

# Certified accelerometer and charge amplifier system

## 712E/CC712E

### SPECIFICATIONS

	712E	712E/CC712E
Sensitivity, 25°C	8 pC/g, nominal	20 mV/g, ± 10%
Acceleration range	dependent on external amplifier	100 g peak
Amplitude nonlinearity, to 100 g	1%	1%
Frequency response, ± 3 dB	0.5 Hz - 20 kHz	0.5 Hz - 20 kHz
Resonance frequency	>37.5 kHz	>37.5 kHz
Transverse sensitivity	3% of axial, max	3% of axial
Temperature response:		
	-50°C	-10%
	+260°C	+20%
Capacitance, nominal	1,000 pF	-
Resistance, min	1,000 MΩ	-
Power requirement:		
Voltage source	-	18 - 30 VDC
Current regulating diode	-	2 - 10 mA
Electrical noise, equiv. g, broadband	-	0.001 g peak
Output impedance	-	<100 Ω
Bias output voltage	-	12 VDC
Grounding	case isolated, internally shielded	
Temperature range	-50° to +260°C	712E: -50° to +260°C CC712E: -50° to +95°C
Vibration limit	500 g peak	500 g peak
Shock limit	5,000 g peak	5,000 g peak
Sealing	hermetic	
Base strain	0.002 g/μstrain	0.002 g/μstrain
Sensing element design	PZT, shear	
Weight	40 grams (excluding cable)	712E: 40 grams (excluding cable) CC712E: 123 grams
Case material	316L stainless steel	712E: 316L stainless steel CC712E: glass reinforced plastic
Mounting	8-32 captive screw	
Integral cabling	J3, stainless steel overbraid, 10-32 microdot connector	
Cable length <sup>1</sup>	712E/CC712E: 16 ft.	712E/CC712E: 16 ft.

Notes: <sup>1</sup> Available with 13 ft. cable length as model 712E-1/CC712E-1.

### Certifications

ATEX certified when used with CC712E charge amplifier



II 1 G  
Ga Ex ia IIC T2  
(-50°C ≤ Ta ≤ +95°C) Amplifier  
(-50°C ≤ Ta ≤ +260°C) Transducer

Note: Due to continuous process improvement, specifications are subject to change without notice. This document is cleared for public release.

### Key features

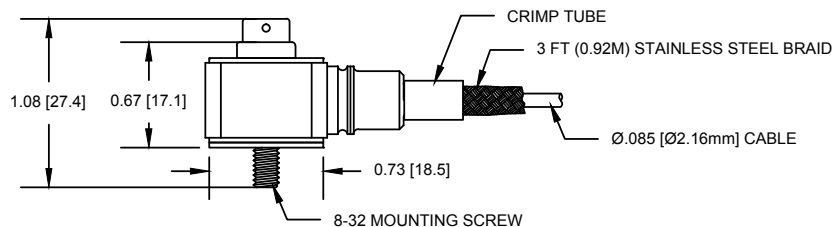
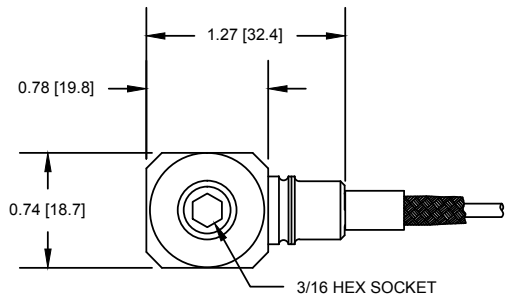
- 260°C operation of sensor
- Charge output
- ATEX certified
- Manufactured in an ISO 9001 facility

See reverse for diagrams and dimensions.

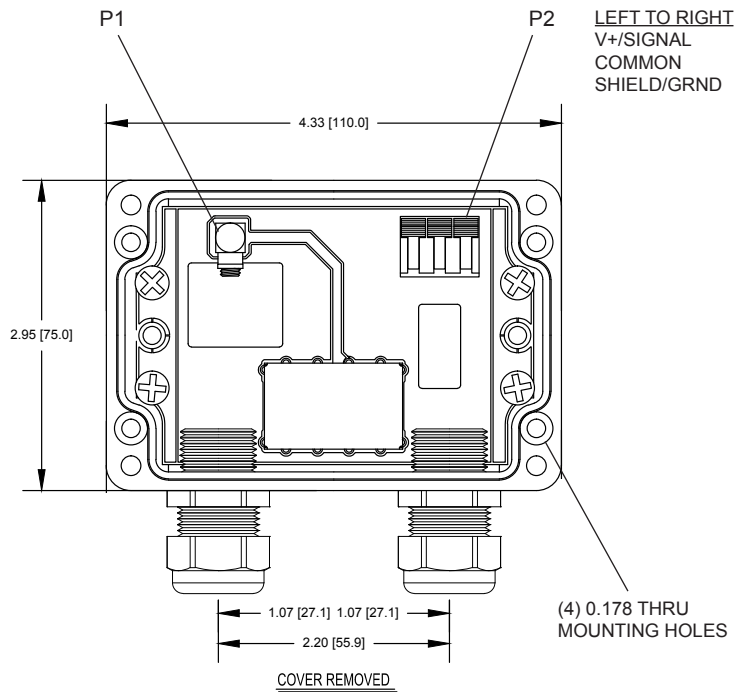
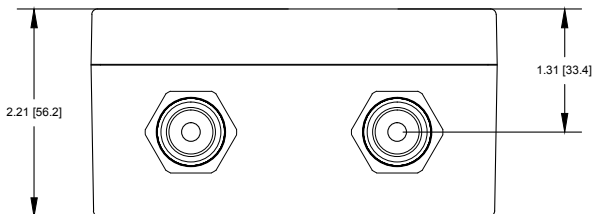
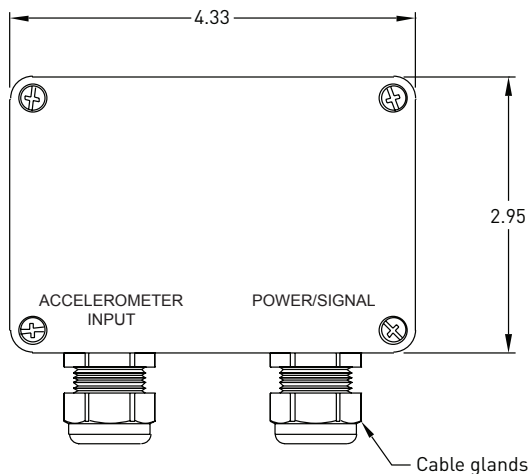
CC712E connections	
Connector pin	Function
P1	712E input
P2	power/signal
left	V+ / signal
center	common
right	shield/ground

712E connections (when used with CC712E)	
Connector pin	10-32 microdot
center pin	signal
outer shell	common

# 712E



# CC712E



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