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# Test & Measurement

## Test & Measurement Sensors

Test and measurement accelerometers are generally characterized by smaller size than industrial units and typically use a 10-32 co-axial connector to connect to measurement equipment. While they are sometimes used in industrial environments for machinery vibration collection, they are usually used in laboratories and similar environments. Modal and structural testing are the typical applications for test and measurement sensors.

### Wilcoxon Test & Measurement Sensors:

Model	Style	Sensitivity	Low Freq	High Freq	Accel Range
726 / 726T	compression	100 mV/g	0.6 Hz	15 kHz	80 g peak
728A / 728T	compression	500 mV/g	0.8 Hz	10 kHz	15 g peak

Note: Frequency @  $\pm 3dB$ .

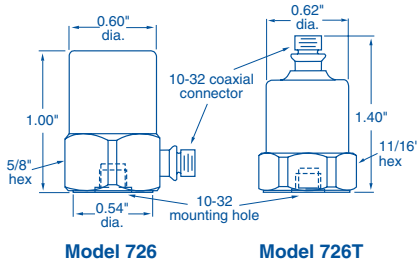


## Model 726 / 726T

Small size, Piezoelectric Accelerometers

### FEATURES:

- Wide frequency range
- Low noise floor
- Hermetically designed
- Temperature compensated
- Wide dynamic range
- Small size, lightweight
- Miswiring protection



Model 726

Model 726T

### DYNAMIC

Sensitivity, $\pm 5\%$ , 25°C .....	100 mV/g	
Acceleration Range .....	80 g peak	
Amplitude Nonlinearity .....	1%	
Frequency Response:		
$\pm 5\%$ .....	2.0 - 10,000 Hz	
$\pm 10\%$ .....	1.0 - 12,000 Hz	
$\pm 3$ dB .....	0.6 - 15,000 Hz	
Resonance Frequency, mounted,		
nominal .....	32 kHz	
Transverse Sensitivity, max. ....	5% of axial	
Temperature Response .....	-50°C	-10%
	+120°C	+5%

### ELECTRICAL

Power Requirement:		
voltage source .....	18 - 30 VDC	
current regulating diode .....	2 - 10 mA	
Electrical Noise, equiv. g, nominal:		
Broadband 2.5 Hz to 25 kHz .....	60 $\mu$ g	
Spectral		
10 Hz .....	8.0 $\mu$ g/ $\sqrt{\text{Hz}}$	
100 Hz .....	0.8 $\mu$ g/ $\sqrt{\text{Hz}}$	
1,000 Hz .....	0.3 $\mu$ g/ $\sqrt{\text{Hz}}$	
10,000 Hz .....	0.2 $\mu$ g/ $\sqrt{\text{Hz}}$	
Output Impedance, max. ....	100 $\Omega$	
Bias Output Voltage, nominal .....	12 VDC	
Grounding:		
Model 726 (side connector) .....	case grounded	
Model 726T (top connector) .....	base isolated	

### ENVIRONMENTAL

Temperature Range .....	-50 to 120°C
Vibration Limit .....	500 g peak
Shock Limit .....	5,000 g peak
Electromagnetic Sensitivity @ 60 Hz .....	40 $\mu$ g/gauss
Base Strain Sensitivity .....	0.002 g/ $\mu$ strain

### PHYSICAL

Weight .....	30 grams (Model 726)
	34 grams (Model 726T)
Case Material .....	316L stainless steel
Mounting .....	10-32 tapped hole
Output Connector .....	10-32 coaxial
Cabling:	
Mating Connector .....	Wilcoxon R1 (10-32 coaxial)
Standard Cable .....	J93, coaxial, Teflon jacket, 30 pF/ft

ACCESSORIES SUPPLIED:  
ACCESSORIES AVAILABLE:

SF1 mounting stud, calibration data  
R1-2-J93-10 cable assembly, magnetic mounting bases, SF5 cementing studs, SF4 isolation mounting bases, power supplies, amplifiers, signal conditioners.



## Model 728A / 728T

### High Sensitivity, Low Noise Accelerometers



#### DYNAMIC

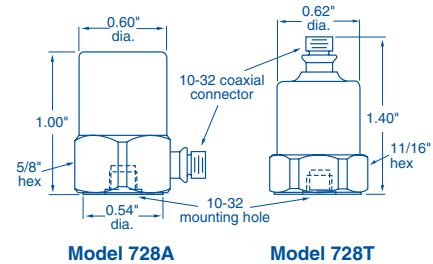
Sensitivity, $\pm 5\%$ , 25°C .....	500 mV/g
Acceleration Range .....	15 g peak
Amplitude Nonlinearity .....	1%
Frequency Response, nominal	
$\pm 5\%$ .....	2.0 - 4,000 Hz
$\pm 10\%$ .....	1.2 - 6,000 Hz
$\pm 3$ dB .....	0.8 - 10,000 Hz
Resonance Frequency, mounted, nominal .....	23 kHz
Transverse Sensitivity, max. ....	7% of axial
Temperature Response .....	-50°C    -10%
	+120°C   +5%

#### FEATURES:

- Wide frequency range
- Low noise floor
- Hermetically sealed
- Temperature compensated
- Wide dynamic range
- Small size, light weight
- Miswiring protection

#### ELECTRICAL

Power Requirement:		
voltage source .....	18 - 30 VDC	
current regulating diode .....	2 - 10 mA	
Electrical Noise, equiv. g, nominal:		
Broadband    2.5 Hz to 25 kHz .....	20 $\mu$ g	
Spectral        10 Hz .....	3.0 $\mu$ g/ $\sqrt{\text{Hz}}$	
100 Hz .....	0.3 $\mu$ g/ $\sqrt{\text{Hz}}$	
1000 Hz .....	0.6 $\mu$ g/ $\sqrt{\text{Hz}}$	
Output Impedance, max. ....	100 $\Omega$	
Bias Output Voltage, nominal .....	10 VDC	
Grounding		base isolated
Model 726 (side connector) .....	case grounded	
Model 726T (top connector) .....	base isolated	



#### ENVIRONMENTAL

Temperature Range .....	-50 to 120°C
Vibration Limit .....	250 g peak
Shock Limit .....	2500 g peak
Electromagnetic Sensitivity, equiv. g .....	20 $\mu$ g/gauss
Base Strain Sensitivity .....	0.002 g/ $\mu$ strain

#### PHYSICAL

Weight .....	45 grams
Case Material .....	316L stainless steel
Mounting .....	10-32 tapped hole
Output Connector .....	10-32 coaxial
Cabling: Mating Connector .....	Wilcoxon R1 (10-32 coaxial)
Standard Cable .....	J93, coaxial, Teflon jacket, 30 pF/ft

#### ACCESSORIES SUPPLIED:

SF1 mounting stud, calibration data

#### ACCESSORIES AVAILABLE:

R1-2-J93-10 cable assembly, magnetic mounting bases, SF8 cementing studs, power supplies, amplifiers, signal conditioners.



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