CARLO GAVAZZI
Automation Components

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Press Release

ICF SERIES: FULL METAL INDUCTIVE SENSORS WITH IO-LINK COMMUNICATION

Reliable detection and prevention of potential failures and false actuations
thanks to condition monitoring implementation via IO-Link.

Lainate, February 2023 - Carlo Gavazzi Automation, the international electronics group with activities in the design, manufacture and marketing of electronic equipment, today presents its new ICF series of inductive sensors in full metal housing with integrated IO-Link communication.

The ICF inductive sensor family is a robust solution for daily indoor and outdoor operations to ensure accurate and reliable detection of actuating parts – even in harsh conditions - such as skid conveyor positioning on conveyor lines in food and beverage applications, monitoring the bucket position in agricultural machinery and counting revolutions of the axle in CNC machinery.

The ICF sensors offer a specific cyclic process to monitor the quality of detection, allowing timely and predictable scheduling of maintenance to prevent machine downtime. These sensors are resistant to extreme operating conditions such as exposure to wide temperature variations, frequent high pressure, and high-temperature wash-down cycles.

"The one-piece stainless-steel housing allows the front face of the sensors to resist up to 260 bar pressure for M12, 200 bar for M18 and 100 bar for M30; that makes the ICF sensors particularly suitable in applications where high mechanical resistance to impact and resistance to aggressive cleaning processes with chemical agents are required", Davide Boschetti, International Product Specialist, says. "With this launch we aim to consolidate and increase our presence in the industry of food and beverage, agriculture and manufacturing machinery, providing sensors that guarantee accuracy in detection and continuity of operation even in harsh conditions".

Developed in our competence centre in Denmark, the ICF series has been specifically designed to resist shocks, vibrations and impacts, high and low temperatures and frequent washdown cycles. These sensors are mainly addressed to OEMs manufacturers of conveyor systems, agricultural machines, industrial doors, and metal works in general.

Main technical features

- **Condition monitoring** for real time evaluation of critical changes of the switching state of the switching output, activation level, low margin and proximity alarms, and temperature monitoring
- **Pressure resistance** on the sensing face up to 260 bar for M12, 200 bar for M18 and 100 bar for M30, thanks to one-piece stainless-steel housing
- **Extreme mechanical performance:** 25 g vibration resistance, 100 g shock resistance and 40 g continuous shock resistance; IK10 mechanical shock resistance (EN 50102), 1 J impact resistance (EN 60068-2-75)
- **cULus and ECOLAB** approved, IO-Link communication V1.1
- **Extended operating temperature** range from -40 to +85°C. Resistant to short exposure (15') at 100°C for the cleaning process
- **IP68 and IP69K protection** for a certified full protection of the sensor against high pressure and high temperature washing cycles
- **High switching distances** from 4 to 22 mm for safe installation
- **Available in M12, M18 and M30** robust stainless-steel housings with 2 m PUR cable or M12-plug, flush or non-flush mountable

ABOUT CARLO GAVAZZI AUTOMATION

Carlo Gavazzi Automation is an international electronics group with activities in the design, manufacture and marketing of electronic equipment targeted at the global markets of industrial and building automation.
Carlo Gavazzi Automation provides customers with technologically innovative, high quality and competitive solutions, in compliance with their requirements and expectations through its 22 National Sales Companies in Europe, the Americas and Asia & Pacific, operating with its production sites in Denmark, Italy, Malta, Lithuania and China.

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