Ultrasonic full-metal sensor

Robust for harsh environments

Product description

Ultrasonic full-metal sensor

Hard shell, same core

Making the tried and tested even better? Our full-metal ultrasonic sensors prove that this is indeed possible. This means they are perfectly suited for environments in which aggressive vapours from paints, oils or other chemicals have made life difficult for the sensors used so far.

High-grade stainless steel from the sensing head to the plug. This sums up how resilient the full-metal sensor is. Only the ultrasonic waves come in and out.

Now let's get to the tried-and-tested core under the hard shell: In its usual high quality, the ultrasonic sensor detects objects where other sensors reach their limits; even transparent objects are no challenge for the smart all-rounder – and this within a range of up to 2.5 metres.

So why should you resist such an offer any longer? Get your dream sensor in stainless steel at **ifm.com/gb/ultrasonic-full-metal**

Product advantages

Why ultrasonic full-metal sensors?

High resistance

Resistant to external influences thanks to IP 69K and high-grade stainless steel housing. Fit and forget.

By far the best

Non-contact detection of even challenging objects within a range of up to **2.5 metres**.

Process permanently in view

Continuous distance measurement for maximum transparency and faster ability to act if necessary.

Universal use

Reliable versatility: Can be used for level measurement and object detection.

Application overview

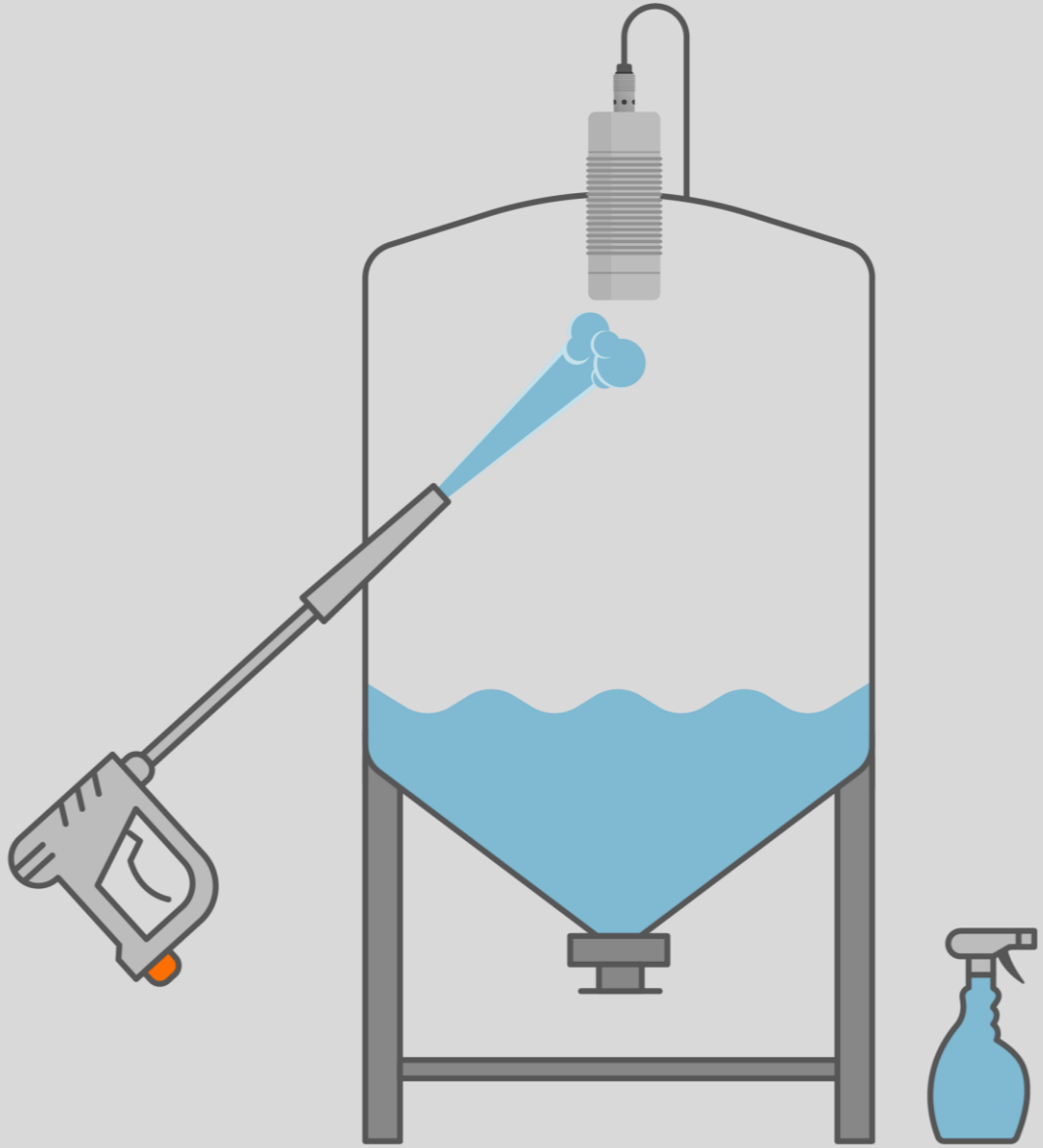
Level detection

Cleaning challenges in food applications

- Damage due to high pressure and steam cleaning
- Cleaning agents can dissolve seals on the sensor
- The connector area is a weak point

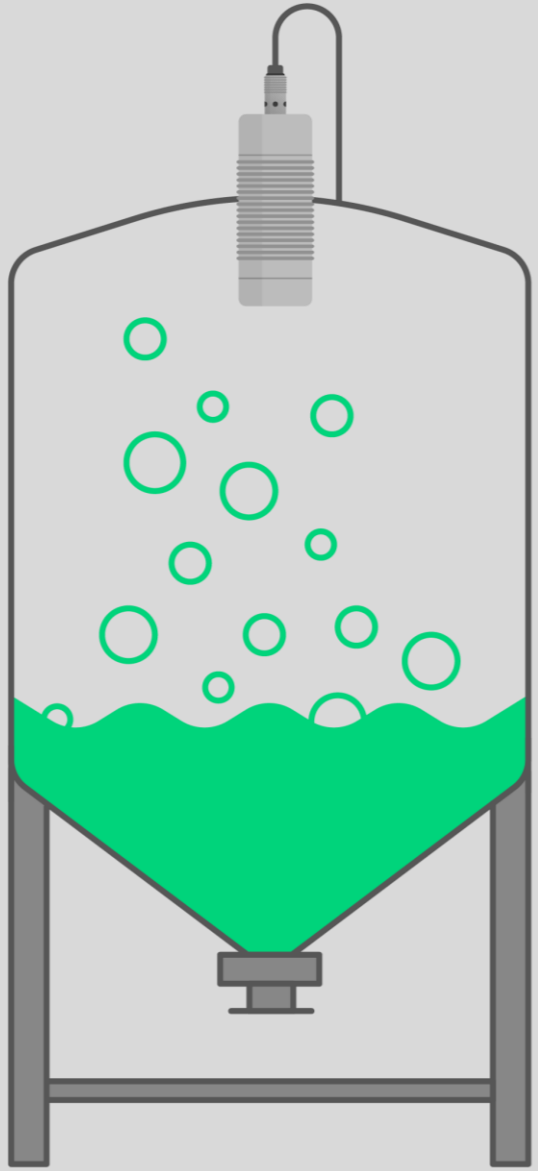
Advantages with ultrasonic full-metal sensors

- Full-length high-grade stainless steel housing in IP 69K reliably protects against high-pressure and steam cleaning
- Sensor head made of durable stainless steel is resistant to aggressive cleaning agents
- Stainless steel plug resists any external influence



Application overview

Level detection



Challenges with chemicals, oils and gases

- Damage due to weak points on the sensor e.g. pushbuttons
- Swelling of the plastic seal due to the influence of oils – Chemicals can penetrate the unit and damage the electronics
- Plug can be damaged by e.g. disinfectants

Advantages with ultrasonic full-metal sensors

- The adjustability via IO-Link allows us to do without the “weak point pushbutton“
- Stainless steel encased sensor head protects the unit against the ingress of chemicals, other liquids or vapours
- Stainless steel plug resists any external influence

Application overview

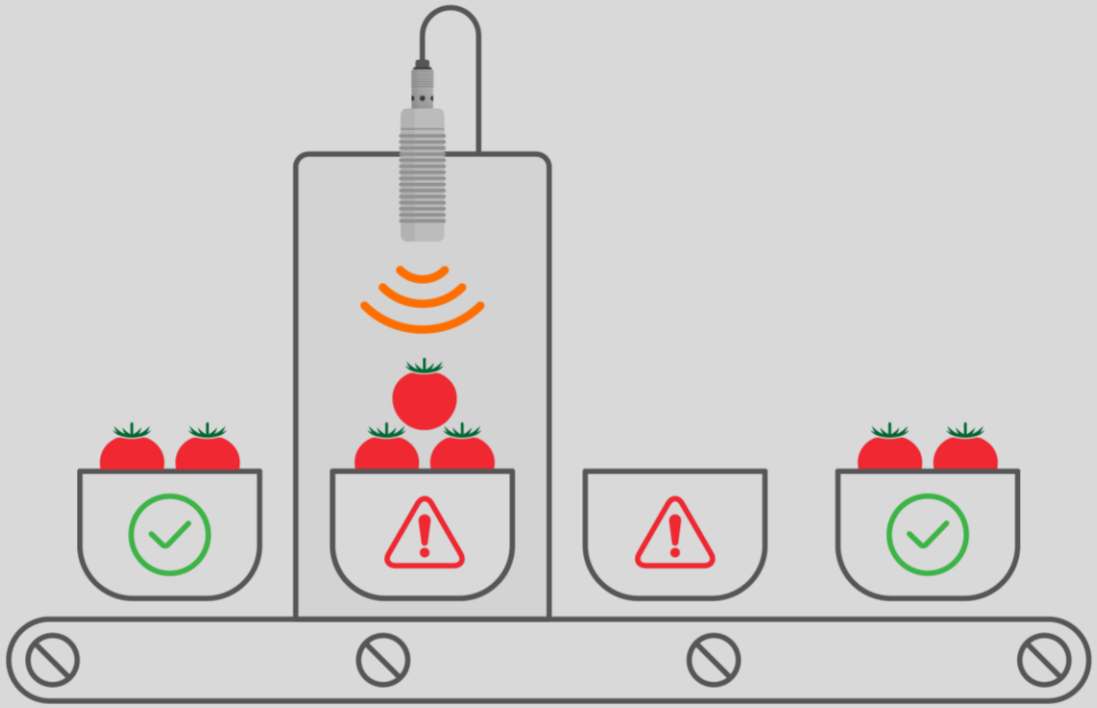
Object detection on conveyor belts

Challenges with chemicals, oils and gases

- Unreliable results due to too small detection zone or challenging object properties (structure, colour)
- Impaired functioning due to high air humidity after cleaning processes
- Unhygienic deposits on the sensor due to rough surfaces
- Damage in and on the sensor due to the effects of oils or chemicals

Advantages with ultrasonic full-metal sensors

- Large detection zone enables reliable detection of objects
- Full-length high-grade stainless steel housing in IP 69K reliably protects against:
  - air humidity, high pressure and steam cleaning
  - Ingress of chemicals or other liquids
- No deposits due to smooth stainless steel membrane



Good to know

The 4 big advantages of ultrasonic sensors

Colour independent

Reliable detection of coloured and even transparent objects.

Independent of material

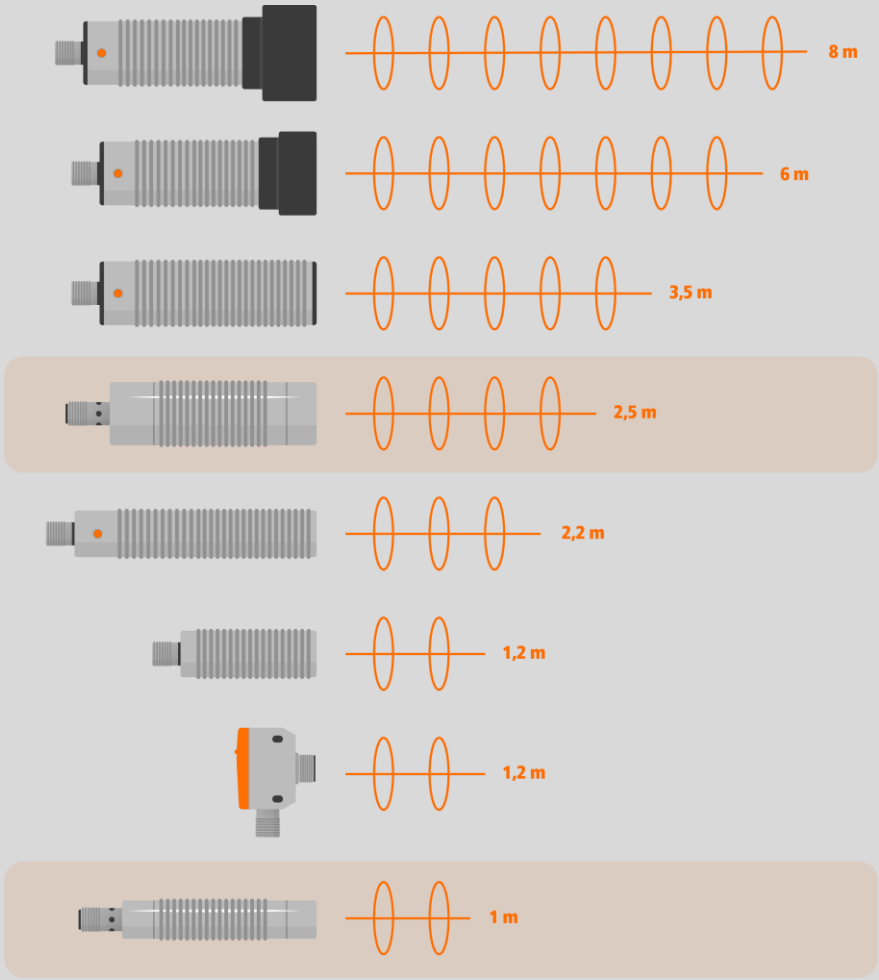
Reliable detection, whether solid or liquid, shiny or matt.

Wide detection zone

Enables reliable detection of even irregular objects such as mesh boxes.

Detection to the nearest millimeter

Continuous and precise output of the distance value.



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