



Sensors



Switches



Controls

Application notes



Application Note: February 2023

Industry: Conveyors, Food & beverage

Product: ICF inductive sensors

Customer: OEMs

Subject: Position monitoring for food & beverage conveyor lines

CUSTOMER ISSUE :

The food industry requires a high level of hygiene and cleanliness of equipment that has to withstand daily wash-downs at high temperatures, high-pressure cleaning, and harsh detergents.

An inductive sensor is generally used to detect the position of the object on very long conveyor lines.

The harsh environmental conditions could cause water/moisture penetration into the sensor and the consequent failure of the application, stopping the production line.

When this occurs, the customer has to spend a lot of time locating the sensor and fixing the issue by replacing the component with a consequent reduction of uptime and efficiency.

OUR SOLUTION :

The ICF inductive sensors grant the highest uptime level and safe operation, thanks to the extended temperature range of -40 to +85°C, and resistance to frequent washing cycles thanks to IP68 and IP69K protection degrees.

Furthermore, the ICF sensors can withstand a short exposure (15') at 100°C during the cleaning processes.

The Ecolab certification guarantees resistance to industrial cleaning agents, such as alkaline or chlorine foam and acid foam disinfectants.

Via IO-Link it is also possible to activate the "find my sensor" mode and make the sensor visible thanks to blinking LEDs.

BENEFITS :

- Reliable detection between -40 to +85°C, thanks to the advanced micro-processor-based electronics
- Full metal housing in robust stainless steel AISI 304
- Further mechanical protection of the sensor due to the longer sensing distance and flush installation option
- Easy to install, as a result of the long thread length and the possibility to choose between 2 m PUR cable or M12 disconnected plug versions
- Fully configurable via IO-Link v1.1 to adapt the sensor to the application