

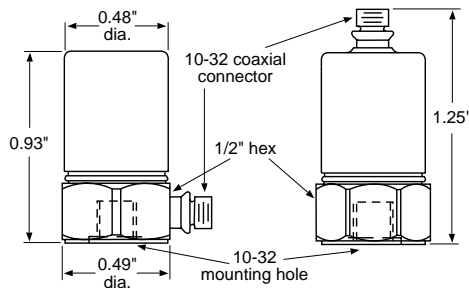
Model 736/736T

Small Size, High Sensitivity, High Frequency Accelerometer



FEATURES:

- Wide dynamic range
- High sensitivity
- Compact construction to fit in tight spaces
- Wide frequency range
- Standardized sensitivity
- Hermetic design



Model 736

Model 736T

SPECIFICATIONS

DYNAMIC

Sensitivity, $\pm 5\%$, 25°C	100 mV/g
Acceleration Range ¹	50 g peak
Amplitude Nonlinearity	1%
Frequency Response:	
$\pm 5\%$	5.0 - 15,000 Hz
± 3 dB	2.0 - 25,000 Hz
Resonance Frequency, mounted, nominal	60 kHz
Transverse Sensitivity, max.	7% of axial
Temperature Response	see graph

ELECTRICAL

Power requirement:	
voltage source	18 - 30 VDC
current regulating diode ^{1,2}	2 - 10 mA
Electrical Noise, equiv. g, nominal:	
Broadband 2.5 Hz to 25 kHz	150 μ g
Spectral	
10 Hz	10 μ g/ $\sqrt{\text{Hz}}$
100 Hz	2 μ g/ $\sqrt{\text{Hz}}$
1,000 Hz	1 μ g/ $\sqrt{\text{Hz}}$
10,000 Hz	0.8 μ g/ $\sqrt{\text{Hz}}$
Output Impedance, max.	150 Ω
Bias Output Voltage, nominal	10 VDC
Grounding	case grounded

ENVIRONMENTAL

Temperature Range	-50 to 120°C
Vibration Limit	500 g peak
Shock Limit	5000 g peak
Electromagnetic Sensitivity, equiv. g	100 μ g/gauss
Base Strain Sensitivity	0.005 g/ μ strain

PHYSICAL

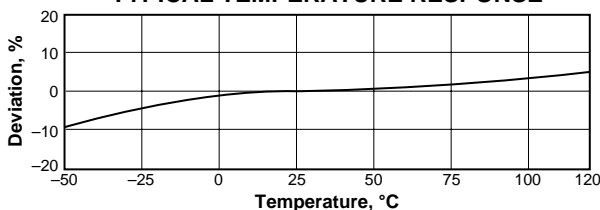
Weight	13 grams
Material	316L stainless steel
Mounting	10-32 tapped hole
Output Connector	10-32 coaxial
Cabling: Mating Connector	Wilcoxon R1 (10-32 coaxial)
Cable	J93, coaxial, Teflon jacket, 30 pF/ft

- NOTES:**
- ¹ To minimize the possibility of signal distortion when driving long cables with 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.

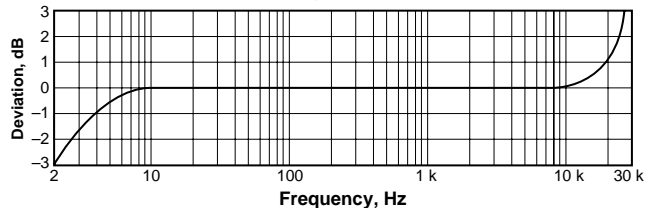
ACCESSORIES SUPPLIED: SF1 mounting stud, calibration data

ACCESSORIES AVAILABLE: R1-2-J93-10 cable assembly, power supplies, amplifiers, signal conditioners, SF5 cementing studs, magnetic mounting bases, SF4 isolating studs.

TYPICAL TEMPERATURE RESPONSE



TYPICAL FREQUENCY RESPONSE



98093 Rev. D 9/97

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

