ICS08 IO-Link 3-wire DC

Miniaturized proximity inductive sensors with IO-Link communication

Description

ICS08 series represents the optimal solution for industrial automation equipment in applications where space is limited, but long switching distance is needed, including tool-selection and textile machines. The advanced electronics is encapsulated in a robust stainless steel housing. The availability of the M8-plug and 2m-PVC cable connection in short or long housing construction allows flexible mounting.
On-board IO-Link communication opens up many possibilities, such as easy configuration and set-up of the devices and advanced parameter setting.

Benefits

- **A complete family.** Available in M8 male thread robust stainless steel housings with an operating distance of 2 to 4 mm.
- **Easy to install.** Both flush and non-flush construction are available. The user can choose between short and long body housings in 2 m PVC cable or M8-disconnect plug versions.
- **High precision**. The onboard advanced microcontroller ensures better stability with respect to environmental influences, with highly repeatable measurements between -25 and +80°C.
- **Easy customization to specific OEM requests:** different cable lengths and materials, special labelling, customized pig-tail solutions with special cables and connectors are possible on request.

Only for IO-Link sensors

- **The output** can be operated either as a switching output or in IO-Link mode.
- **Fully configurable via IO-Link v1.1.** Electrical outputs can be configured as PNP/NPN/Push-pull, normally open or normally closed.
- **Timer functions** can be set, such as switch-on and switch-off delay
- **Adjustable sensing distance and hysteresis:** sensing distance can be set to 50% or 100% of the maximum sensing distance
- **Temperature monitoring:** over or under-run temperature alarms can be set
- IO-Link

Applications

- Non contact detection of metal objects in general position-sensing and presence-sensing in industrial applications
- Particularly suitable for rotational speed monitoring thanks to the high operating frequency

Main functions

- Integrated diagnostic function with flashing LED in the event of a short circuit or overload

IO-Link sensors

- The devices can be operated in IO-Link mode once connected to an IO-Link master, or in standard I/O mode.
- In IO-Link mode the switching signals of the sensor are made available in the process data via the IO-Link interface.
- Several sensor functions can be set via the IO-Link interface:
  - Adjustable switching distance: 50% or 100% of the maximum switching distance.
  - Adjustable hysteresis: standard or increased value.
  - Divider function: the sensor gives a signal after a specified number of actuation pulses has been reached.
  - Switch-on delay: the switching pulse is generated after the sensor actuation.
  - Switch-off delay: the generation of the switch signal is delayed by the set time after sensor actuation.
  - Temperature error: temperature is out of specifications.
  - Temperature over-run and under-run: temperature is out of the limits defined by the user.

References

Order code

I C S 08 □ □ □ □ □

Enter the code option instead of □

Code	Option	Description
I	-	Inductive sensor
C	-	Cylindrical housing with threaded barrel
S	-	Stainless steel housing
08	-	M8 housing
□	S30	Short housing with thread barrel of 30 mm
	L45	Long housing with thread length of 45 mm
□	F	Flush
	N	Non-flush
□	20	Sensing distance 2mm
	40	Sensing distance 4mm
□	M5	M8 plug
	A2	2 m PVC cable
□	NO	NPN – normally open output
	NC	NPN – normally closed output
	PO	PNP – normally open output
	PC	PNP – normally closed output
	IO	IO-Link programmable version

Additional characters can be used for customized versions.