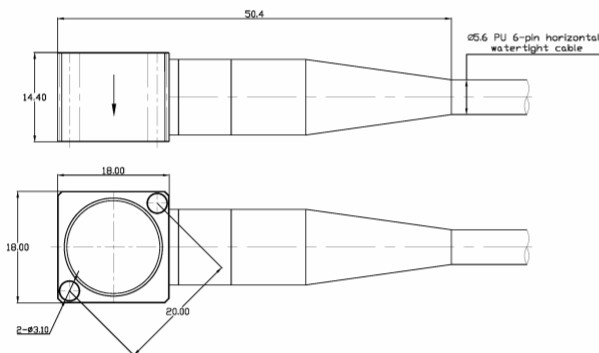


Universal Testing Type Accelerometer

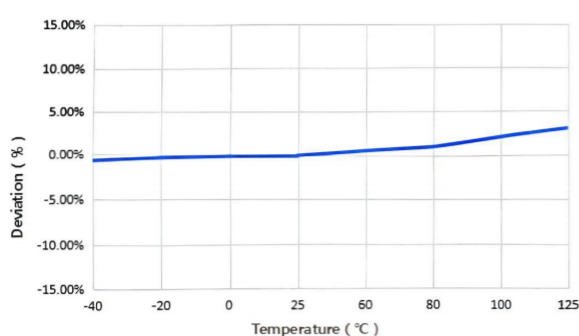
DETAILS

The single-axis capacitive accelerometer sensor, type AXXD70, utilizes a variable capacitive MEMS sensitive element. The sensitive element consists of a very small inertial mass and a flexure element. The mass is deflected under acceleration and the capacitance changes. The AC excitation and modulation-demodulation circuitry contained within the internal internal circuitry of the sensor outputs an analog voltage signal proportional to the acceleration. Sensitive components and circuitry are encapsulated in a titanium alloy housing, with an integral vulcanized watertight four-core cable output, waterproof to 3MPa, and signal ground isolated from the housing.

Fig_1 Dimensions of AXXD70



Fig_2 Typical Temperature Response



FEATURES

- Zero frequency voltage output type
- Low power consumption, low noise, high resolution
- Connected cable output
- Broadband response

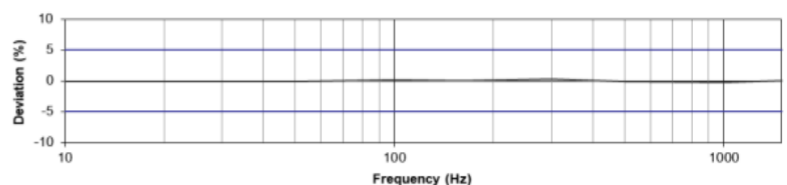
TYPICAL APPLICATIONS

- Road spectrum testing
- Overload testing
- Foundation building structure testing
- Low frequency testing
- Underwater test



AXXD70

Fig_3 Typical Frequency Response



Specifications-AXXD70

MODEL NUMBER		UNIT	A05D70	A06D70
PERFORMANCE				
Sensitivity ¹		mV/g	40	80
		mV/(m/s²)	4	8
Range		g	±100	±50
Non-Linearity (typ) ²		%	0.1	
Non-Linearity (max) ²		%	0.3	
Frequency Range	± 5%	Hz	0-1.5k	0-1.5k
	±10%		-	-
Resonance Frequency ³		Hz	8.5k	5.8k
Transverse Sensitivity		%	≤0.2	
Output Mode		-	Single-ended	
ELECTRICAL				
Excitation Voltage		V DC	6-30	
Full Range Voltage		V	±4	
Output Impedance		Ω	≤90	
ENVIRONMENTAL				
Sinusoidal Vibration Limit ⁴		g rms	5000	5000
Shock Limit ⁴		g pk	5000	5000
Temperature Range		°C	-40-120	
		°F	-40-248	
PHYSICAL				
Sealing		-	Laser welding IP68	
Sensing Element		-	MEMS Chip	
Housing Material		-	Titanium alloy	
Size	mm	18.00×18.00×14.40		
	in	0.709×0.709×0.567		
Electrical Connector		-	Watertight connected cable	
Mounting Thread		-	2×M3	
Weight ³	g	10		
	oz	0.353		

Additional Information

Note:

1. @ 160Hz, under the condition of 23 °C± 5 °C
2. JBT 6822-2018 7.12.1 Vibration Testing Method
3. Typical values
4. It refers to the mechanical structure of the sensor not being damaged in a non powered state, rather than in a working state

AXXD70

Supplied Accessories:

- Product Verification Report
- Install screws

COMPLIANCE WITH STANDARDS



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