**New FS62 weldable optical strain sensor for easy installation on steel**

* Robust and simple-to-install sensors that can measure strain on steel structures straightaway
* Easy installation with portable welding machines
* Also for application on slightly curved surfaces

**HBM FiberSensing has redesigned its compact FS62 optical weldable strain sensor. This compact sensor is designed with a stainless-steel cover sheet which allows it to be spot-welded to steel structures and materials. It is now available in a new version (2.0) suited to be welded with low-power portable welding devices.**

The newly launched version of the FS62 optical weldable strain sensor can be spot-welded more easily and without compromising measurements using a larger number of portable welding machines. By reducing the power needed for the welding process, installation becomes less challenging, i.e., requiring no previous sensor welding experience. With a thinner cross section and reduced rigidity, the FS62 sensor is now more flexible, meaning it can now also be applied on slightly curved surfaces and not only to flat ones.

**Extra resistance and durability**

FS62 optical weldable strain sensors were also redesigned to bear no pre-tension on the Fiber Bragg Gratings (FBG) in order to increase their robustness and fatigue resistance; as the fiber is no longer always under tension, the levels of effort on the fiber are smaller when traction is applied. Their traditional resistance has been kept with the use of armored cables to withstand harsh operating conditions found in field installations.

Moreover, installation without the use of adhesives allows these sensors to endure long-term attachments and ensures an extended service life. The FS62 sensor is recommended for field installation in, for example, pipelines, heavy duty metallic structures (cranes, turbines, generators), wind turbine structures, railways, bridges and all other steel structures that require strain measurements.

**Compatible with most optical interrogators**

The FS62 sensors are compatible with most common optical interrogators and are suitable for remote sensing, making it possible to install them far away from the data acquisition device.

This sensor, in particular, uses 9 μm core fiber and high reflectivity gratings making it suitable for use in cases of very long distances between the interrogator and the sensors network and compatible with standard telecommunication fiber for signal transmission. Compatible with other sensors from the FS line, FS62 optical weldable sensors can also be assembled in array (K-SYS-FSA) using a single optical fiber.

For more information please go to <https://www.hbm.com/en/4599/optical-fiber-sensors-fibersensing/>

*Image: FS62 Optical Weldable Sensor*

**About HBM FiberSensing**

HBM FiberSensing is a European company specialized in the development and production of advanced monitoring systems based on optical Fiber Bragg Grating (FBG) technology. It concentrates all optical business of HBM Test and Measurement and is certified in accordance with ISO 9001:2008 standards.

Founded in Germany in 1950, Hottinger Baldwin Messtechnik (HBM) is today the technology and market leader in the field of test and measurement. The company has production facilities in Germany, USA, Portugal and China and is represented in over 80 countries worldwide.

[www.hbm.com/fs](http://www.hbm.com/fs)