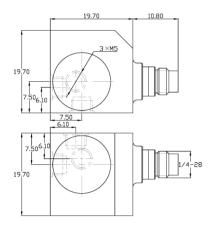


## **Universal Testing Type Accelerometer**

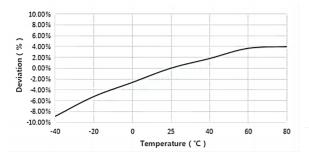
#### **DETAILS**

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.

#### Fig\_1 Dimensions of B09Y35 B09Y36 B10Y35 B10Y36



Fig\_2 Typical Temperature Response



#### **FEATURES**

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

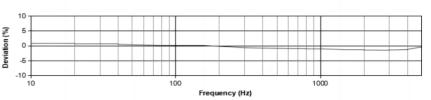
#### TYPICAL APPLICATIONS

·Structural testing of bridges, buildings, etc



B09Y35 B09Y36 B10Y35 B10Y36

Fig\_3 Typical Frequency Response





### Specifications-BXXY35&BXXY36

MODEL NUMBER		UNIT	B09Y35	B09Y36	B10Y35	B10Y36
PERFORMANO	CE					
Sensitivity <sup>1</sup>		mV/g	500	500	1000	1000
		mV/(m/s²)	50	50	100	100
Measurement Range		g	±10	±10	±5	±5
Broadband Resolution <sup>2</sup>		g rms	0.00002	0.00002	0.00001	0.00001
Non-Linearity <sup>3</sup>		%		•	1	
Pange	5%	Hz	0.5-5k	0.5-8k	0.5-5k	0.5-8k
	:10%		0.3-6k	0.3-10k	0.3-6k	0.3-10k
Resonance Frequency <sup>2</sup>		Hz	≥32k	≥32k	≥32k	≥32k
Discharge Time Constant <sup>2</sup>		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 <sup>2</sup>	10Hz	µg/√Hz	3.6	3.6	3.6	3.6
	100Hz		1.6	1.6	1.6	1.6
	1000Hz		0.8	0.8	0.8	0.8
ENVIRONMEN	ITAL	'				
Sinusoidal Vibration Limit <sup>4</sup>		g rms	3000	3000	400	400
Shock Limit <sup>4</sup>		g pk	5000	5000	1000	1000
Temperature Range		°C	-40~120			
		°F	-40~248			
Temperature Response <sup>2</sup>		%/°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 <sup>2</sup>		g	37	37	37	37
		OZ	1.305	1.305	1.305	1.305
TEDS Optional <sup>5</sup>		- 1		Y	es	1

#### **Additional Information**

#### Note:

- 1. @ 160Hz, 24VDC, 4mA conditions
- 2. Typical values
- 3. JBT 6822-2018 7.12.1 Vibration Testing Method
- 4. References the mechanical structure of the sensor not being damaged in a non powered state, rather than in a vorking state
  5. 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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