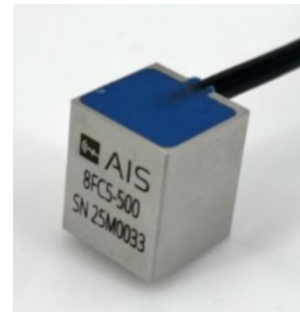


AIS 8FC5

Copyright AIS GmbH | Subject to change Rev. Sep. 2025

Piezoresistive Accelerometer Uniaxial



The Model AIS 8FC5 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.

Features

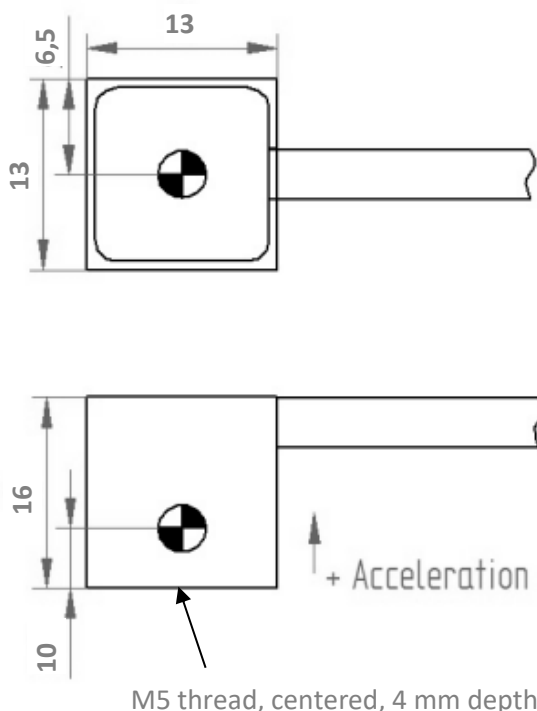
- Advanced MEMS Sensing Element
- Wheatstone Bridge
- Spezifikation SAE J211
- Ranges $\pm 50g$ to $\pm 2000g$
- $\pm 25mV$ Zero Measurement
- Output type
- 2-10 VDC Excitation
- Gas Damping
- Mechanical Overload Stops
- Srew Mounting M5

Application

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

Service

- Sinusoidal Calibration
- Pendulum Calibration
- Signal Conditioning
- Connector Options
- Repair Options
- IDModule Options



Technical Data Sheet



AIS 8FC5

Copyright AIS GmbH | Subject to change Rev. Sep. 2025

Individual Technical Data

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

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

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)	25
Cable	(g/m)	nom. 6,5, 87 Shore A, Polyurethane
Material Housing		Stainless Steel

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

