

Low transverse tilt sensitivity

ASC (Germany) has launched the TSF-360 CANopen sensor. It uses the physical effect that the surface of liquids is always aligned exactly horizontally due to gravity.



The TSF-360 digital tilt sensor provides CAN/CANopen connectivity (Photo: ASC)

By means of a suitable electrode arrangement, the angle between the sensors and the horizontal is measured with a dielectric liquid. The analog measurements are digitized, calculated, and output as angles via the CAN/CANopen interface (250 kbit/s). Therefore the user doesn't need a separate data acquisition system anymore. In contrast to the MEMS-based inclinometers, the TSF-360 low transverse tilt sensitivity due to the liquid-based measuring principle.

Compared to conventional inclinometers, this sensor can be used as a 360° version. The sensor with internal temperature compensation operates with a high accuracy of less than $\pm 0,1^\circ$ over the entire measuring range. The product can be used anywhere on earth because the measured value is independent of the magnitude of the acceleration due to gravity at the measuring point. The aluminum housing complies with protection class IP67.

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