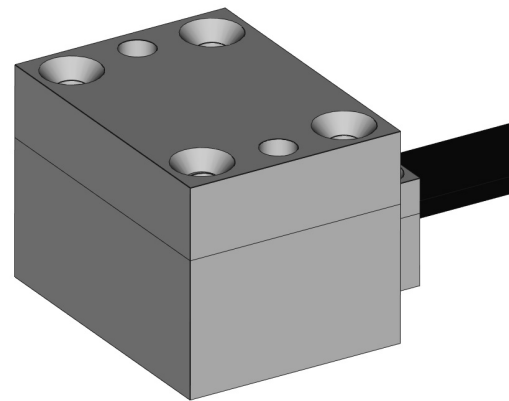


AIS 83C2

Piezoresistive Accelerometer Triaxial, screw mount



Features

The model AIS 83C2 Accelerometer is designed for high performance applications. The accelerometer incorporates a gas-damped piezoresistive MEMS sensing element providing outstanding long-term stability. Ranges from $\pm 50g$ to $\pm 2000g$ with high frequency response, this sensor also meets the specification SAE J211. The model 83C2 provides a millivolt output signal and features mechanical overload stops that provide shock protection to loads greater than 10,000g. Signal amplified versions are optional.

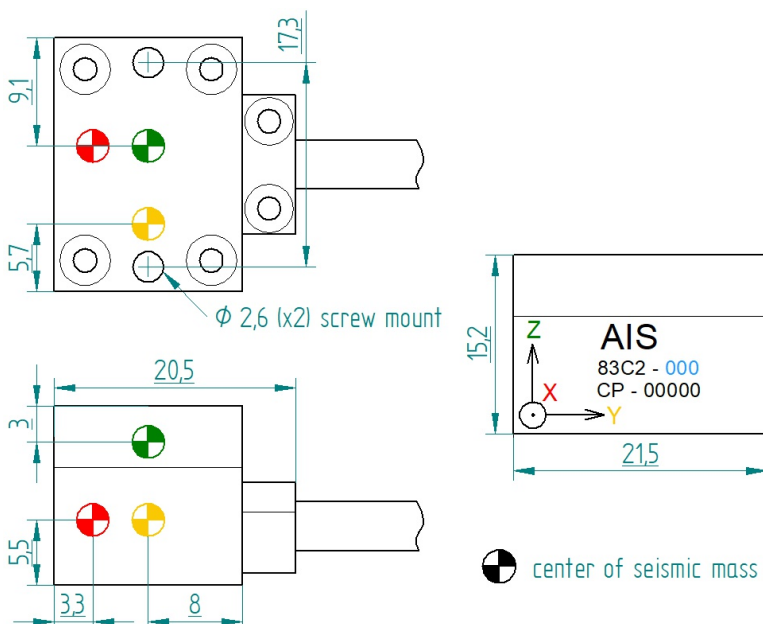
- Piezoresistive MEMS Technology
- Wheatstone Bridge
- Specification SAE J211
- Ranges $\pm 50g$ to $\pm 2000g$
- $\pm 25mV$ Zero Measurement Output typ.
- 2-10 VDC Excitation
- Amplified Output
- Mechanical Overload Stops
- Screw Mount Multiple
- Aluminium Housing

Applications

- Crash Testing
- Vibration & Shock Monitoring
- Impact Testing
- Automotive Comfort Testing
- Truck Testing

Service

- Sinusoidal Calibration
- Pendulum Calibration
- Signal Conditioning
- Connector Options
- Signal Conditioning
- Repair Options
- ID-Module Options, for all axes
- Equipment Exchange (EQX)



AIS 83C2 Piezoresistive Accelerometer / triaxial, screw mount, multiple

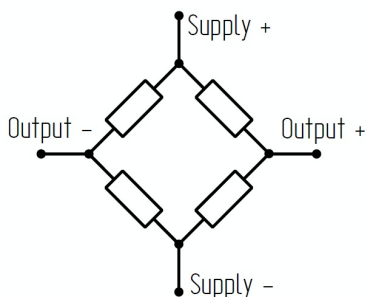
Individual Technical Data All values are typical at +24°C and 10.0 VDC excitation

AIS 83C2				
Range (g)	Sensitivity ¹ (mV/g)	Frequency Response (±5%) (Hz)	Damping Ratio ³	Shock Limit ² (g)
±50	2.0	0 - 600	0.40 - 0.9	10,000
±100	1.0	0 - 800	0.40 - 0.9	10,000
±200	0.9	0 - 1000	0.20 - 0.6	10,000
±500	0.4	0 - 1200	0.20 - 0.6	10,000
±2000	0.15	0 - 2500	0.05 - 0.3	10,000

- 1) Output is ratiometric to excitation voltage, signal conditioning optional
Calibration data incl.: sensitivity at 80 Hz / 5VDC, offset, bridge resistance
- 2) 10,000g shock limit in normal axis, 5,000g in transverse axes
- 3) Damping behavior varies with cable, screw mounting or gluing

General Technical Data

AIS 83C2 Performance		
Supply Voltage	(VDC)	2 to 10
Ranges	(g)	50 to 2000
Non-Linearity typ.	(%)	±1% FSO
Transverse Sensitivity typ.	(%)	<3
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)	-20 to +90
Storage Temperature	(°C)	-55 to +125
Weight Housing	(g)	14
Cable	(g/m)	nom. 30, 88 Shore A, Polyurethane
Material Housing		Aluminium, hard anodized



Order Information			
AIS 83C2-XXX-XXX			
	1	2	3
1 Model			
2 Range			
3 Cable length & Pinout			

Cable Code			
	X-Axis	Y-Axis	Z-Axis
Supply +	Red/O	Red/BL	Red
Supply -	Black/O	Black/BL	Black
Output +	Green/O	Green/BL	Green
Output -	White/O	White/BL	White



subject to change Mai 2016