

Greater product reliability thanks to the first self-calibrating thermometer

With the iTHERM TrustSens TM371, Endress+Hauser is presenting truly unique sensor technology with a fully automated inline self-calibration function for hygienic and aseptic applications.

100% compliance – 0% effort

The new iTHERM TrustSens enables seamless inline monitoring, resulting in high product reliability and increased plant capacity utilization. The hygienic thermometer is designed primarily for users in the pharmaceutical and food and beverage industries who require absolute compliance with FDA or GMP regulations. The result? Less effort and reduced costs.

At the heart of the temperature probe is a highly developed sensor unit consisting of a primary Pt100 temperature sensor and a highly accurate integrated reference. The reference sensor uses a physical fixed point on the basis of the Curie temperature and therefore serves to regularly calibrate the primary sensor. This ensures that the constantly high measuring accuracy of the temperature sensor is permanently monitored throughout its entire service life.

Heartbeat Technology in temperature measurement technology

The integrated smart electronics contain varied diagnostics functions, which are categorized in line with the NE107 NAMUR recommendation and transmitted via HART® communication. Furthermore, status signals are displayed locally by means of the LED integrated in the device. In addition to the automated calibration, and therefore verification of the thermometer's measuring accuracy, data from the last 350 calibrations is stored directly in the device. This makes it possible to access a long device and process history, which can be used as a basis for predictions and the early determination of trends.

These functions, known as "Heartbeat Technology", guarantee continuous, fully autonomous device self-diagnostics. The iTHERM TrustSens is therefore well equipped for Industry 4.0.

Checked, tested, confirmed

The iTHERM TrustSens TM37x is supplied ex-works with a calibration certificate for the fixed-point reference integrated in the sensor, which ensures the traceability of the calibration chain. Years of extensive load tests over many thousands of cycles, both in the lab and in the field, have confirmed that the solution is well developed.

The device also has the following international approvals and certificates: Hygienic guidelines in accordance with EHEDG, ASME BPE, FDA, 3-A, 1935/2004, 2023/2006, 10/2011, CE, CRN, TSE free

from animal fat, CSA General Purpose.

For further information on the iTHERM TrustSens TM371, visit www.endress.com/trustsens

Image 1



Continuous inline self-calibration eliminates the risk of non-conformity: iTerm TrustSens for the food industry.

The Endress+Hauser Group

Endress+Hauser is a leading international supplier of measuring devices, services and solutions for industrial process engineering. The Group employs 13,000 people worldwide. In 2016, it generated turnover of more than EUR 2.1 billion.

Structure

Professional support is guaranteed worldwide through its own Sales Centers and a network of partners. With Product Centers in 12 countries, Endress+Hauser is fast and flexible in meeting the needs of its customers. A holding company in Reinach/Switzerland coordinates the Group. A successful family-run business, Endress+Hauser is an independent and unaffiliated company, and intends to remain so in the future.

Products

Endress+Hauser supplies sensors, devices, systems and services for measuring fill level, flow, pressure and temperature, as well as performing analyses and recording readings. The company supports its customers with services and solutions in automation engineering, logistics and information technology. Its products set standards in terms of quality and technology.

Industries

Its customers come primarily from the chemical/petrochemical, food, oil and gas, water/wastewater, power and energy, life science, primaries and metal, renewable energies, pulp and paper and shipbuilding industries. With support from Endress+Hauser, they are able to implement reliable, safe, efficient and environmentally friendly processes.

History

Endress+Hauser was founded in 1953 by Georg H. Endress and Ludwig Hauser. The Group has been solely owned by the Endress family since 1975. The company has evolved consistently, from a level measurement specialist to a complete solutions provider for industrial measurement technology and automation with constant expansion into new territories and markets.

For further information, please visit www.endress.com/media-center or www.endress.com.

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