910P

Comparison standard accelerometer

Description

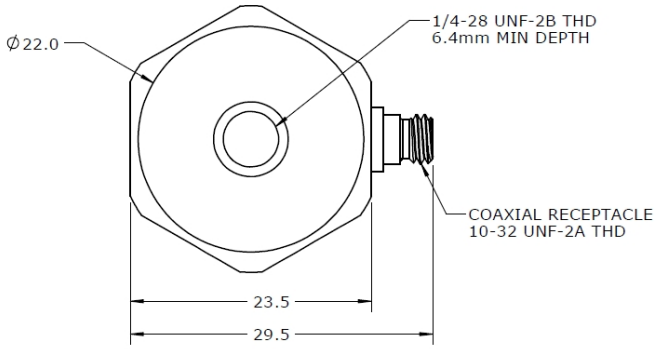
The model 910P is a comparison standard accelerometer designed specifically for accelerometer calibration. It transfer standard accelerometer for calibration of back-to-back working standards and reference standards built into shakers. The unit is hermetically sealed and ideal for long term reference standard. This sensor is the industry standard for vibration/shock calibration. The model 910P provide Ultra-stability performance and flat high frequency response by reliable crystal sensing element. Model 910 offer double side(Top & Bottom) 1/4-28 thread hole for shaker mounting and the sensor under test. Features a button configuration, model 910P operating in compress mode. The specially designed crystal exhibit low base strain sensitivity and high resonance frequency, and excellent output stability over time. Signal ground is connected to the outer case of the unit, an insolation washer is available by option. The accelerometer features a 10-32 side connector and requires a coaxial cable for measurement operation. Senther's model 11P-3 is a 10-32 to BNC low noise coaxial cable for the sensor.

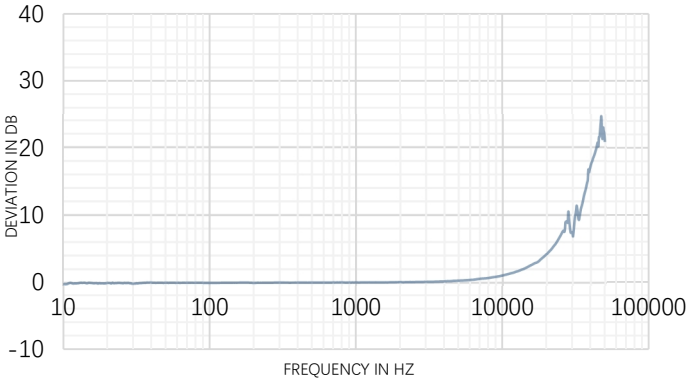
Features

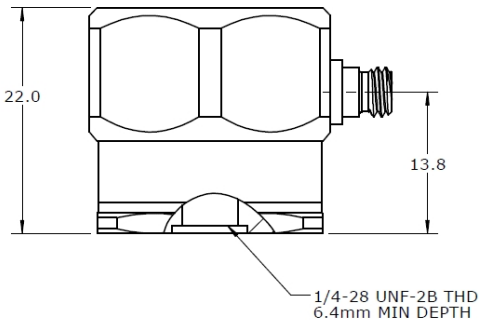
- Laboratory standard
- CNAS traceable calibration
- Hermetic seal
- Ultra-stable output
- Wide frequency response
- Shock duration

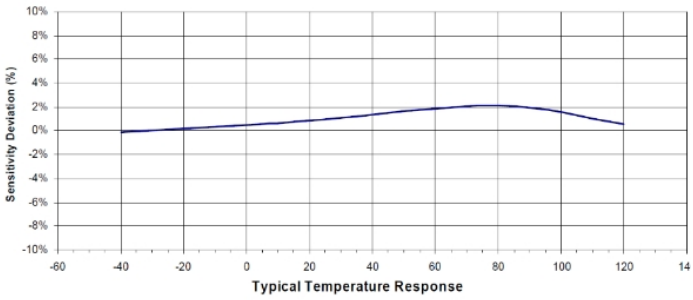
Application

- 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	2	pC/g
Sensitivity, Minimum	1.6	pC/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 +260°C	±3	%
Linearity	±0.5	%FSO
Dynamic Range	15000g peak shock 1000g peak sinusoidal	
Shock Limit	±20000	g
Sensitivity Stability, Max.	±0.2% per year	

PARAMETERS	VALUE	UNITS
Internal Resistance (@100Vdc)	>10	GΩ
Internal Resistance @ +260ºC (+500ºF)	>100	MΩ
Capacitance (Nominal)	500	pF
Grounding	Case Grounded	
Insulation Resistance (@100Vdc)	>100	MΩ
Operating Temperature	-55 to +260	ºC
Humidity	Hermetically Sealed	
Material (Casing)	Stainless Steel	
Sensing Element	Piezo Ceramic	
Weight	69	Grams
Mounting Torque	18 (2.0)	lb-in(Nm)

Accessories

Calibration certificate included.

Part Number	Description	Availability
PM0011	Mounting stud ¼-28 to ¼-28 thread	Included
PM0385	Mounting stud ¼-28 to M5 thread	Included
PM0386	Mounting stud ¼-28 to 10-32 thread	Included
11P-3	3 meter low noise cable with 10-32(male) to BNC(male) connector	Optional
10P-3	3 meter low noise cable with 10-32(male) to 10-32(male) connector	Optional
IN-06	3 channels charge converter	Optional
IN-07	1 channel inline charge converter	Optional

Measurement configuration

Sensor/910P	Mating cable	Charge converter	BNC cable	Calibration system
				

Ordering information

910	P
Model	Output signal
910	P=Charge output