PE Uniaxial Isolated Shock Accelerometer

DETAILS

The C00XGX series charge-type uniaxial shock accelerometer uses a unique shear structure with reduced base strain and transverse sensitivity. High-quality ceramics ensure long-term stability. Unique double-shielded structure with ground isolation; integrated screw with attached cable for secure installation. Custom output connectors available.

FEATURES

·High shock testing charge output sensor
·Special shear structure design
·Full series uses shape-memory alloy fasteners, shear structure, stable and reliable

TYPICAL APPLICATIONS

·Drop testing
·Blast shock testing

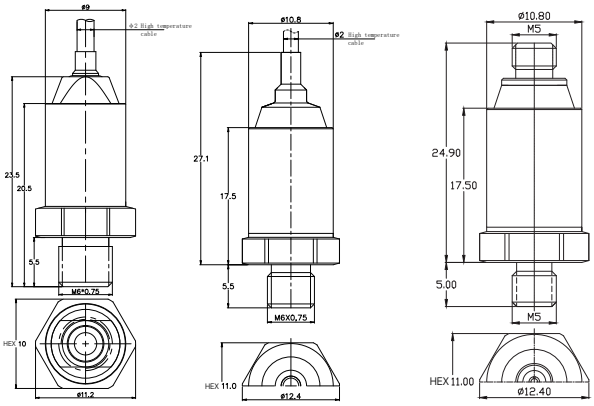
Fig_1 Picture of C00XCX

C00AG1

C00CG1
C00CG2
C00CG3
C00CG7-Top

C00CG7-Side

Fig_3 Dimensions of C00XCX



C00CG7

C00CG1
C00CG2
C00CG3

C00AG1

Fig_4 Typical Temperature Response

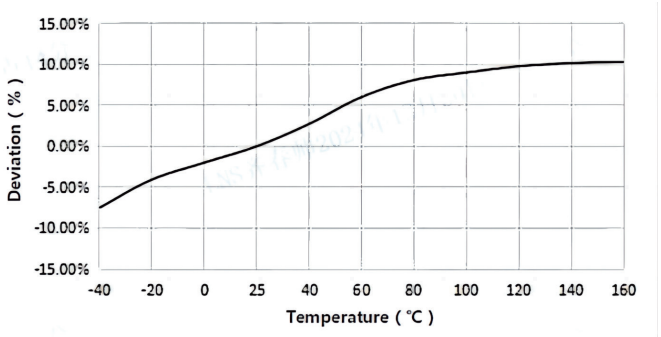


Fig_5 Typical Frequency Response

Specifications-C00XGX

MODEL NUMBER		UNIT	C00CG7	C00CG3	C00CG2	C00CG1	C00AG1
PERFORMANCE							
Sensitivity [1]		pC/g	0.05	0.3	0.5	1	1
		pC/(m/s²)	0.005	0.03	0.05	0.1	0.1
Measurement Range [2]		g	±100000	±80000	±50000	±25000	±25000
Non-Linearity [3]		%	10	per10000g 3%		5	2
Frequency Range	± 5%	Hz	-	-	-	-	-
	±10%	Hz	10-10k(±20%)	5-12k	5-12k	5-12k	5-12k
Resonance Frequency [2]		Hz	≥45k	≥80k	≥60k	≥65k	≥65k
Transverse Sensitivity		%	≤5				
ELECTRICAL							
Capacitance		pF	18	320	300	300	300
Resistance		Ω	$\geq 1\times10^{11}$	$\geq 1\times10^{11}$	$\geq 1\times10^{11}$	$\geq 1\times10^{11}$	$\geq 1\times10^{11}$
Electrical Isolation		Ω	$\geq 1\times10^{8}$	$\geq 1\times10^{8}$	$\geq 1\times10^{8}$	$\geq 1\times10^{8}$	$\geq 1\times10^{8}$
ENVIRONMENTAL							
Sinusoidal Vibration Limit [4]		g rms	-	-	-	-	-
Shock Limit [4]		g pk	130000	90000	70000	35000	35000
Temperature Range		℃	-50~160				
		℉	-58~320				
Temperature Response [2]		-	See typical curve				
PHYSICAL							
Sealing		-	Laser welding IP68				
Sensing Element		-	Piezoelectric ceramics				
Housing Material		-	Titanium alloy	17-4SS			
Size		mm	HEX10×23.5 or HEX11×20.4	HEX11×27.1 or HEX11×20.4			HEX 11×24.9
		in	HEX0.394×0.925 or HEX0.433×0.803	HEX0.433×1.067 or HEX0.433×0.803			HEX 0.433×0.980
Electrical Connector		-	Connected cable Top/Side				M5 Top
Mounting Thread		-	M5/M6×0.75Jointed thread				
Weight [2]		g	5	12	12	12	11.7
		oz	0.176	0.423	0.423	0.423	0.413
Mounting Torque		-	3.0-3.5N·m				
Recommended Accessories	Cable	-	AB				K01AB01
	Mounting Base	-	H01C60				H02B27

Additional Information

Note:

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

C00XGX

Supplied Accessories:

- Product Verification Report

OPTIONALVERSIONS

-A: 10-32 Output Connector
-E: 10-32 Mounting Threads

COMPLIANCE WITH STANDARDS