Press release

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**1- and 2-axis inclination sensor for dynamic applications**

**With the inertialSENSOR INC5502D, Micro-Epsilon introduces a new inclination sensor for disturbance-free angle measurements that delivers accurate results even in the event of sudden movements, shocks and vibrations. The sensor is optimized for series applications and offers very high signal stability combined with high dynamics. Very accurate measurements are possible even during motion which is particularly favorable when used in moving machines and vehicles as well as cranes and ships.**

The inertialSENSOR INC5502D inclination sensors are used for precise measurement of angles, orientation of machine parts and position detection of moving components. Mounted on construction, agricultural and forestry machinery, for example, the sensors are exposed to interferences such as centrifugal forces, shocks and vibrations. Thanks to the intelligent sensorFUSION algorithm, the measurement signal remains stable and free of overshoots even during sudden movements, e.g. due to shocks, vibrations, start-up and braking processes. The high signal quality of the sensor and a very short response time enable extremely accurate measurements during motion. In these dynamic applications, the sensors achieve accuracies of up to ± 0.3°.

A robust plastic housing made of impact-resistant polyamide protects the sensor and offers maximum reliability and durability even in harsh environments. Its excellent temperature stability and high resistance to shocks, vibrations as well as moisture and dust (up to IP69K) make the sensor ideal for outdoor use in mobile machinery. The orientation of the sensor can be freely selected during installation, as the axis of rotation can be set as desired. The slim sensor design reduces integration and installation effort to a minimum.

For a quick functional test and to check the measured values, the INC5502D can also be connected to the sensorTOOL software. The sensorTOOL enables adjustment of parameters and to directly display the measured values.

approx. 2,000 characters incl. spaces



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