

CALTROP INSTRUMENTS
A BRIDGE TO PERCEIVE THE WORLD



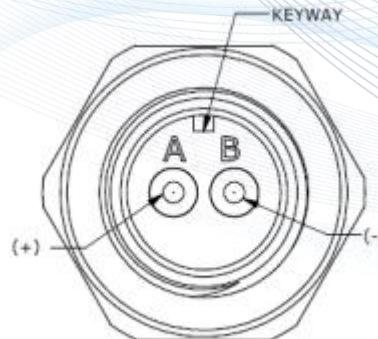
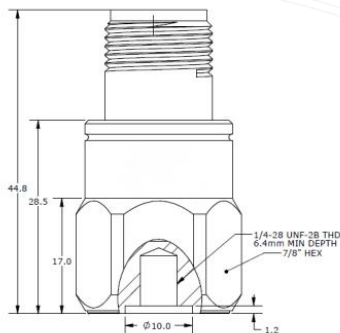
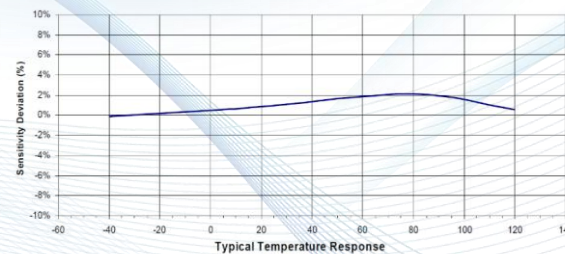
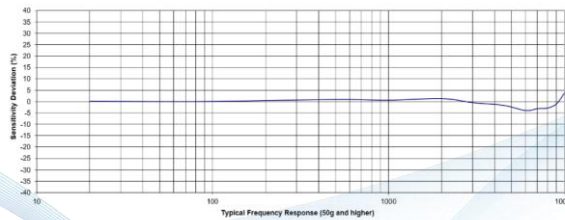
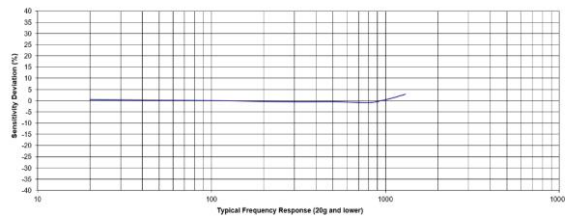
Model P84AS is an IEPE single axial accelerometer with static and dynamic response, this feature permitting the measurement of motion with high frequency and low frequency signal, even down to 0Hz(static) measurement. P84AS utilizes a silicon Micro-Electro Mechanical System (MEMS) sensor which exhibits excellent output stability over time. The accelerometer incorporates an internal circuit in a two-wire IEPE system which transmits the acceleration output through the same cable that supplies the constant current power. Polarity inversion protection for the amplify circuit is inherent in the circuit design. The accelerometer offer rugged, laser welded, stainless steel housing with durable military style connectors. Electrical case isolation, hermetic sealing, RF, EMI, ESD, and overload protection all ensure tolerance against environmental influence and mishandling. All variations provide reliable measurements and long-term stability. P84AS has 1/4-28 threaded holes for stud mounting on the test object. Senter's model 16A-L is a breakout cable for the sensor.

Features:

- IEPE excitation
- Internally shielded
- Corrosion resistant
- Hermetic seal
- Case isolated
- DC response
- Fast shock recovery

Application:

- Low frequency measurement
- Tower monitoring
- Industrial applications
- Wind-turbine blade monitoring
- Static/dynamic testing



Specification:

Dynamic Performance	Unit								
Measurement Range	g	±2	±5	±10	±20	±50	±100	±200	±500
Sensitivity ±10%	mV/g	2500	1000	500	250	100	50	25	10
Residual Noise	μVrms	650	1000	550	550	550	250	300	300
Frequency Range ±5%	Hz	0 ~ 800			0 ~ 4500		0~6000	0 ~ 8000	
Frequency Range ±3dB	Hz	0 ~ 1300			0~10000		0 ~ 13000	0~20000	
Transverse Sensitivity	%	<3							
Non-Linearity	% FSO	±1							
Shock Limit	g	5000							

Environmental Parameters

Temperature Sensitivity Coefficient -40 ~ +125°C	%	±5
Operating And Storage Temperature	°C	-40~125
Bias Voltage	Vdc	11~13

Electrical Characteristics

Output Impedance	Ω	< 100
Insulation Resistance (@100vdc)	MΩ	> 100
Excitation Voltage	Vdc	18 ~ 30
Excitation Voltage	mA	2~10

Physical Properties

Weight (Cable Not Included)	Grams	70
Turn On Time	mSEC	<100
Housing Material	316L Stainless Steel	
Humidity	Hermetically Sealed	
Sensing Element	MEMS	

Random Accessories

HS004	Mounting Stud 1/4-28 to 1/4-28 Thread	One Stud Included
HS005	Mounting Stud 1/4-28 to M6 Thread	
HS006	Mounting Stud 1/4-28 to M10 Thread	Optional
HS030	Bonding Mount	Optional
IS006	Magnet Mounting Adapter	Optional
IS007	Saddle Shape Magnetic Mount	Optional
AM003	3 Channels IEPE Signal Conditioner	Optional
AM004	Portable Vibration Analyzer	Optional
AM005	8 Channels Data Acquisition System	Optional

Ordering information:

P84AS

GGGG

Range

0002=2g

0005=5g

0010=10g

0020=20g

0030=30g

0050=50g

0100=100g

0500=500g

E.G :

P84AS-2

Model P84AS, 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).

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