

# Low-frequency accelerometer

## 793L

### SPECIFICATIONS

<b>Sensitivity, <math>\pm 5\%</math>, 25°C</b>		500 mV/g
<b>Acceleration range</b>		10 g peak
<b>Amplitude nonlinearity</b>		1%
<b>Frequency response:</b>	$\pm 5\%$	0.6 - 700 Hz
	$\pm 10\%$	0.4 - 1,000 Hz
	$\pm 3$ dB	0.2 - 2,300 Hz
<b>Resonance frequency</b>		15 kHz
<b>Transverse sensitivity, max</b>		5% of axial
<b>Sensitivity variation with temperature:</b>		
	<b>-50°C</b>	-10%
	<b>+120°C</b>	+10%
<b>Power requirement:</b>		
<b>Voltage source</b>		18 - 30 VDC
<b>Current regulating diode</b>		2 - 10 mA
<b>Electrical noise, equiv. g:</b>		
<b>Broadband</b>	<b>2.5 Hz to 25 kHz</b>	8.0 $\mu$ g
<b>Spectral</b>	<b>2 Hz</b>	2.0 $\mu$ g/ $\sqrt{\text{Hz}}$
	<b>10 Hz</b>	0.4 $\mu$ g/ $\sqrt{\text{Hz}}$
	<b>100 Hz</b>	0.2 $\mu$ g/ $\sqrt{\text{Hz}}$
<b>Output impedance, max</b>		100 $\Omega$
<b>Bias output voltage</b>		10 VDC
<b>Grounding</b>		case isolated, internally shielded
<b>Temperature range</b>		-50° to +120°C
<b>Vibration limit</b>		250 g peak
<b>Shock limit</b>		5,000 g peak
<b>Electromagnetic sensitivity, equiv. g</b>		20 $\mu$ g/gauss
<b>Sealing</b>		hermetic
<b>Base strain sensitivity, max</b>		0.0001 g/ $\mu$ strain
<b>Sensing element design</b>		PZT, compression
<b>Weight</b>		142 grams
<b>Case material</b>		316L stainless steel
<b>Mounting</b>		1/4-28 tapped hole
<b>Output connector</b>		2 pin, MIL-C-5015
<b>Mating connector</b>		R6 type
<b>Recommended cabling</b>		J9T2A

Accessories supplied: SF6 mounting stud; calibration data (level 2)

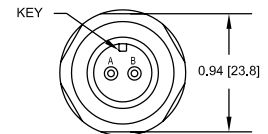
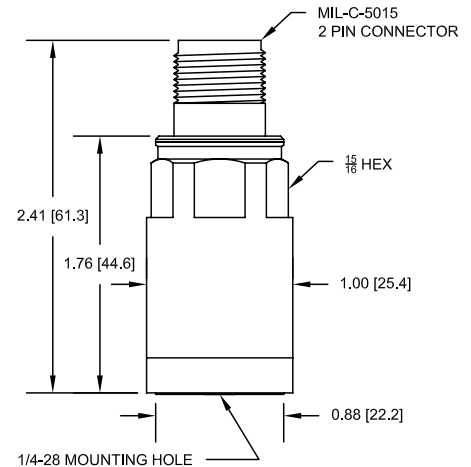
### Certifications

All 793L models	793LE	793L-33
	Class I, II, III, T4 Div 1 Groups A, B, C, D, E, F, G Div 2 Groups A, B, C, D, F, G	Class I, Div 1 Groups A, B, C, D



### Key features

- Certified versions available for use in hazardous areas (models 793LE and 793L-33)
- Manufactured in ISO 9001 facility



Connections	
Function	Connector pin
power/signal	A
common	B
ground	shell

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