

Type 8632C5 ... 8632C50

## 8632C PiezoBEAM® CUBE ACCELEROMETERS

The 8632C accelerometer is ideally suited for modal analysis. The convenient cubic configuration provides flexibility for installation. Three surfaces are suited for adhesive mounting, allowing quick removal. The small, lightweight design reduces mass loading in

multichannel applications. High sensitivity and high thermal rejection are featured in this series. These ground isolated accelerometers are housed in a hard, anodized package for protection against adverse conditions. The PiezoBEAM design produces outstanding

Continued

- Low impedance voltage mode
- High sensitivity
- Small, cubic design
- Ideal for modal analysis
- Excellent thermal stability
- Conforming to CE



Technical Data	Units	8632C5	8632C10	8632C50
<b>Acceleration Range</b>	<i>g</i>	±5	±10	±50
<b>Threshold</b> nom.	$\mu g_{rms}$	120	280	1000
	$\mu V_{rms}$	120	140	100
<b>Sensitivity</b> , ±5% @ 100Hz. 3 $g_{rms}$	mV/g	1000	500	100
<b>Resonant Frequency</b> mounted, nom.	kHz	9	22	22
<b>Frequency Response</b> ± 5%	Hz	1 ... 3000	1 ... 5000	1 ... 6000
<b>Phase Shift</b> , < 5°	Hz	4 ... 2 000	4 ... 2 000	4 ... 4 000
<b>Amplitude Non-linearity</b>	%FSO	±1	±1	±1
<b>Time Constant</b> nom.	s	1	1	1
<b>Transverse Sensitivity</b> max.	%	1	1	1
<b>Environmental:</b>				
<b>Base Strain Sensitivity</b> @ 250 $\mu\epsilon$	<i>g</i> / $\mu\epsilon$	<0.001	<0.001	<0.001
<b>Shock Limit</b> (0.2ms pulse width)	<i>g</i> <sub>pk</sub>	7000	10000	10000
<b>Temperature Coefficient of Sensitivity</b>	%/°F	-0.02	+0.04	+0.04
	%/°C	-0.04	+0.08	+0.08
<b>Temperature Range Operating</b> (4 mA supply current)	°F (°C)		32 ... 150 (0 ... 65)	
<b>Storage</b>	°F (°C)		-10 ... 200 (-23 ... 94)	
<b>Output:</b>				
<b>Bias</b> nom.	VDC	11	11	11
<b>Impedance</b>	$\Omega$	<500	<500	<100
<b>Voltage</b> full scale	V		±5	
<b>Current</b>	mA		2	
<b>Source:</b>				
<b>Voltage</b>	VDC		20 ... 30	
<b>Constant Current</b>	mA		2 ... 20	
<b>Impedance</b> min.	k $\Omega$		100	
<b>Construction:</b>				
<b>Sensing Element</b>	type		ceramic bimorph / bender	
<b>Housing/Base</b>	material		Al / hard anodized	
<b>Sealing</b> - housing/connector	type		Epoxy	
<b>Connector</b>	type		10-32 neg.	
<b>Ground Isolation</b> min.	M $\Omega$		10	
<b>Weight</b>	grams		6	
<b>Mounting</b>	type		adhesive / wax	

1 *g* = 9.80665 m/s<sup>2</sup>, 1 inch = 25.4 mm, 1 gram = 0.03527 oz, 1 lbf-in = 0.1129 Nm

phase response and a wide frequency range. The 8632C is available in three ranges with sensitivities as high as 1000mV/g.

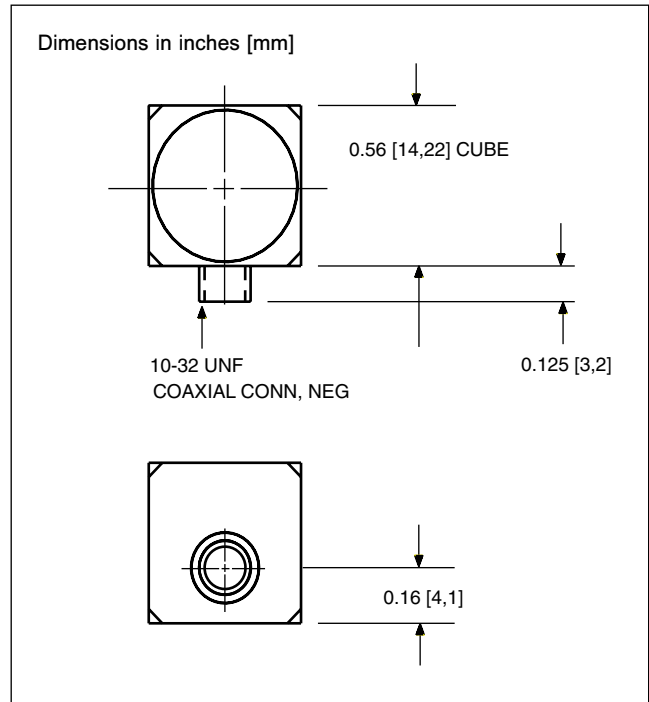
The built-in charge amplifier provides low impedance, voltage output, allowing for high-noise immunity and insensitivity to cable motion. Standard, low-cost cables can be used because of the low impedance output. This PiezoBEAM will operate directly from the ICP compatible internal power source found in most FFT analyzers. A wide selection of Kistler Piezotron® power supply couplers are also available.

**Applications**

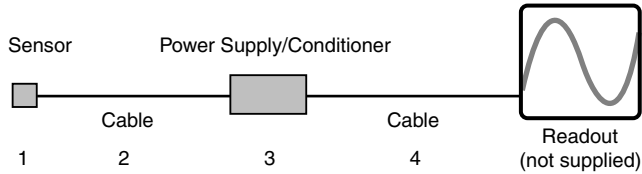
- Multichannel measurements
- Modal analysis measurements on automotive body and aircraft frames
- Structural analysis measurements

**Related Products**

8630C series	accelerometers, adhesive mount
8636C series	accelerometers, 5-40 stud mount
8690C series	accelerometers, triaxial cube
8692C series	accelerometers, triaxial
9720 series	impulse hammers
K-BEAM®	accelerometers for very low frequency measurements



**Ordering Information**



- Specify:
- 1 - 8632C... cube accelerometer, specify range
  - 2 - 1761B... low-cost cable, 10-32 pos. to BNC pos., specify length in meters
  - 3 - 5100 coupler series
  - 4 - 1511... output cable, BNC pos. to BNC pos., specify length in meters

**Supplied Accessory**

8432 mounting wax

**Optional Accessory**

8478 mounting clip, Black Delrin

000-229e-10.02 (DBK8.8632e)