



Always accurate, even when the machine is moving

Dynamic inclination sensors with IO-Link

- Sensor combines 3D acceleration and 3D gyro data for accurate measurements even in applications subject to shock and vibration
- Optimised for simultaneous fast response time with high signal quality
- Lightweight, compact housing simplifies integration into any machine



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Description	Article no.
Dynamic inclination sensor with 2 switching outputs and IO-Link, for horizontal installation position	JBC334
Dynamic inclination sensor with 2 switching outputs and IO-Link, for vertical installation position	JBC234
Dynamic inclination sensor with 2 analogue outputs (4...20 mA) and IO-Link, for horizontal installation position	JBC304
Dynamic inclination sensor with 2 analogue outputs (4...20 mA) and IO-Link, for vertical installation position	JBC204

Machine motion disturbances are filtered out

The JBC dynamic inclination sensor offers an innovative solution for accurate angle measurement, even in the event of disturbances such as a vehicle starting or braking, or vibrations and shocks. The device detects acceleration and rotation in three dimensions, as well as temperature data. By filtering out motion disturbances, the Kalman filter ensures accurate inclination values even in the most dynamic of applications.

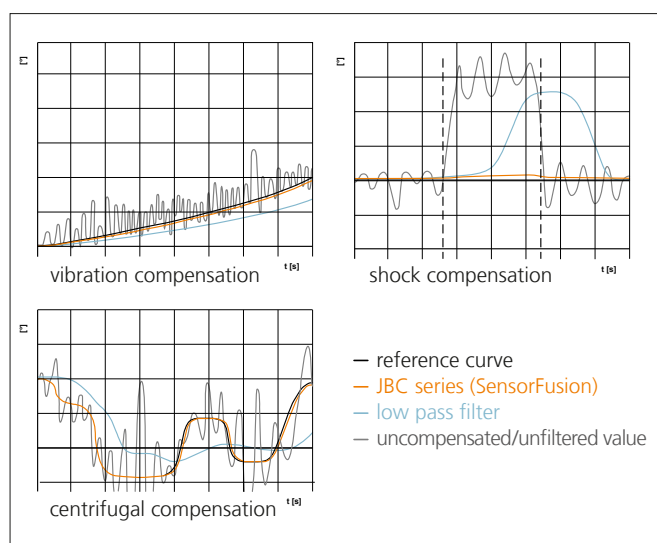
User-friendly parameter setting

The filtered data is output via IO-Link and – depending on the variant – via two switch points or two analogue outputs. In addition, all raw data, including the temperature, can be read out separately. Basic sensor settings are also made via IO-Link. Once installed, the angle value can be easily set to zero using the inductive teach button, without the need for additional software.

Compact design, easy installation

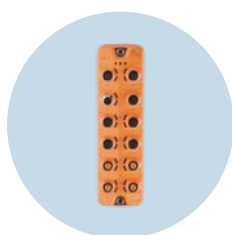
The sensor's lightweight and compact plastic housing allows for easy installation even where space is limited. Despite its small size, the sensor is robust enough to withstand external influences. It attaches with only two screws, simplifying installation and providing a stable, vibration-free mount. A highly visible LED clearly indicates the current status of the sensor.

Technical data		
Internal measurement axes	[acceleration]	3
Internal measurement axes	[rotation rate]	3
Measurement axes	[angle]	2
Angular range	[°]	-90...90, freely adjustable over 360°
Static accuracy	[°]	≤ ± 0.25
Dynamic accuracy	[°]	≤ ± 0.5
Repeatability	[°]	± 0.05
Resolution	[°]	0.01
Weight	[g]	< 20
Protection rating		IP6K5, IP6K7, IP6K8, IP6K9K

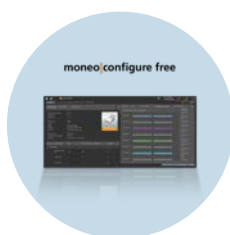


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ifm electronic gmbh · Friedrichstr. 1 · 45128 Essen



IO-Link master
Field-compatible PerformanceLine, up to 2 A per port



moneo|configure free
Software for parameter setting of the IO-Link infrastructure



Bluetooth Mesh system
Wireless connection of sensors to the IT level



For further technical details, please visit:
ifm.com/fs/JBC334