

Acceleration sensor



Type BAM53 for predictive maintenance



Acceleration sensor type BAM53

Features

The BAM53 acceleration sensor is a capacitive MEMS sensor that is type-tested in accordance with the railway standard EN 50155. With its compact design and robust stainless steel housing, it is particularly durable and resistant.

The BAM53 can be flexibly adapted to your requirements. Both the dimensions and the electrical connection are variable. Additional cable protection can be integrated as an option for extreme operating conditions.

Technical Data (extract)	
Frequency range	1 ... 20,000 Hz
Output signal	2 outputs for each channel, positive output: 0 ... 5 ... 10 V = - g ... 0 ... + g Negative output: 0 V ... 5 V ... 10 V = + g ... 0 ... - g => symmetrical output signal: $\pm 10 \text{ V} = \pm \text{g}$
Operating temperature	-40 ... +105 °C
Supply voltage	9 ... 32 V DC

Your Benefits

- One sensor for different applications
- Ideal for predictive maintenance (e.g. bogie condition and derailment detection)
- High accuracy due to low noise
- Measurement of up to three axles
- Wide frequency range
- Also available as a multi sensor with speed and/or temperature detection

Application

Thanks to the capacitive MEMS technology, the BAM53 is ideal for measuring low frequencies and impresses with its outstanding temperature stability and repeatability. Even after years of use, it hardly shows any deviations in the measurement results.

The BAM53 is also an ideal solution for retrofit applications. As a multi sensor that monitors acceleration, speed and temperature, it can be easily retrofitted to existing systems.

Technical Data (extract)	
Measurement range	$\pm 50 \text{ g}$ oder $\pm 100 \text{ g}$
Measurement principle	Capacitive MEMS sensor
Degree of protection	Housing: IEC 60529, IP66/IP68 Connections: Type X IP66/IP68