

High temperature PE accelerometer



Features

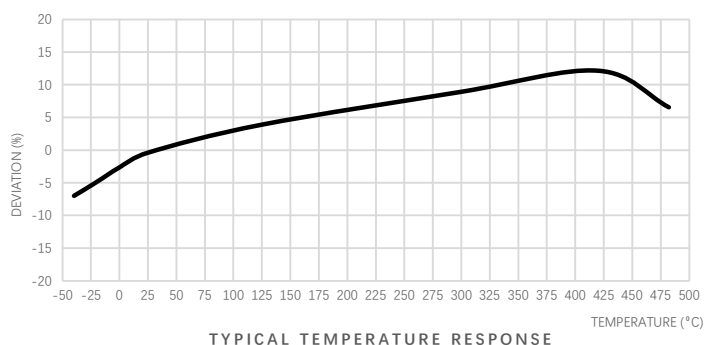
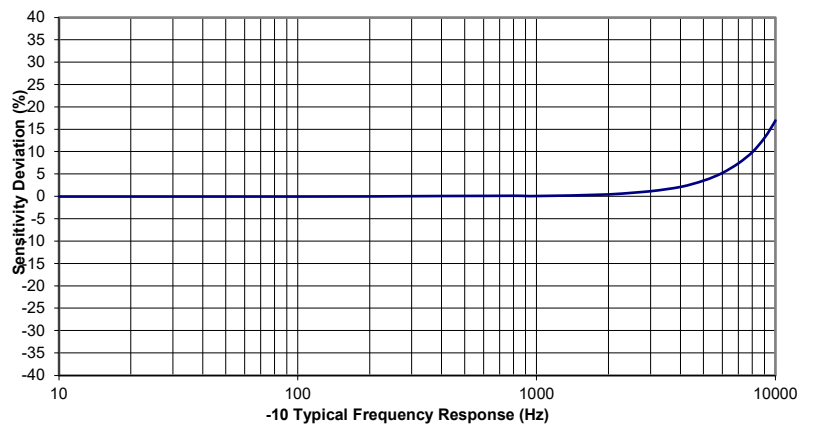
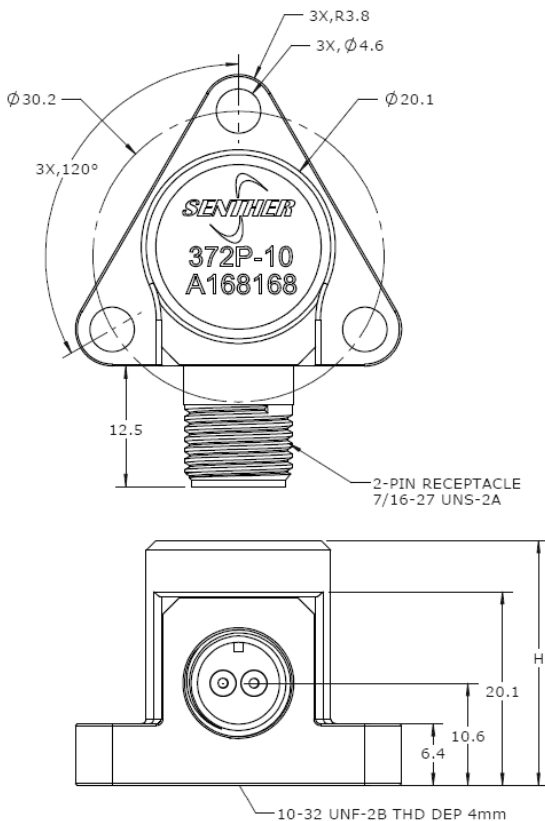
- Triangular structure
- Screws or stud mounting
- Hermetic seal
- Case isolated
- Wide frequency response

Application

- Vibration monitoring
- Engine testing
- Aircraft research
- Modal analysis
- Exhaust system testing

Description

Model 372P is a piezo-electrical accelerometer permitting high temperature vibration measurements. 372P features a shear mode ceramic crystal which exhibits excellent output stability over time. With the benefit of special piezo crystal, The accelerometer transmit the acceleration signal by charge output through the low noise cable. Signal ground isolated from the outer case of the unit. The welded Inconel construction provides a hermetic housing high temperature application. The miniature 7/16-27 glass insulated connector provides long-term stability over the operating temperature range. The 372P has triangular through holes for M4 screws mounting on the test object. The 372P provides wide frequency response, which is ideal for dynamic vibration and shock measurement. Senter's model 17P-L is a 7/16-27 to BNC breakout cable for the sensor. IN-17 charge amplifier is recommended when 372P work under high temperature environment that may cause the lower sensor internal resistance.



Specification

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

Dash NO.	-10	-50	-100	
SENSITIVITY, TYPICAL	10	50	100	pC/g
SENSITIVITY, MINIMUM	9.5	47.5	95	pC/g
FREQUENCY RESPONSE ±5%	10-5000	10-2500	10-2000	Hz
FREQUENCY RESPONSE ±1dB	1-8000	0.1-5000	0.1-3000	Hz
RESONANT FREQUENCY	33	20	15	kHz
TRANSVERSE SENSITIVITY	<5	<5	<5	%
TEMPERATURE RESPONSE, -55 to +482°C	±15	±15	±15	%
LINEARITY	±1	±1	±1	%FSO/500g
DYNAMIC RANGE	±1000	±1000	±1000	g
SHOCK LIMIT	±5000	±5000	±2000	g
WEIGHT	78	95	110	Grams
CAPACITANCE (NOMINAL)	300	550	1000	pF
HEIGHT "H"	25.4	32	38	mm

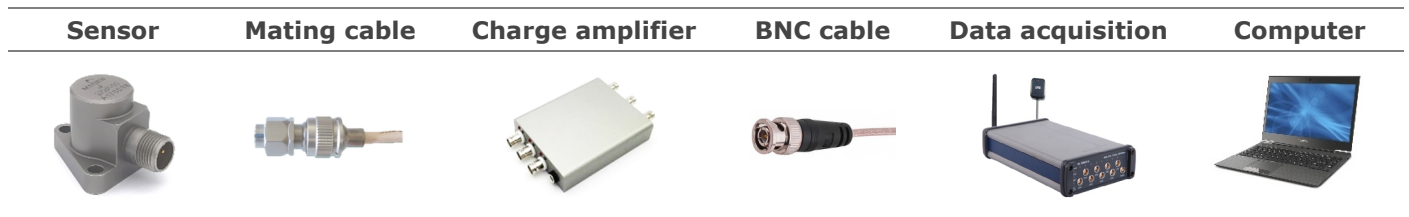
Parameters	Value	Units
INTERNAL RESISTANCE (@100Vdc)	>1	GΩ
INTERNAL RESISTANCE @ +482°C (+900°F)	>100	KΩ
GROUNDING	Case isolated	
INSULATION RESISTANCE (@100Vdc)	>100	MΩ
OPERATING TEMPERATURE	-55 to +482	°C
HUMIDITY	Hermetically Sealed	
MATERIAL (Casing)	Inconel	
SENSING ELEMENT	Piezo Ceramic	
MOUNTING TORQUE	18 (2.0)	lb-in(Nm)

Accessories

Calibration certificate included.

Part Number	Description	Availability
PM0024	M4x10 mounting screw	3pcs included
PM0231	Mounting stud 10-32 to 10-32 thread	Optional
PM0356	Mounting stud 10-32 to M5 thread	Optional
MB0027	Welding/Adhesive mounting adaptor	Optional
17P-3	3 meter low noise mating cable with 7/16-27(female) to BNC(male) connector	Optional
IN-06	3 channels charge amplifier	Optional
IN-17	1 channel high temperature sensor charge amplifier	Optional
IN-3062	8 channels data acquisition system	Optional

Measurement configuration



Ordering information

372	P	-	10	-	3
Model	Output signal	-	Sensitivity	-	Integrated cable length
372	P=Charge output	-	10=10pC/g 50=50pC/g 100=100pC/g	-	3=3 meters Blank=Connector output

