

Universal Testing Type Accelerometer

DETAILS

The B09Y35 B09Y36 B10Y35 B10Y36 adopts piezoelectric ceramic shear structure, with wide band frequency response, resistant to large impact damage, high-quality piezoelectric ceramic with long-term stability can ensure years of accurate measurement. Built-in low impedance circuit, characterized by low noise, good low frequency response, small size and high sensitivity. The housing is made of titanium alloy with lower density and laser welding. Each of the three axial directions is equipped with calibration holes for easy calibration and installation, and an insulated mounting kit is standard.

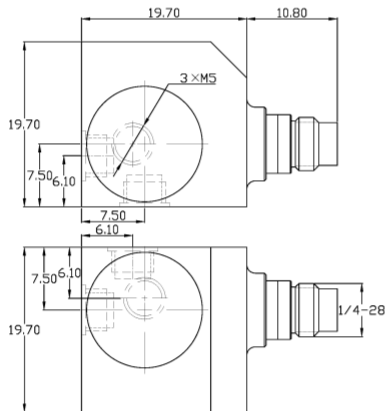
FEATURES

- IEPE Universal Acceleration Sensor
- Standard series with multiple range options
- Shear structure
- Broadband response

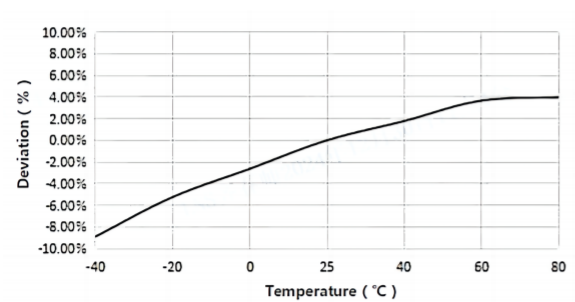
TYPICAL APPLICATIONS

- Structural testing of bridges, buildings, etc

Fig_1 Dimensions of B09Y35 B09Y36 B10Y35 B10Y36

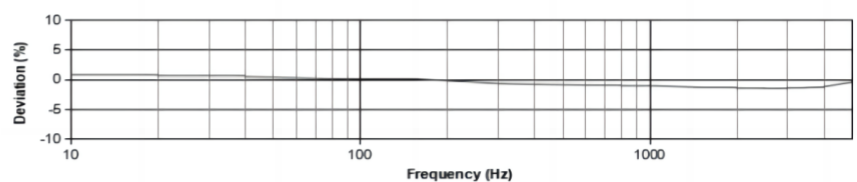


Fig_2 Typical Temperature Response



B09Y35
B09Y36
B10Y35
B10Y36

Fig_3 Typical Frequency Response



Specifications-BXXY35&BXXY36

MODEL NUMBER	UNIT	B09Y35	B09Y36	B10Y35	B10Y36
PERFORMANCE					
Sensitivity ¹	mV/g	500	500	1000	1000
	mV/(m/s ²)	50	50	100	100
Measurement Range	g	±10	±10	±5	±5
Broadband Resolution ²	g rms	0.00002	0.00002	0.00001	0.00001
Non-Linearity ³	%	1			
Frequency Range	± 5%(Hz)	0.5-5k	0.5-8k	0.5-5k	0.5-8k
	±10%(Hz)	0.3-6k	0.3-10k	0.3-6k	0.3-10k
Resonance Frequency ²	Hz	≥32k	≥32k	≥32k	≥32k
Discharge Time Constant ²	s	≥2			
Transverse Sensitivity	%	≤5			
ELECTRICAL					
Excitation Voltage	VDC	20-30			
Constant Current Excitation	mA	2-20			
Output Impedance	Ω	≤100			
Output Bias Voltage	V	8-12			
Electrical Isolation	Ω	-			
Spectral Noise ²	μg/√Hz	3.6	3.6	3.6	3.6
		1.6	1.6	1.6	1.6
		0.8	0.8	0.8	0.8
ENVIRONMENTAL					
Sinusoidal Vibration Limit ⁴	g	3000	3000	400	400
Shock Limit ⁴	g	5000	5000	1000	1000
Temperature Range	°C	-40-120			
	°F	-40-248			
Temperature Response ²	%/°C	0.15			
PHYSICAL					
Sealing	-	Laser welding IP68			
Sensing Element	-	Piezoelectric ceramics			
Housing Material	-	Titanium Alloy			
Size	mm	19.7 Cube			
	in	0.776 Cube			
Electrical Connector	-	1/4-28 4-pin			
Mounting Thread	-	M5 (Opt. 10-32)			
Weight ²	g	37	37	37	37
	oz	1.305	1.305	1.305	1.305
TEDS Optional ⁵	-	Yes			

Additional Information

Note:

- @ 160Hz, 24VDC, 4mA conditions
- Typical values
- JBT 6822-2018 7.12.1 Vibration Testing Method
- References the mechanical structure of the sensor not being damaged in a non powered state, rather than in a working state
- Some products may have changes in size after adding TEDS

BXXY35&BXXY36

Supplied Accessories:

- Product Verification Report
- Install Screws

OPTIONALVERSIONS

-E: 10-32 Mounting Threads

COMPLIANCE WITH STANDARDS



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