

AIS 8SC2

Piezoresistive Accelerometer Uniaxial, cube form



Features

The Model AIS 8SC2 Accelerometer is a small, compact uniaxial device designed for vehicle impact and road testing. Featuring ranges from $\pm 50g$ to $\pm 2000g$ and high frequency response, this sensor is easily mounted in hard to get places on vehicles under test.

The sensor provides a millivolt output signal and features mechanical overload stops that provide shock protection to loads greater than $10,000g$. The electrical signal changes proportional to introduced vibration.

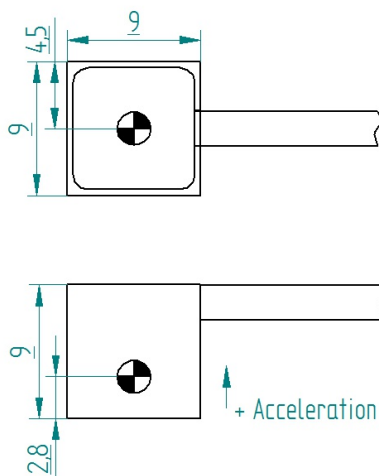
- Advanced MEMS Sensing Element
- Wheatstone Bridge
- Spezifikation SAE J211
- Ranges $\pm 50g$ to $\pm 2000g$
- $\pm 25mV$ Zero Measurement Output typ
- 2-10 VDC Excitation
- Gas Damping
- Mechanical Overload Stops
- Adhesive Mounting
- Low Cost

Applications

- Crash Testing
- Vibration & Shock Monitoring
- Impact Testing
- Road Testing
- Transportation Testing

Service

- Sinusoidal Calibration
- Pendulum Calibration
- Signal Conditioning
- Connector Options
- Repair Options
- ID-Module Options



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Individual Technical Data All values are typical at +24°C and 10.0 VDC excitation

AIS 8SC2				
Range (g)	Sensitivity ¹ (mV/g)	Frequency Response (±5%) (Hz)	Damping Ratio ³	Shock Limit ² (g)
±50	2.0	0 - 800	0.40 - 0.9	10,000
±100	1.0	0 - 1000	0.40 - 0.9	10,000
±200	0.9	0 - 1400	0.20 - 0.6	10,000
±500	0.4	0 - 2000	0.20 - 0.6	10,000
±2000	0.15	0 - 3000	0.05 - 0.3	10,000

- 1) Output is ratiometric to excitation voltage, signal conditioning optional
- 2) 10,000g shock limit in normal axis, 5,000g in transverse axes
- 3) Damping behavior varies with cable, mounting or gluing

General Technical Data

AIS 8SC2 Performance		
Supply Voltage	(VDC)	2 to 10
Ranges	(g)	50 to 2000
Non-Linearity typ.	(%)	±1% FSO
Transverse Sensitivity typ.	(%)	<1
Zero Acceleration Output (differential) typ.	(mV)	±25
Input and Output Resistance	(Ω)	2400 - 6500
Thermal Zero Shift typ.	(%FSO/°C)	-0.09
Thermal Sensitivity Shift typ.	(%/°C)	-0.15
Operating Temperature uncompensated	(°C)	-45 to +90
Storage Temperature	(°C)	-55 to +125
Weight Housing	(g)	2,0
Cable	(g/m)	nom. 6,5, 87 Shore A, Polyurethane
Material Housing		Aluminium, hard anodized

Order Information		
AIS 8SC2-XXX-XXX		
1	2	3
1 Model		
2 Range		
3 Cable length & Pinout		

Cable Code	
	Axis
Supply +	Red
Supply -	Black
Output +	Green
Output -	White

