt Hz
Output impedance, max.		100 Ω
Bias output voltage.....		10 VDC
Grounding.....		case isolated, internally shielded

Environmental

Temperature range	-50 to 120°C
Vibration limit.....	250 g peak
Shock limit	2,500 g peak
Electromagnetic sensitivity, equiv. g.....	5 μ g/gauss
Base strain sensitivity	0.001 g/ μ strain

Physical

Sensing element design.....	PZT ceramic / shear
Weight	160 grams
Case material.....	316L stainless steel
Mounting	1/4-28 captive socket head screw
Output connector.....	3 pin, MIL-C-5015 style
Mating connector	R6G type
Recommended cabling.....	J9T3A

Accessories supplied: #12105-01 captive screw (International customers specify mounting requirements); calibration data (level 3).

Connections

Connector pin	Function	Cable conductor color
Shell	ground	shield
A	accelerometer, power / signal	red
B	accelerometer / temperature common	black
C	temperature sensor, power / signal	white

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



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