

Comparison standard accelerometer

Description

The model 912A is a comparison standard accelerometer designed specifically for accelerometer calibration. It transfer standard accelerometer for calibration of back-to-back working standards and reference standards built into shakers. The unit is hermetically sealed and ideal for long term reference standard. This sensor is the industry standard for vibration/shock calibration. The model 912A provide Ultra-stability performance and flat high frequency response by reliable crystal sensing element. Model 912 offer bottom 10-32 thread hole for shaker/shock head mounting. The miniature glass insulated connector provides long-term stability over the operating temperature range. 912A provides wide frequency response, which is critical for vibration and shock calibration. The specially designed crystal exhibit low base strain sensitivity, high resonance frequency and excellent output stability over time. Signal ground is connected to the outer case of the unit, an insulation washer is available by option. The accelerometer features a 10-32 side connector and requires a coaxial cable for measurement operation. Senter's model 11-3 is a 10-32 to BNC breakout coaxial cable to work with the sensor.

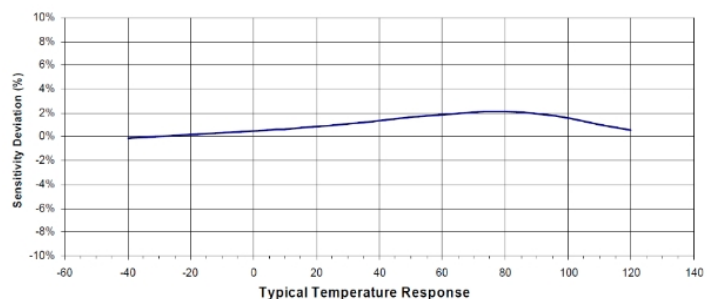
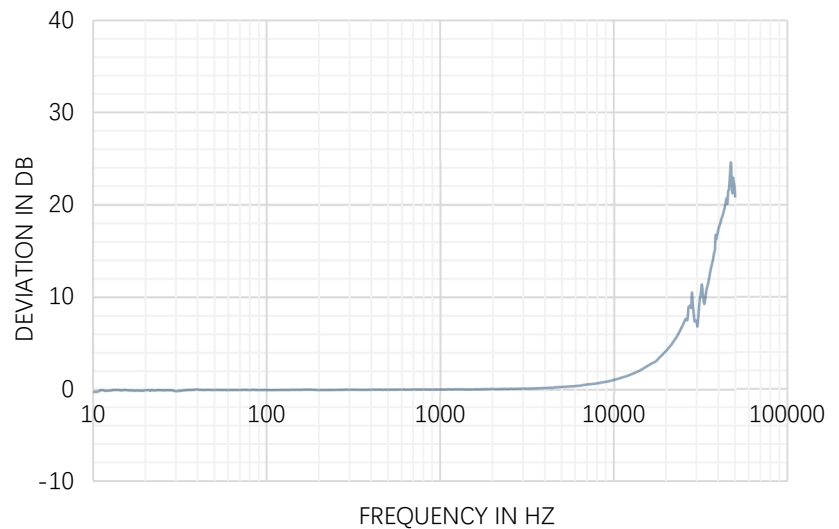
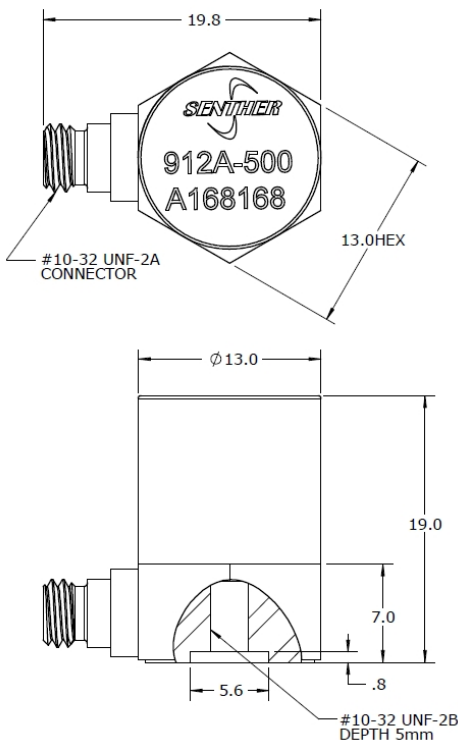


Features

- Laboratory standard
- CNAS traceable calibration
- Hermetic seal
- Ultra-stable output
- Wide frequency response
- Shock duration

Application

- Back to Back comparison
- Accelerometer calibration
- Vibrator control
- Vibration standard
- Shock calibration



Specification

All values are typical at +24°C (+75°F) and 100Hz unless otherwise stated

Sensitivity, typical	10	mV/g
Sensitivity, Minimum	8	mV/g
Frequency Response ±10%	1-10000	Hz
Frequency Response ±3dB	0.5-15000	Hz
Resonant Frequency	38	kHz
Transverse Sensitivity	<3	%
Temperature Response, -55 to +125°C	±3	%
Linearity	±0.5	%FSO
Dynamic Range	±500	g
Shock Limit	±5000	g
Sensitivity Stability, Max.	±0.2% per year	


PARAMETERS	VALUE	UNITS
Bias Voltage (Room Temp.)	9-11	Vdc
Bias Voltage (-50~125) °C	8-12	Vdc
Output Impedance	<100	Ω
Full Scale Output Voltage	±5	V
Insulation Resistance	>100	MΩ
Supply Voltage	18-30	VDC
Supply Current	2 to 10	mA
Operating and Storage Temperature	-50~+125	°C
Sensing Element	Quartz Crystal	
Sensing Geometry	Compress	
Housing Material	316L Stainless Steel	
Sealing	Welded Hermetic	
Grounding	Signal return connected to case	
Weight	12	Gram

Accessories

Calibration certificate included.

Part Number	Description	Availability
PM0386	Mounting stud ¼-28 to 10-32 thread	Included
11-3	3 meter mating cable with 10-32(male) to BNC(male) connector	Optional
10-3	3 meter mating cable with 10-32(male) to 10-32(male) connector	Optional
IN-03	3 channels IEPE signal conditioner	Optional

Measurement configuration

Sensor	Mating cable	Signal conditioner	BNC cable	AVTS
				

Ordering information

912	A
Model	Output signal
912	A=IEPE configuration

