

PRESS RELEASE

Level measurement in any setting LFP Inox and LFP Cubic level sensors

Waldkirch, June 2015 – With its LFP Cubic and LFP Inox level sensors, SICK is offering solutions that are suitable for any application, in any setting – whether it involves continuous level measurement, point level measurement, or a combination of the two. LFP sensors are suitable for any installation situation, for a wide variety of liquids and measuring environments, and for process control, storage, and protection applications.

The LFP Cubic and LFP Inox operate according to the “guided microwave” measurement principle (TDR: time domain reflectometry). This allows the sensors to be put to universal use, regardless of the installation situation, container size, or measurement environment. The procedure ensures maximum reliability and the best possible measurement results: Factors such as pressure, temperature, vacuum, dust and, in particular, foam have no significant impact on them. Both sensors are free from PWIS and can therefore be used in the automotive industry.

The “guided microwave”

The electronics in the sensor create an electromagnetic pulse (reference pulse). This pulse is guided along the probe – a metal rod or a steel cable – via the tank entry (transmitter signal) to the surface of the medium. Part of the pulse is reflected here and runs back along the probe to the electronics. The level is calculated based on the time difference between the transmitted and received signal, taking the individual dielectric constant of the medium into account. Depending on your requirements, the sensor can display the level calculated as an analog value or with several switch signals.

LFP Cubic

The LFP Cubic is a level sensor which can be used in almost every liquid. It is a winning choice for both continuous level measurement and point level measurement thanks to its accuracy, reproducibility and resolution, no matter which medium it is used in. It can be commissioned without the need for medium calibration, and recalibration is no longer required during operation. The LFP Cubic is a flexible, cost-saving solution and is ideal for use in metal containers and tanks within the water industry, in mechanical engineering, in machine tools, in plant construction, and in building technology. It also offers a variety of interchangeable probes, such as rod probes, coaxial tubes, and cable probes – and a compact version without a probe is available.

LFP Inox

The LFP Inox fulfills the strictest hygiene requirements and can be used without restrictions under CIP and SIP conditions. The sensor head is entirely compatible with sterilization procedures. This is thanks to the high temperature and pressure resistance of the sensor as well as the use of FDA-compliant materials coupled with an EHEDG-certified design. Not only that, but the sensor can also communicate

with higher-level control units via IO-Link. The IO-Link technology, display, switchable analog output, and two transistor switching outputs are housed in a compact sensor enclosure which meets the requirements of both the IP67 and IP69K enclosure ratings. Additionally, the LFP Inox has FDA/3A approval. The remote amplifier makes the sensor a space-saving solution for cases where space is at a premium. As the probes can be shortened and the hygienic process connections replaced, the LFP Inox can be integrated easily and flexibly into any application. The sensor is designed for constant media temperatures of up to 180 °C and process pressures of up to 16 bar – making it ideally suited to use in demanding hygiene processes.

Image: LFP_IM0057468.jpg

LFP Inox and LFP Cubic – Reliable and flexible level measurement in any setting

SICK is one of the world's leading manufacturers of sensors and sensor solutions for industrial applications. Founded in 1946 by Dr.-Ing. e. h. Erwin Sick, the company is headquartered in the German town of Waldkirch, in the Breisgau region near the city of Freiburg. It is a technology and market leader, maintaining a global presence with more than 50 subsidiaries and equity investments as well as numerous representative offices. In the 2014 fiscal year, SICK had around 7,000 employees worldwide and generated Group revenues of €1,099.8 million.