

Shock test PE accelerometer



Features

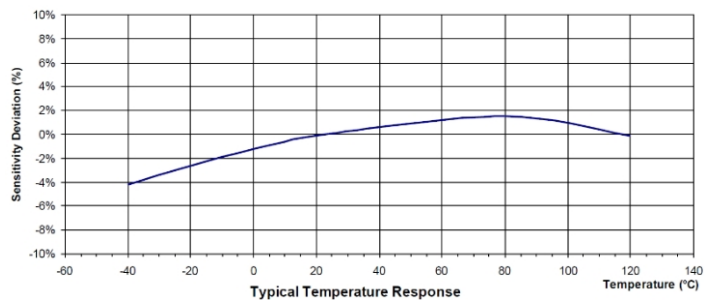
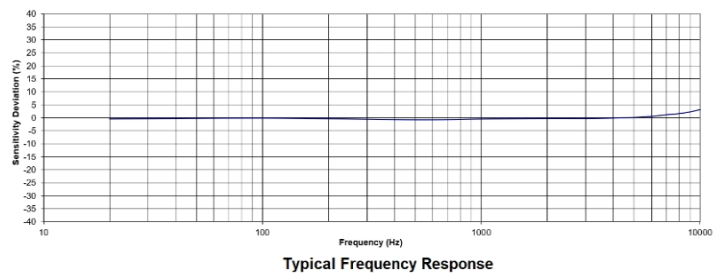
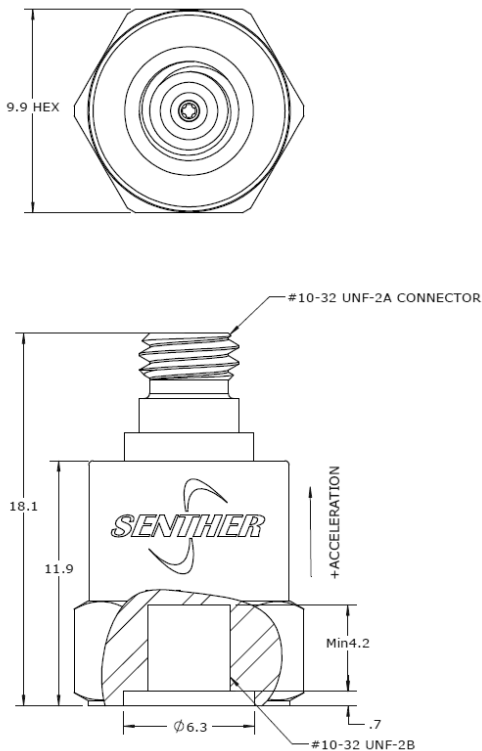
- High amplitude shock
- Top connector/cable
- Hermetic seal
- Annular shear mode
- Wide frequency response
- Adhesive or stud mounting

Application

- Shock testing
- Explode recorder
- Aircraft testing
- Weapon research

Description

The model 517P is a light weight piezoelectric accelerometer designed specifically for high amplitude shock measurement. The unit is hermetically sealed and ideal for use in extreme environments. This sensor is the industry standard for impact/shock accelerometers. The model 517P features a 10-32 threaded mounting hole for high-g shock. The accelerometer is a self-generating device that requires no external power source for operation. Model 517P operating in annular shear mode. These specially designed crystals 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. The accelerometer features a 10-32 side connector and requires a low-noise coaxial cable for error-free operation. Senther's model 11P-3 is a 10-32 to BNC breakout low noise cable for the sensor.



Specification

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

Part number	517P	Units
Sensitivity (±20%)	0.3	pC/g
Frequency Range ±5%	1-8000	Hz
Frequency Range ±10%	1-11000	Hz
Frequency Range ±3dB	0.5-15000	Hz
Resonant Frequency	>50	KHz
Non-Linearity	±1	%
Transverse Sensitivity	<5	%
Dynamic Range	±20000	g

Environmental

Specifications	Standard	Units
Shock Limit	±25000	g pk
Temperature Range	-50-125	°C

Electrical

Specifications	Standard	Units
Capacitance	430	pF
Grounding	Case Grounded	
Output Polarity	Positive	

Physical

Specifications	Standard	Units
Sensing Element	Ceramic	
Sensing Geometry	Shear	
Housing Material	Stainless Steel	
Sealing	Hermetic	
Weight	6	Gram
Mounting Torque	2.0(18)	Nm(lb-in)

Accessories

Calibration certificate included.

Part Number	Description	Availability
PM0231	Mounting stud 10-32 to 10-32 thread	One stud Included
PM0356	Mounting stud 10-32 to M5 thread	
MB0012	Magnet mounting adapter	Optional
PM0276	Adhesive mounting adapter	Optional
11P-3	3 meter low noise mating cable with 10-32(male) to BNC(male) connector	Optional
10P-3	3 meter low noise mating 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
IN-3062	8 channels data acquisition system	Optional

Measurement configuration

Sensor	Mating cable	Charge converter	BNC cable	Data acquisition	Computer
					

Ordering information

517	P	-	A
Model	Output signal	-	Mounting stud
517	P=Charge output	-	A= 10-32 to 10-32 B= 10-32 to M5 C*=Special



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