Low-frequency accelerometer

797L series

SPECIFICATIONS

Sensitivity, ±5%, 25°C		500 mV/g
Acceleration range		10 g peak
Amplitude nonlinearity		1%
Frequency response:	**±5%**	0.6 - 850 Hz
	±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**	−8%
	+120°C	+5%
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 µg
Spectral	**2 Hz**	2.0 µg/√Hz
	10 Hz	0.6 µg/√Hz
	100 Hz	0.2 µg/√Hz
Output impedance, max		100 Ω
Bias output voltage		10 VDC
Grounding		case isolated, internally shielded
Temperature range		−50° to +120°C
Vibration limit		250 g peak
Shock limit		2,500 g peak
Electromagnetic sensitivity, equiv. g		5 µg/gauss
Sealing		hermetic
Base strain sensitivity		0.001 g/µstrain
Sensing element design		PZT ceramic / shear
Weight		148 grams
Case material		316L stainless steel
Mounting		1/4-28 captive socket head
Mating connector		R6 type
Recommended cabling		J9T2A

Accessories supplied: #12105-01 captive socket head (metric mounting available); calibration data (level 3)
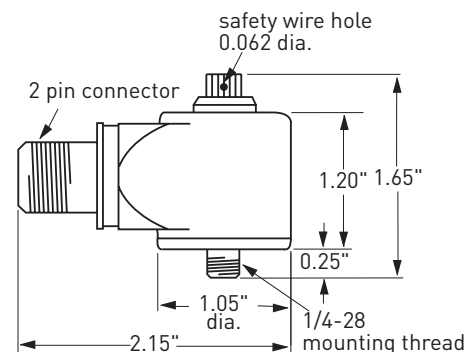
Key features

- Certified versions available for use in hazardous areas (models 797LE, 797L-33, 797L-35)
- Ultra low noise electronics
- Manufactured in ISO 9001 facility

Connections

Function	Connector pin / cable conductor color
power/signal	A / white
common	B / black
ground	shell / shield

Certifications

All 797L models	797LE	797L-33	797L-35
CE	FM APPROVED — Class I, II, III, T4 Div 1 Groups A, B, C, D, E, F, G Div 2 Groups A, B, C, D, F, G	CSA — Class I, Div 1 Groups A, B, C, D	Ex — II 1 G Ex ia IIC T4 Ga Tamb: -50°C to 120°C

For Hazardous area installations the transducer must be installed per 11537.

The model 797L-35 transducer must not be subjected to an acceleration greater than 1200g and must be mechanically protected so that it is not subjected to impacts greater than 2 J energy.

Note: Due to continuous process improvement, specifications are subject to change without notice.
This document is cleared for public release.