



500

400

Fill level switch

Multi-dimensional capacitive sensor system
for fill level measurement

capaTEC⁺

EBE

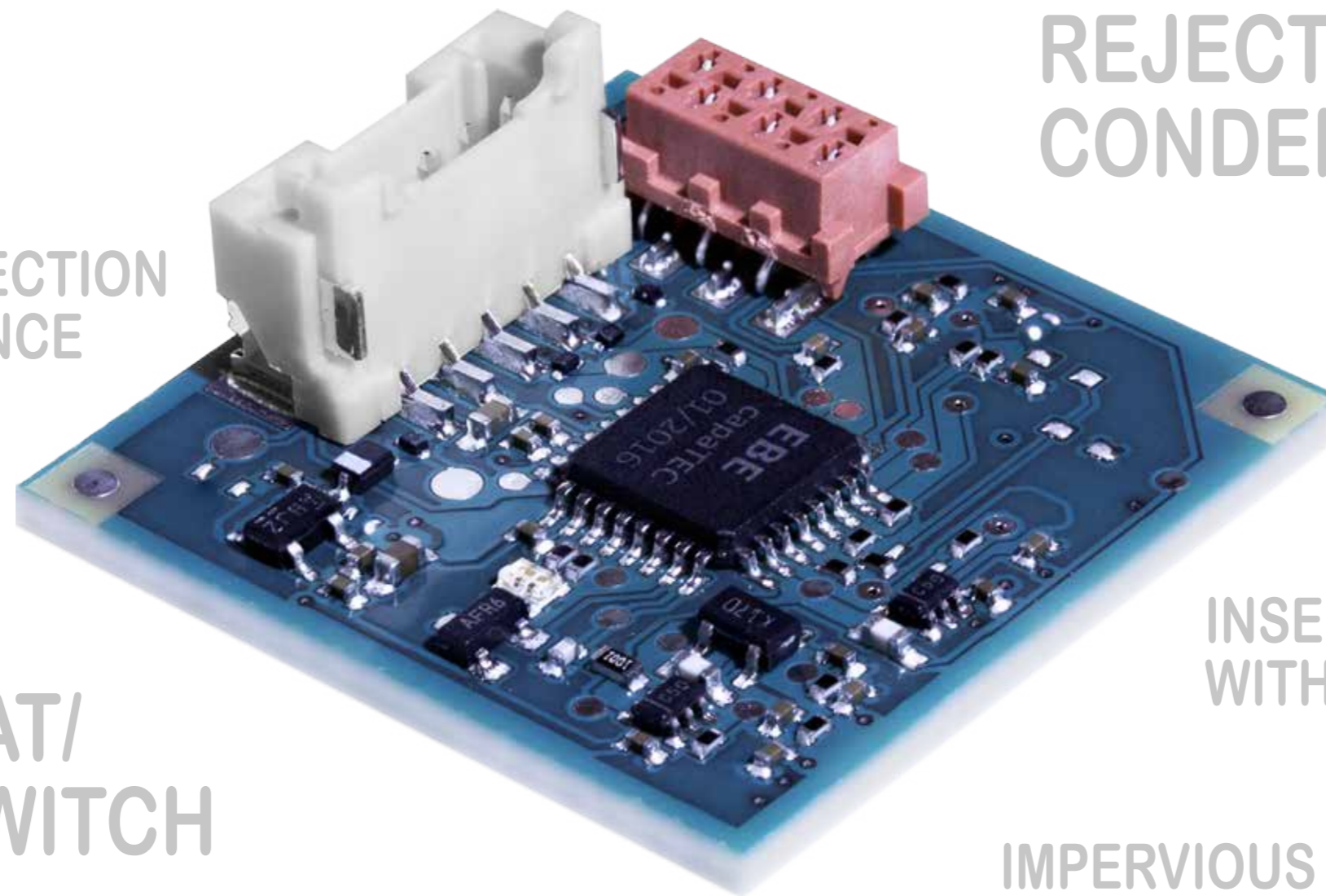
sensors and motion

MEASUREMENT
THROUGH THE
CONTAINER WALL

RELIABLE PRESENCE
DETECTION OF EMPTY
CONTAINERS

REJECTION OF DROPS/
CONDENSATE

BIO-FILM DETECTION
AND RESISTANCE



NO FLOAT/
REED SWITCH

INSENSITIVE TO CONTACT
WITH THE CONTAINER

IMPERVIOUS TO TEMPERATURE
AND MOISTURE INFLUENCES

Multi-dimensional sensor system for fill level measurement

MEASUREMENT THROUGH THE CONTAINER WALL

The fill level switch detects the surface of the liquid without contact, through the container wall and the machine housing. Any air gaps between these components have no influence on the measurement results.



IMPERVIOUS TO TEMPERATURE AND MOISTURE INFLUENCES

The basic measurement principle is independent of temperature and humidity. These often lead to malfunctions with conventional capacitive sensors.



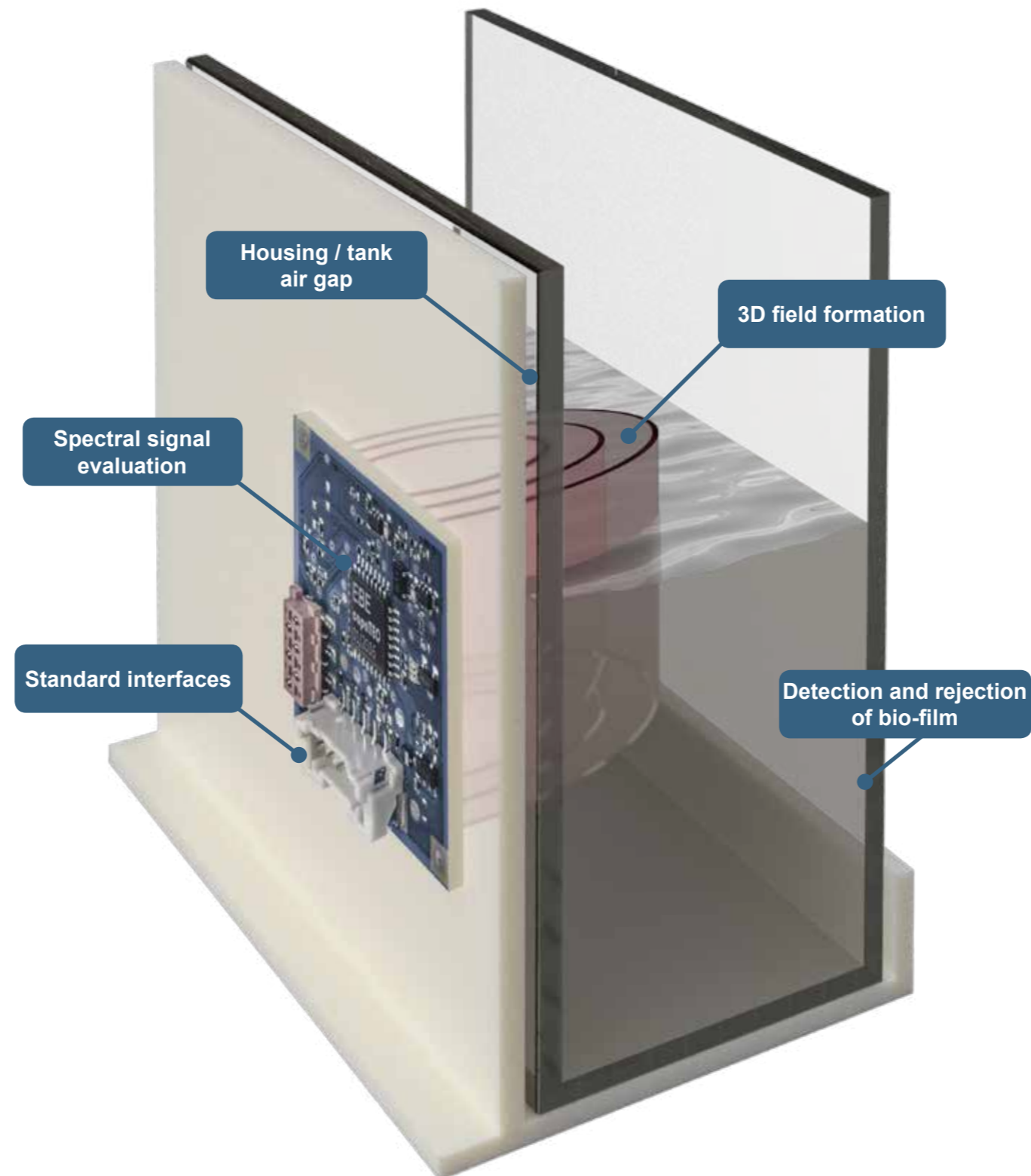
REJECTION OF DROPS/CONDENSATE

The special assessment algorithms of the EBE fill level switch enable differentiation between a solid liquid column and drops or condensate adhering to the container. Even drops on the interior of the container will not lead to an erroneous measurement.



BIO-FILM DETECTION

If a container has become contaminated with bio-film due to inadequate cleaning, the effects of this will be rejected through the innovative algorithms and will not lead to erroneous measurement results. The presence of bio-film can be reported back to the device controller.



NO FLOAT

The capacitive measurement principle uses no moving parts and in particular avoids having to use problematic floats. As a result the tank can be designed in a more visually attractive manner without any disruptive float shafts. Malfunctions due to floats that have become jammed as a result of chalk deposits can therefore be completely eliminated.



PRESENCE DETECTION - EMPTY CONTAINER




The new type of 3D measurement principle enables reliable detection and signalling of the empty container without additional elements.



INSENSITIVE TO CONTACT WITH THE CONTAINER

The fill level switch does not react to hands touching the container. This often led to a malfunction with conventional capacitive sensors.



-  4-channel capacitive measurement process
-  Spectroscopic signal evaluation
-  3D field formation

Our fill level sensor portfolio

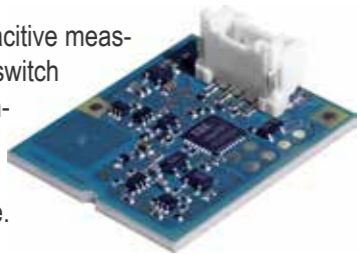
Various measurement processes are used for the different requirements for fill level measurement. They record and monitor the level continuously or by means of limit values, depending on the application - and also depending on the medium and container. Our sensors are employed in the fields of white goods, automotive, medical equipment, foodstuffs industry, beverages industry and in the chemicals industry.

FILL LEVEL SWITCHES

Contactless, capacitive measurement fill level switch with capacitive container detection and rejection of drops/condensate as well as bio-film.



Contactless, capacitive measurement fill level switch with inductive container detection and rejection of drops/condensate.

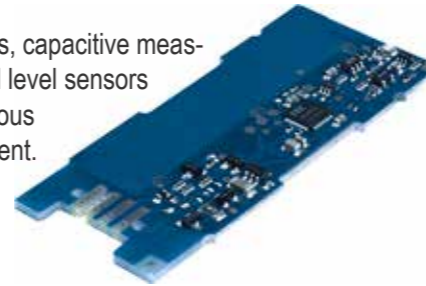


Contactless, capacitive measurement fill level switch in hot-melt housing with sealed, kink-protected connection cable.



FILL LEVEL SENSORS

Contactless, capacitive measurement fill level sensors for continuous measurement.



Capacitive measurement fill level sensor for conductive and non-conductive media. With non-conductive media, the electrodes are arranged coaxially. With conductive media a single insulated electrode suffices.



Inductive measurement fill level switch with float. Contactless and wear-free measurement. Suitable for conductive and non-conductive media.



Other fill level measurement technologies from EBE:

- Time-of-Flight sensors
- Radar sensors

Development

We want to know and understand your desires and expectations precisely in order to present you with an optimised solution. With their enthusiasm for technology and constant endeavours to optimise our technologies, our development engineers will convert your individual requirements into impressive technical solutions for your application. In doing so, we use our innovative underlying technologies with supplementary modules. You receive an innovative product with its unique selling point, which strengthens your competitive position. We are already thinking about the solutions for tomorrow and often suggest completely new approaches as early as in the planning stage so that ideas can evolve into innovative products. We use SCRUM-based project management to develop your application with a high level of efficiency.

Quality

The latest statistical methods for process monitoring during the manufacturing of our fill level switches ensure consistently high quality in your application.

For this reason, high quality in the cycle from new development or problem solving through to production and sales, in accordance with DIN ISO 9001 is more than just a procedure, it is an inherent part of our company philosophy – and is certificated! Our site in Friedrichshafen is also certified in accordance with the medical equipment standard DIN EN ISO 13485 as well as the standard for the automotive industry - ISO TS 16949. This guarantees high product and service quality.

Serial production

From rapid prototype production through to serial production of high quantities, we produce your sensors in accordance with the highest quality standards.



INNOVATIVE COMPETENT CUSTOMER-ORIENTED

Your requirements - our application-specific sensor systems!

Sensors play an increasingly important role in making applications simpler and more convenient. They are critical components for the quality and reliability of your products and solutions.

Our high quality fill level switches, based on the most innovative technologies, are specially adapted to your application and are designed specifically for use in price-sensitive markets. We can offer you a tailor-made sensor solution for your product.

Technology is moving quickly. Our qualified and motivated staff are always right at the forefront. Our know-how should be your competitive advantage!

We stand for

- Innovative Technologies
- Highest Quality
- Customer Focus
- Consistency and Reliability
- Experience, Foresight and Commitment to Success

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