

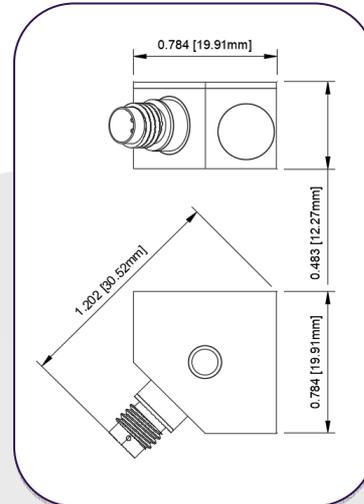


## AT/15 Triaxial Piezo-Tronic IEPE Accelerometer through hole mount

1mV/g up to 200mV/g  $\pm 10\%$  14.1gm Std Temp 125°C

A lightweight general purpose triaxial vibration transducer comprising of three voltage output piezo-electric sensing elements mounted orthogonally within a titanium block with welded construction. The AT/15 is based upon the unique DJB Konic shear® design and offers a through hole mounting method which allows the user to orientate the connector and axes in the required direction for testing.

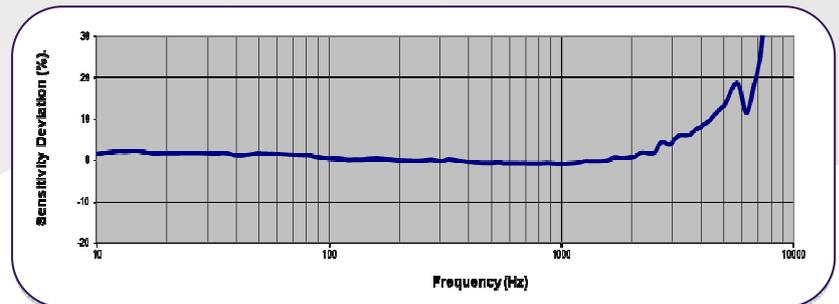
With a 1/4-28 UNF 4 pin connector centralised on one face and ruggedized single cables with three BNC labelled breakout leads the AT/15 is well suited to Automotive/Aerospace applications.



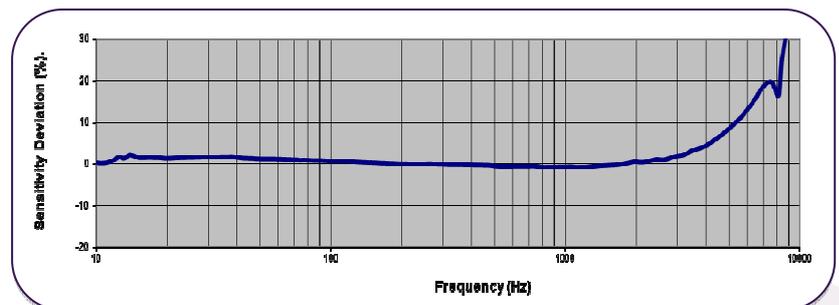
AT/15

### Typical Frequency Response

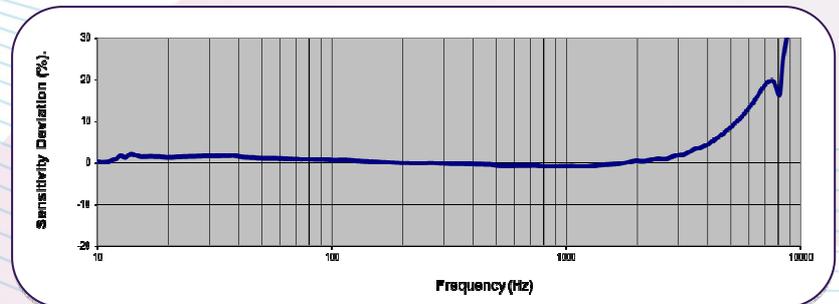
X



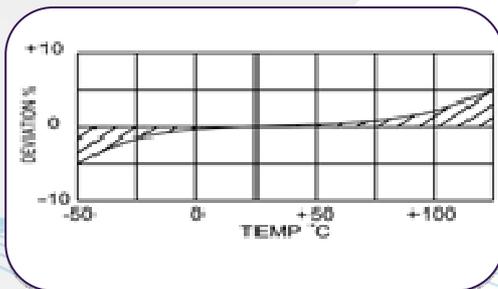
Y



Z



### Temperature Response



### Typical Spectral Noise (100mV/g):

1Hz	345 $\mu$ g/ $\sqrt$ Hz
10Hz	42.8 $\mu$ g/ $\sqrt$ Hz
100Hz	11.2 $\mu$ g/ $\sqrt$ Hz
1kHz	5.67 $\mu$ g/ $\sqrt$ Hz
10kHz	5.23 $\mu$ g/ $\sqrt$ Hz

Please note: For information and reference only. Data should not be used as pass / fail criteria for calibration purposes

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A UK company with UK-based manufacturing, assembly and calibration in-house.



ISO 9001 - 00025363



## AT/15 Triaxial Piezo-Tronic IEPE Accelerometer through hole mounting

1mV/g up to 200mV/g  $\pm 10\%$     14.1gm    Std Temp 125°C

	Metric			Imperial		
	0.1mV/(m/s <sup>2</sup> )	1.02mV/(m/s <sup>2</sup> )	10.2mV/(m/s <sup>2</sup> )	1mV/g	10mV/g	100mV/g
Voltage Sensitivity @ 20°C $\pm 10\%$	0.1mV/(m/s <sup>2</sup> )	1.02mV/(m/s <sup>2</sup> )	10.2mV/(m/s <sup>2</sup> )	1mV/g	10mV/g	100mV/g
Resonant Frequency	X/Y $\geq 20$ kHz    Z $\geq 33$ kHz					
Typical Frequency range $\pm 5\%$ $\pm 10\%$	1Hz – 4kHz 0.7Hz – 5kHz	1Hz – 4kHz 0.7Hz – 5kHz	1.5Hz – 4kHz 1Hz – 5kHz	1Hz – 4kHz 0.7Hz – 5kHz	1Hz – 4kHz 0.7Hz – 5kHz	1.5Hz – 4kHz 1Hz – 5kHz
Cross Axis Error	$\leq 5\%$ max					
Amplitude non-linearity (%FS)	$\leq 1\%$			$\leq 1\%$		
Temperature Range	-55/ +125°C			-67/ +257°F		
Voltage Sensitivity deviation (20°C/68°F)	-5% @ -55°C / +5% @ +125°C			-5% @ -67°F / +5% @ +257°F		
Supply Voltage	15/35 V DC					
Supply current	2-20mA					
Output Impedance	$\leq 100\Omega$					
Bias Voltage (20°C/68°F)	10/14 VDC					
Settling time within 10% bias	<5 seconds					
Broadband resolution grms	0.02	0.012	0.002	0.02	0.012	0.002
Base Strain Sensitivity	$\leq 0.001$ g/ $\mu$ strain					
Shock limit	49033m/s <sup>2</sup>			5000g		
Saturation limit equiv. g	49033m/s <sup>2</sup>	4903m/s <sup>2</sup>	490m/s <sup>2</sup>	5000g	500g	50g
Case Material	Titanium					
Mounting	Through hole mounting, $\varnothing 3.6$ mm (0.142")					
Weight	14.1gm			0.497oz		
Case Seal	Welded					
Size	19.9mm x 19.9mm x 12.27mm			0.78in x 0.78in x 0.48in		
Connector	1/4 -28UNF, 4 Pin Connector					

### Options:

AT/15.xxxT – TEDS enabled  
xxx – sensitivity selection

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