

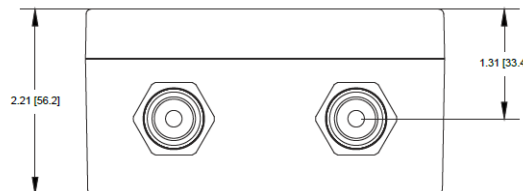
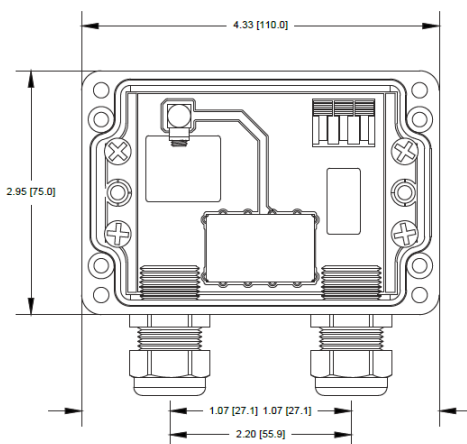
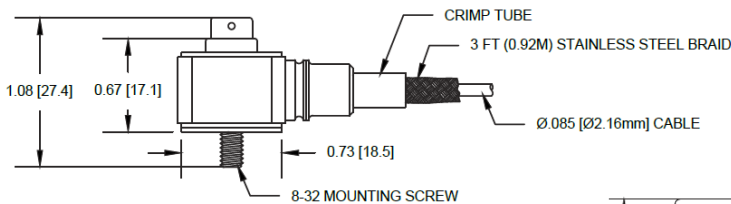
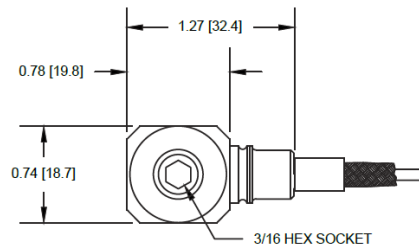
# Certified accelerometer and charge amplifier system

## 712E/CC712E

Wilcoxon's side-exit 712E high temperature sensor includes an integral cable (13 or 16 feet) and is operable to 260° C. When monitoring machinery in extremely high temperature environments, high performing equipment is required to ensure data is accurate. The 712E/CC712E system consists of the 712E accelerometer with integral cable which connects to the CC712E charge amplifier. Using this system allows the temperature-sensitive amplifier (charge converter) to be installed away from the sensor, protecting the electronics from high temperatures. The input of the amplifier connects to the sensor via the integral cable and the output can connect to data analysis equipment.

The 712E high temperature sensor is ATEX certified for usage in explosive atmospheres when used with the CC712E charge amplifier.

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



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

### Key features

- Charge output
- Case isolated
- 260°C operation
- Integral cable with stainless steel overbraid
- Low noise cable minimizes triboelectric noise
- Manufactured in an approved ISO 9001 facility

### Certifications



ATEX certified when used with CC712E charge amplifier II 1G  
Ga Ex ia IIC T2  
Transducer Tamb -50° C to +260° C

For hazardous area locations, sensor must be installed in accordance with installation instructions or local code requirements.

Electrical safety barrier required for hazardous area installations.

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

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An Amphenol Company

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## 712E/CC712E

### SPECIFICATIONS

	712E	712E/CC712E
<b>Sensitivity, 25° C</b>	8 pC/g, nominal	20 mV/g, ± 10%
<b>Acceleration range</b>	dependent on external amplifier	100 g peak
<b>Amplitude nonlinearity, to 100 g</b>	1%	1%
<b>Frequency response, ± 3 dB</b>	0.5 - 20 kHz	0.5 - 20 kHz
<b>Resonance frequency</b>	>37.5 kHz	>37.5 kHz
<b>Transverse sensitivity</b>	3% of axial, max	3% of axial
<b>Temperature response</b>	<b>-50° C</b> -10% <b>+260° C</b> +20%	-10% +20%
<b>Capacitance, nominal</b>	1,000 pF	-
<b>Resistance, min</b>	1,000 MΩ	-
<b>Voltage source</b>	-	18 - 30 VDC
<b>Current regulating diode</b>	-	2 - 10 mA
<b>Electrical noise, equiv g, broadband</b>	-	0.001 g peak
<b>Output impedance</b>	-	< 100 Ω
<b>Bias output voltage</b>	-	12 VDC
<b>Grounding</b>	case isolated, internally shielded	
<b>Temperature range</b>	-50 to +260° C	712E: -50 to +260° C CC712E: -50 to +95° C
<b>Vibration limit</b>	500 g peak	500 g peak
<b>Shock limit</b>	5,000 g peak	5,000 g peak
<b>Sealing</b>	hermetic	
<b>Base strain</b>	0.002 g/μstrain	0.002 g/μstrain
<b>Sensing element design</b>	PZT, shear	
<b>Weight</b>	40 grams, excluding cable	712E: 40 grams, excluding cable CC712E: 123 grams
<b>Case material</b>	316L stainless steel	712E: 316L stainless steel CC712E: glass reinforced plastic
<b>Mounting</b>	8-32 captive screw	
<b>Integral cabling</b>	J3, stainless steel overbraid, 10-32 microdot connector	
<b>Cable length</b>	712E-1/CC712E: 13 ft 712E/CC712E: 16 ft	712E-1/CC712E: 13 ft 712E/CC712E: 16 ft

### Contact

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