**Miniature strain sensors measure large forces even in confined spaces**

(04.06.2020) The miniature-format strain sensors DST20 complement the Baumer portfolio by adding a compact and cost-efficient solution for measuring large forces above 10,000 N even in confined spaces. With their dimensions of 28x12x10 mm, the DST20 miniature strain sensors offer space savings that are unmatched by any other screw-on strain sensor on the market. At the same time, their stainless steel housing and a certification for the IP 65 degree of protection make them excellently suited for use in rough production environments and for a large range of applications, such as mechanical and equipment engineering as well as process automation. The DST20 strain sensor can be integrated into a machine with minimum engineering effort and offers a lasting solution that can serially replace cold bonded strain gauges in limited installation spaces, based on initial tests in the experimental laboratory.

Similar to other strain sensors in the Baumer portfolio, the compact DST20 sensors are based on the strain gauge technology with a strain gauge and a strain body. The soft geometry on the inside minimizes hardening of the structure to be measured. This makes the miniature strain sensor suitable for static as well as dynamic applications. Thin structures can also be monitored because of the limited reaction forces on the screws.

Ex factory the strain is typically measured with an output signal of around 1.0 mV/V, which frequently eliminates the need for calibration with a separate force sensor. This allows users to benefit from simple and quick commissioning coupled with high measurement accuracy in the micrometer range, which saves valuable time in the case of emergencies.

The sensors come in two measurement ranges: 500 and 1,000 µm/m, for different customer requirements in terms of the expected strains and permitted mechanical tension, depending on the steel quality. This way, a single sensor can be used to cover a large number of applications, allowing users to reduce costs and warehouse space.

With the DST20, Baumer rounds off its strong portfolio for force measurement with force and strain sensors. In addition to robust strain sensors for outdoor and industrial applications, Baumer has thus combined robustness and precision with exceptionally compact dimensions, effectively enhancing the scope of application of strain sensors. Users can now also optimize their process safety and quality in areas where the smallest dimensions matter.

Learn more: [www.baumer.com/strain-sensors](http://www.baumer.com/strain-sensors)

**Baumer Group**

The Baumer Group is an internationally leading manufacturer of sensors, encoders, measuring instruments and automated image-processing components. Baumer combines innovative technology and customer oriented service into intelligent solutions for factory and process automation and offers a uniquely wide range of related products and technologies. The family-owned company has around 2,700 employees with manufacturing facilities, sales offices and agents in 38 offices and 19 countries, always close to the customer. With consistently high quality standards worldwide and a huge potential for innovation, Baumer brings their customers critical advantages and measurable added value across many industries. For more information, visit [www.baumer.com](http://www.baumer.com).

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