C00XGX

Universal Testing Type Accelerometer

DETAILS

C00CGX series and C00AG1 charge single axis shock acceleration sensor using a unique shear structure, smaller base strain and lateral sensitivity, high quality piezoelectric ceramics with long term stability ensures years of accurate measurements. Unique double shielded construction, insulated to ground, one-piece screw-in cable output for ruggedness and reliability, customizable output connectors.

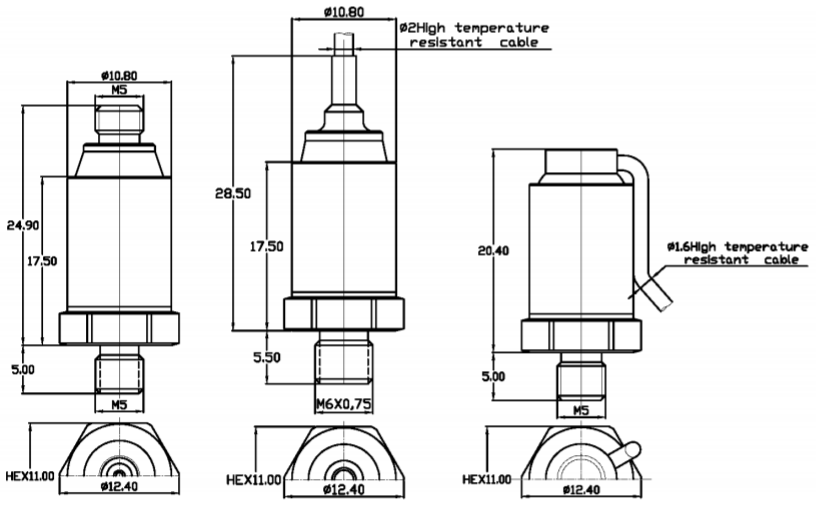
FEATURES

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

TYPICAL APPLICATIONS

- Drop test
- Burst impact test

Fig_1 Dimensions of C00XGX



C00XGX

Fig_2 Typical Temperature Response

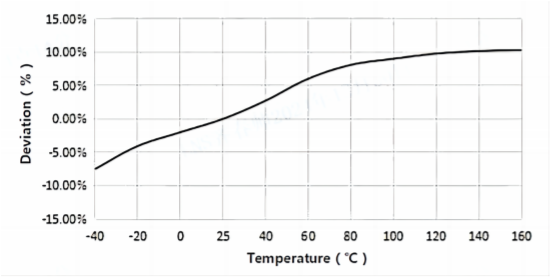
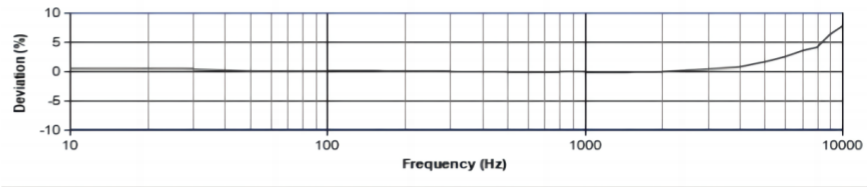


Fig_3 Typical Frequency Response



Specifications-C00XGX

MODEL NUMBER		UNIT	C00CG7	C00CG3	C00CG2	C00AG1	C00CG1
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		g	±100000	±80000	±50000	±25000	±25000
Non-Linearity [3]			per10000g 3%				
Frequency Range	± 5%	Hz	-	-	-	-	-
	±10%		5-15k	5-12k	5-12k	5-12k	5-12k
Resonance Frequency [2]		Hz	≥100k	≥80k	≥60k	≥65k	≥65k
Discharge Time Constant [2]		s	-				
Transverse Sensitivity		%	≤5				
ELECTRICAL							
Capacitance		PF	350	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	-	-	-	-	-
Shock Limit [4]		g	130000	90000	70000	35000	35000
Temperature Range		℃	-50~160				
		℉	-58~320				
Temperature Response [2]		%/℃	0.08	0.05			
PHYSICAL							
Sealing		-	Laser welding IP68				
Sensing Element		-	Piezoelectric ceramics				
Housing Material		-	17-4SS				
Size		mm	HEX11×28.5 or HEX11×20.4	HEX11×28.5 or HEX11×20.4	HEX11×28.5 or HEX11×20.4	HEX11×24.9	HEX11×28.5 or HEX11×20.4
		in	HEX0.433×1.122 or HEX0.433×0.803	HEX0.433×1.122 or HEX0.433×0.803	HEX0.433×1.122 or HEX0.433×0.803	HEX0.433×0.980	HEX0.433×1.122 or HEX0.433×0.803
Electrical Connector		-	Connected cable Top/Side			M5 Top	Connected cable Top/Side
Mounting Thread		-	M5/M6×0.75Jointed thread				
Weight [2]		g	12	12	12	11.7	12
		oz	0.423	0.423	0.423	0.413	0.423

Additional Information

Note:

1. @ 160Hz, 1g
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 working state

C00XGX

Supplied Accessories:

- Product Verification Report
- Install Screws

OPTIONAL VERSIONS

-A: 10-32 Output Connector

-E: 10-32 Mounting Thread

COMPLIANCE WITH STANDARDS

LNS Intelligent Technology Co., Ltd
NO.3 Building
Qilu High-Tech District, Qihe,Dezhou
Shandong Province, China 251100
+86-534-2150417

International:
9620 NE Tanasbourne Dr Ste 300
Hillsboro, OR, USA 97124
+1-503-208-5512
info@lnsdynamics.com