


R6B0B60A

Angular Velocity and Acceleration Sensor 6-axial

Properties

Sensor of  DTS

Minimized housing dimension (□24 mm!)

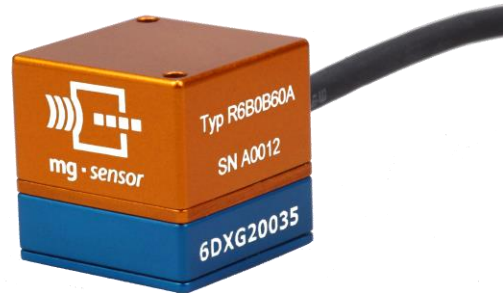
Measuring range ± 8000 °/s, 500 g

Noise reduction

Unipolar supply

Analog and digital version

Sensor and connection cable or housing removable



Application

General test and measurement

Fatigue

Vehicle crash

Measurement principles

Micro-mechanically

Options

Analog version: ID-Module integrated in sensor

Analog connection cable

Digital version: RS485, RS232, RS422, CAN-Bus, Profi-Bus

Benefits

The sensor has the dimensions of only 24x24x8 mm without connection unit. The modular design allows different connection modifications. In the digital version, the sensor can be calibrated analog and thus fulfills all requirements of SAE J211. The total dimensions are 24x24x24 mm (without connection cable and strain relief).

Dimensions

Body: W x H x D: 24 x 24 x 24 mm (without connection cable and strain relief)

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Technical specification angular velocity

	Unit	Value	Comment
Measuring range	°/s	±8000	Standard
Bandwidth	Hz	0–2000	From DC
Sensitivity ¹⁾	mV/(°/s)	0.25	
Output signal ^{1), 2)}	V	±2.0	
Zero signal ¹⁾	mV	±200	
Channel cross talk	%	±5.0	
Amplitude non-linearity ³⁾	%	≤ 1.0	
Current consumption	mA	6.0	Per axis, analog version
Supply voltage	V	4.9–14	Analog version

Technical specification acceleration

	Unit	Value	Comment
Measuring range	g	±500	Standard
Bandwidth	Hz	0–10000	From DC
Sensitivity ¹⁾	mV/V/g	0.02	
Output signal ^{1), 2)}	mV/V	±40	
Zero signal ¹⁾	mV/V	±0.2	
Channel cross talk	%	±3.0	
Amplitude non-linearity ³⁾	%	≤ 1.0	
Current consumption	mA	2.5	Per axis, analog version
Supply voltage	V	2–5 (10)	Analog version

Technical specification general

	Unit	Value	Comment
Insulation resistance	MΩ	> 100	
Temperature range	°C	-40...+70	
Weight (approximate)	g	–	

All values measured at 5 V sensor supply voltage and at 23 °C.

¹⁾ Typical value

²⁾ At nominal load

³⁾ Relative nominal range