



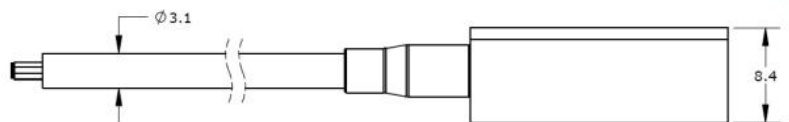
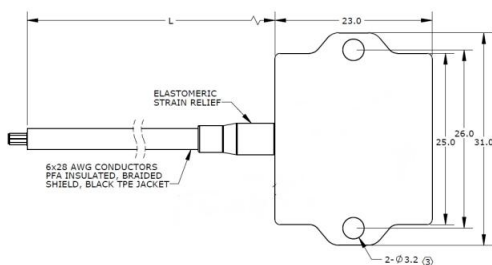
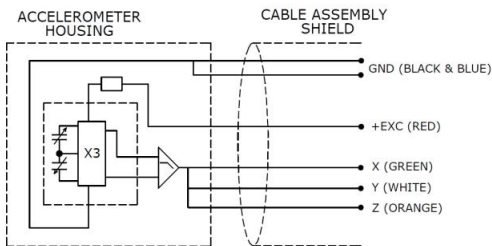
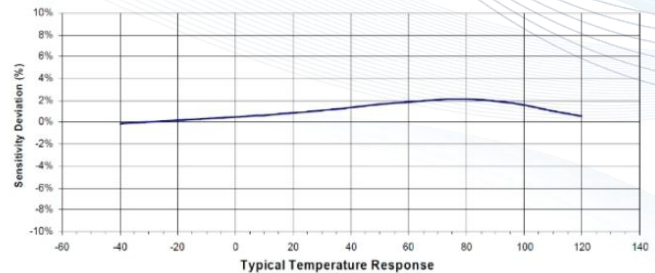
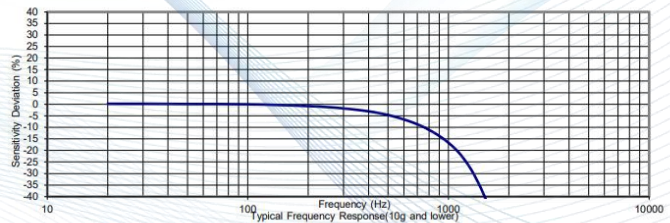
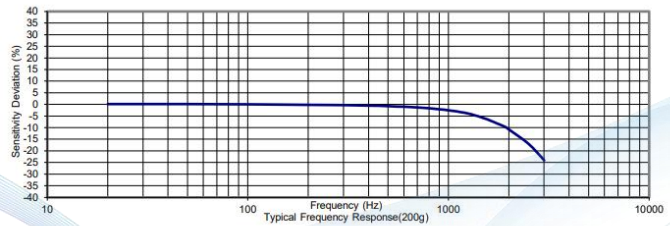
Model P82AT is a high-sensitivity triaxial accelerometer which simultaneously measures acceleration and low-frequency vibration in three mutually perpendicular axial. P82AT is triaxial capacitive accelerometer family utilizes a silicon Micro-Electro-Mechanical System (MEMS) variable capacitance sensing element. The output signal is scaled as a voltage which is proportional to the applied acceleration, signal format is single-ended  $2.5 \pm 2V$ . The accelerometer is powered by a single regulated supply between 5.5 to 30 Vdc. Thermal drift has been compensated by internal circuit for the best environment stability. The sensing element and electronics are contained in a lightweight housing with an integral cable terminated by pigtailed or specified connector. Signal ground is isolated from the test object that benefit from the anodized aluminum housing. The accelerometer can be mounted by M3 metric screw or adhesive. P82AT is well-suited for a wide variety of R&D or OEM applications requiring low frequency measurements and compact size.

## Features:

- Static response
- 2 to 200g full scale
- Motion, low frequency, tilt
- 5K g shock survivability
- Temperature compensation

## Application:

- Automotive road testing
- Civil engineering structures
- Railway comfort
- Aviation and aerospace



## Specification:

Dynamic Performance		Unit			
Measurement Range	g	±2	±5	±10	±200
Sensitivity ±10%	mV/g	1000	400	200	10
Frequency Range ±3db	Hz	0 ~ 400	0 ~ 400	0~400	0~1000
Residual Noise (Passband)	µV RMS	1000	500	400	1300
Shock Limit	g	5000			
Zero Acceleration Output	V	2.5±0.1			
Transverse Sensitivity	%	<3			
Non-Linearity	% FSO	±1			
Thermal Zero Shift -40~+85°C	% FSO	±2			
Thermal Sensitivity Shift -40~+85°C	%	±2			
Environmental Parameters					
Operating and Storage Temperature	°C	-40~85			
Electrical Characteristics					
Output Impedance	Ω	< 100			
Full Scale Output Voltage <sub>a</sub>	V <sub>pk</sub>	±2			
Insulation Resistance (@100vdc)	MΩ	> 100			
Excitation Voltage	V <sub>dc</sub>	5.5 ~ 30			
Excitation Current	mA	< 10			
Physical Properties					
Weight (Cable Not Included)	Grams	380			
Turn On Time	mSEC	<100			
Mounting Torque	6 ( 0.7 )				
Humidity	Silicone Potted				
Random Accessories					
HS002	M3x16 Socket Head Cap Screws	2pcs Included			
HS003	Φ3 SST Washer	2pcs Included			
CR001	LEMO FGG-1B-307 Connector	Optional			
AM005	8 Channels Data Acquisition System	Optional			

## Ordering information:

P82AT

GGGG

Range

0002=2g

0005=5g

0010=10g

00200=200g

E.G :

P82AT-2

Model P82AT, 0002, 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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