



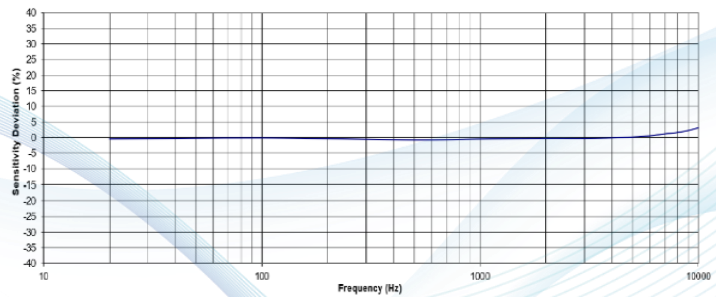
The M73AT series product is an IEPE 3-axis miniature accelerometer sensor. This model utilizes a piezoelectric ceramic in shear mode operation as the sensitive element with ultra-wide band response characteristics. The IEPE accelerometers generate signals through a combination of high quality piezoelectric crystals and low noise microelectronics, resulting in an ultra-low temperature sensitivity change/response over the operating temperature range compared to other sensitive elements, and shear mode piezoelectric technology ensures excellent base sensitivity strain errors. The M73AT series features a laser-welded titanium housing and glass-sealed 4-pin lightweight connector construction (or complete line output) for lightweight, broadband applications. Excellent amplitude and phase frequency response make this product ideal for structural verification, component testing, drop testing, and laboratory fluid dynamics testing. The miniature cube construction makes it easy for test engineers to simultaneously measure acceleration in three mutually perpendicular axes for reliable, long-term stability.

## Features :

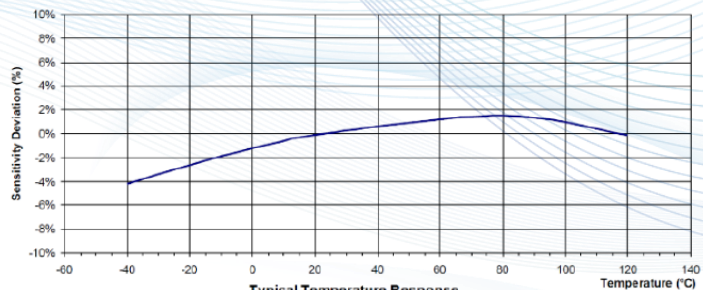
- Tri-axial measurement
- Flexible cable exit
- Adhesive or screw mounting
- Hermetic sealed
- Annular shear mode
- Wide frequency response
- Mounting ground isolated

## Application :

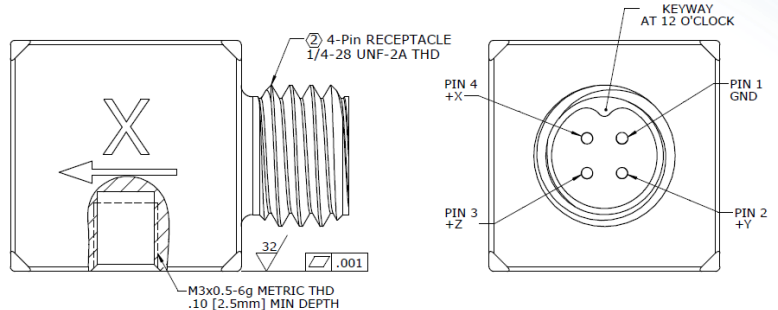
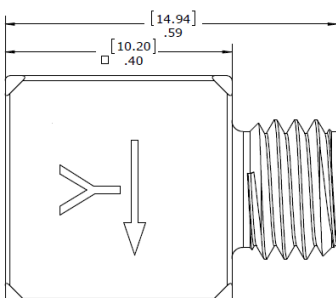
- Aircraft testing
- Shock testing
- Road testing
- Modal analysis



Typical Frequency Response



Typical Temperature Response



## Specification:

Dynamic performance	Unit				
Measurement Range	g	50	100	200	500
Sensitivity $\pm 15\%$	mV/g	100	50	25	10
Frequency Range $\pm 5\%$	Hz	0.5 ~ 10000			1 ~ 10000
Frequency Range $\pm 3\text{dB}$	Hz	0.3 ~ 12000			0.5 ~ 12000
Resonant Frequency	kHz	42			
Transverse Sensitivity	%	<5			
Non-Linearity	% FSO	$\pm 1$			
Shock Limit	g	5000			
Environmental parameters					
Temperature response -55 ~ +125°C	%/°C	$\pm 10$			
Operating and Storage Temperature	°C	-55 ~ 85	-55 ~ 100	-55 ~ 125	
Bias Voltage (Room Temp.)	Vdc	8 ~ 12			
Bias Voltage (-50 ~ 125) °C	Vdc	6 ~ 13			
Electrical characteristics					
Output Impedance	$\Omega$	< 100			
Full Scale Output Voltage	V	$\pm 5$			
Insulation Resistance	M $\Omega$	> 100			
Supply Voltage	Vdc	18 ~ 30			
Supply Current	mA	2 ~ 10			
Physical properties					
Weight (Excluding Cable)	Grams	4.3			
Mounting torque	lb-in (N-m)	16 (1.8)			
Sensing Element	Piezo Ceramic				
Housing Material	Titanium alloy				
Humidity	Hermetically sealed				
Output Methods	IEPE output				

## Accessories

HS013	M3X8.0 cup point set screw	Included
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## Optional cables

1428	Triaxial Acceleration Sensor Cable, 1/4-28 UNF connector, high temperature and low noise	Optional
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## Ordering information:

**M73AT**

**GGGG**

Range

0050=50g

0100=100g

0200=200g

0500=500g

E.G:

**M73AT-50**

Model M73AT, 0050, Connector, No Options

The data contained in this document is intended for the use of technical trainers only. The customer's technical department is responsible for assessing the suitability of the product for the intended application and the completeness of the product information given in this document in relation to such application. For further information on products, technology, terms and conditions of delivery and prices, please contact our nearest office ([www.senstechxyz.com](http://www.senstechxyz.com)).

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