CA30CAxxBPxIO - IO-Link

Capacitive Proximity Sensors with IO-Link communication

Description

The new generation of CA30CA…IO sensors are a complete family of high performance capacitive sensors for detection of most solid or liquid targets in industrial applications such as Plastic & Rubber, Agriculture, Food & Beverage and Material handling. The 4th Generation of TRIPLESHIELD™ technology providing increased immunity to electromagnetic interference (EMI), especially to frequency drives, and improve the immunity to humidity and dust.
The sensor housing has the IP69K rating as well as approval by ECOLAB for cleaning- and disinfection agents.
On-board IO-Link communication opens up a variety of functions, such as easy communication and customization of advanced parameter settings.

Benefits

- **A complete family.** Availability in M30 in a robust PBT housing with an operation of 2 - 20 mm flush or 4 - 30 mm non-flush.
- **Verbesserte EMV performance:** 4th Generation TRIPLESHIELD™
- **Easy customization to specific OEM requests:** different cable lengths and materials, special labeling, customized pig-tail solutions with special cables and connectors are possible on request.
- **The output** can be operated either as a switching output or in IO-Link mode.
- **Fully configurable via output IO-Link v 1.1.** Electrical outputs can be configured as PNP / NPN / Push-Pull / External input, normally open or normally closed.
- **Timer functions** can be set, such as ON-delay, Off-delay, and one shuts.
- **Logging functions:** Temperatures, detecting counter, power cycles and operating hours.
- **Detection modes** Single point, Two point and window mode.
- **Analogue output:** In IO-Link mode the sensor will generate 16 bit analogue process data output representing the dielectric value measured by the sensor.
- IO-Link

Applications

- Detection not only the level of plastic pellets in plastic molding machines but also the dielectric value of the pellets to avoid false manufacturing.
- Detection of not only the wood pellets in pellets burners but also the density of the wood pellets.

Main functions

- The sensor can be operated in IO-Link mode once connected to an IO-Link master or in standard I/O mode.
- Adjustable parameters via IO-Link interface:
  - Sensing distance and hysteresis.
  - Sensing modes: single point or two point or window mode.
  - Timer functions like: On-delay, Off delay, One shot leading edge or trailing edge.
  - Logic functions such as: AND, OR, X-OR and SR-FF.
  - External input.
  - Logging functions: Maximum temperatures, minimum temperatures, operating hours, operating cycles, power cycles, minutes above maximum temperature, minutes below minimum temperature, etc.