



## Overview

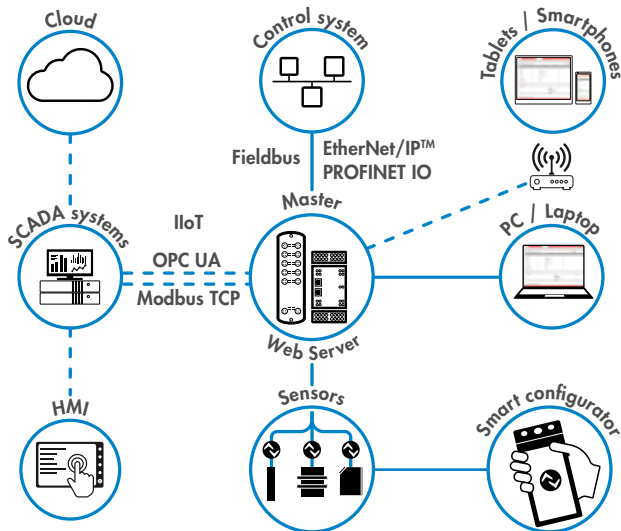
# IO-Link devices

# Overview

## IO-Link devices

### Universal, smart and easy

The use of fieldbus and manufacturer independent IO-Link communication protocols have significantly increased the visibility of processes, thanks to the full access to IO-Link device parameters, diagnostics and process data from the controller. Carlo Gavazzi IO-Link solution provides new ways of accessing, communicating, and processing data, with continuous, and extensive feedback on machine status.



### IO-Link, The “USB interface” for sensors and actuators

Universal, worldwide recognized open industrial communication protocol (IEC 61131-9), allows IO-Link enabled devices to exchange process values, parameters or diagnostic messages, via the standard unshielded 3-wire industrial cables.

### Centralised configuration and data management

IO-link enables fast configuration and dynamic changes to the sensor's parameters on the fly, which considerably increases the flexibility and diversity of the installation.

### Automatic device reconfiguration

In case of device failure the IO-Link Master will automatically check if the new connected device is the right one and re-configure it with the same parameters stored for the old device, preventing incorrect settings.

### Simplified maintenance

Thanks to IO-Link, travelling time to reach the plant and stop the machine is no longer necessary. For devices located in a remote area with difficult access, detailed diagnostics and parameter adjustment is now available from any location.

### Drive predictive maintenance

IO-Link devices continuously deliver data on their condition and help to predict when a machine needs repair or the replacement of parts. Instead of unnecessary, frequent preventive maintenance, service is need-based reducing machine downtime and maintenance cost.

### Capacitive, inductive and photoelectric sensors

Our sensors combine their excellent features with the benefits of the IO-Link standard. Unlimited combinations of functions are now available from output configurations to customized sensing distance and advanced sensing modes. Integrated logging functions of operational hours and power cycles offer advanced diagnostics mechanisms to make both real-time and historic data available. Advanced parameters such as Quality of Run, give an indication of the actual sensing performance of the sensor and help to avoid unplanned interruption of the machines.



### Y series DIN-rail and Machine mount IO-Link Masters

The IO-Link Masters allow connection to up to 8 smart devices to the higher-level control system and support the industry's leading Ethernet protocols, such as EtherNet/IP™, PROFINET IO, and MODBUS TCP.

Thanks to the on-board OPC UA server, which runs in parallel without interfering with the main control system, it is possible to simultaneously access the data of the attached smart devices from cloud-based applications via OPC UA clients. The integrated web server and IODD interpreter allow workers to easily configure and access diagnostic information of the IO-Link master and attached devices via a web browser, also remotely from PC or tablets.



### SCTL-55 smart configurator, industry 4.0 in your hand

The SCTL-55 is the first and most innovative handheld, self-powered and user-friendly device for identification, configuration, and diagnostics of IO-Link sensors and actuators without the need of any additional hardware or dedicated software.

After plugging in the sensor to one of the integrated M12 or M8 connectors, it will automatically download the IODD file, through Wi-Fi and display all data immediately. Through a 5.5" HD touchscreen display and user-friendly interface the user can view, modify, and optimize even the most complex device very quickly.



# IO-Link devices

## Feature by family

Group function	Function Family	Inductive	Capacitive	Photoelectric	
		D4, M5, M8, M12, M18, M30	M18, M30	LD30	PD30
IO-Link	IO-link v1.1	▼	▼	▼	▼
	Automatic device reconfiguration (replacement)	▼	▼	▼	▼
	Transmission speed: COM 2 (38.4 kBaud)	▼	▼	▼	▼
	SDCI standard: IEC 61131-9	▼	▼	▼	▼
	SIO (standard Input/Output mode) / IO-Link mode	▼	▼	▼	▼
	Required IO-Link master port type: A	▼	▼	▼	▼
	Minimum process cycle time	10.4 ms	5 ms	5 ms	5 ms
Detection 1	Smart sensor profile	▼	▼	▼	▼
	SSC1 or BDC1	BDC1	SSC1	SSC1	SSC1
	Adjustable Sensing Distance	▼	▼	▼	▼
	Adjustable Hysteresis	▼	▼	▼	▼
	Single Point Mode	▼	▼	▼	▼
	Two Point Mode	▼	▼	▼	▼
	Window Mode	▼	▼	▼	▼
	Detection filter function	▼	▼	▼	▼
	Dust alarm	▼	▼	▼	▼
	Waterdrop alarm	▼	▼	▼	▼
Detection 2	Temperature alarm	▼	▼	▼	▼
	SSC2 or BDC2	BDC2	SSC2	SSC2	SSC2
	Adjustable Sensing Distance	▼	▼	▼	▼
	Adjustable frequency detection	▼	▼	▼	▼
	Adjustable Hysteresis	▼	▼	▼	▼
	Single point / Two point / Windows mode	▼	▼	▼	▼
	Detection filter function	▼	▼	▼	▼
	Dust alarm	▼	▼	▼	▼
	Waterdrop alarm	▼	▼	▼	▼
	Temperature alarm	▼	▼	▼	▼
Sensitivity control	Frequency detection Mode	▼	▼	▼	▼
	External input	▼	▼	▼	▼
	Teach or configuration by IO-Link	▼	▼	▼	▼
Logic functions	Trimmer input	▼	▼	▼	▼
	Teach by wire	▼	▼	▼	▼
Logging functions	Logic function (AND/OR/X-OR/Gated SR-FF)	▼	▼	▼	▼
	High temperature	▼	▼	▼	▼
	Low temperature	▼	▼	▼	▼
	Operating cycle	▼	▼	▼	▼
	Operating hour	▼	▼	▼	▼
Timer functions	Download counter	▼	▼	▼	▼
	Power cycle	▼	▼	▼	▼
	On-delay	▼	▼	▼	▼
	Off-delay	▼	▼	▼	▼
	On and Off delay	▼	▼	▼	▼
Other features	One Shot (leading or trailing edge)	▼	▼	▼	▼
	Actual temperature	▼	▼	▼	▼
	Actual switching frequency	▼	▼	▼	▼
	Number of detections (since start up)	BDC1	SSC1	SSC1	SSC1
	Quality of run	▼	▼	▼	▼
	Quality of teach	▼	▼	▼	▼
	Analogue output (via IO-Link)	▼	▼	▼	▼
	Activation level (via IO-Link)	▼	▼	▼	▼
	LEDs on/off	▼	▼	▼	▼
	Divider function (revolution counter)	▼	▼	▼	▼
Output 1	Find My Sensor Flashing LEDs	▼	▼	▼	▼
	Pattern recognition	▼	▼	▼	▼
	Speed and length	▼	▼	▼	▼
Output 2	Object and Gap Monitoring	▼	▼	▼	▼
	Configurable Sensor (NPN, PNP, push-pull)	▼	▼	▼	▼
	Output state selection NO/NC	▼	▼	▼	▼
Output 2	Frequency output state	▼	▼	▼	▼
	Configurable Sensor (NPN, PNP, push-pull, external input)	▼	▼	▼	▼
	Output state selection NO/NC	▼	▼	▼	▼

# Overview

## IO-Link devices

### IO-Link masters

### Smart configurator



Family	<b>YN115 - DIN rail control cabinet</b>	<b>YL212 - Machine mounting</b>	<b>SCTL55 - Handheld</b>
Supply	Push-in or screw terminal connector	M12 L-Coded power connector	Battery operated
User interface	Integrated web server accessible via browser	Integrated web server accessible via browser	High definition 5.5" touchscreen display
Connection	8 IO-Link outputs, 2 Ethernet ports	8 IO-Link outputs, 2 Ethernet ports	M8 3-wire, M8 4-wire and M12
Communication & protocols	EtherNet/IP™ or PROFINET IO, Modbus TCP	EtherNet/IP™ or PROFINET IO, Modbus TCP	Wi-Fi, IO-Link v1.1
Material	Plastic	Plastic	Plastic
Degree of protection	IP20	IP67	IP30
Operating temperature	-40°C ... +70°C (-40°F ... +158°F)	-25°C ... +60°C (-13°F ... 140°F)	0°C ... +40°C (+32°F ... +104°F)
Approvals / Certifications	CE - cULus - FCC	CE - cULus - FCC	CE - RoHS - FCC - IC

**Main feature** Simultaneous access to smart devices attached from cloud-based applications via OPC UA clients and from standard industrial machine control systems Dedicated Apps for easy parameterization and advanced diagnostics of the connected device

### YN115CEI8RPIO YN115CPN8RPIO

### YL212CEI8M1IO YL212CPN8M1IO

### SCTL55

### Photoelectric Time of Flight (ToF) sensors

### Photoelectric Diffuse reflective sensors



Family	<b>LD30E - Stainless steel</b>	<b>LD30C - ABS</b>	<b>PD30E - Stainless Steel</b>	<b>PD30C - ABS</b>
Sensing distance, Sn	1000 mm	1000 mm	1000 mm	1000 mm
Range	Adj. 50 ... 1000 mm	Adj. 50 ... 1000 mm	Adj. 50 ... 1000 mm	Adj. 50 ... 1000 mm
Connection	M8-plug 4 pin or 2m PVC cable	M8-plug 4-pin or 2m PVC cable	M8-plug 4 pin or 2m PVC cable	M8-plug 4 pin or 2m PVC cable
Housing Plug / Cable	11 x 21 x 31.4 mm	10.8 x 20 x 30 mm	11 x 21 x 31.4 mm	10,8 x 20 x 30 mm
Material	Stainless Steel AISI316L	ABS	Stainless Steel AISI316L	ABS
Degree of protection	IP67, IP68, IP69K	IP67	IP67, IP68, IP69K	IP67
Operating temperature	-25°C ... +50°C (-13°F ... +122°F)		-25° ... +50°C (-13° ... +122°F)	
Approvals / Certifications	CE - cULus - ECOLAB	CE - cULus	CE - cULus (UL508) - ECOLAB	CE - cULus (UL508)
Main feature	Infrared Laser class 1, Background Suppression; Time of Flight sensor; Time delay; Logic- and Logging functions; External input; Configurable outputs		Predictive maintenance (QoR, QoT, Temperature and waterdrop alarms), Speed and Length; Pattern recognition, Divider; Object and Gap	
Plug Infrared (850 nm)	<b>LD30ETBI10BPM5IO</b>	<b>LD30CNBI10BPM5IO</b>	<b>PD30ETDI10BPM5IO</b>	<b>PD30CTDI10BPM5IO</b>
Plug Red light 617 nm)	<b>LD30ETDR10BPM5IO</b>	<b>LD30CNDR10BPM5IO</b>	<b>PD30ETDR10BPM5IO</b>	<b>PD30CTDR10BPM5IO</b>
Cable Infrared (850 nm)	<b>LD30ETBI10BPA2IO</b>	<b>LD30CNBI10BPA2IO</b>	<b>PD30ETDI10BPA2IO</b>	<b>PD30CTDI10BPA2IO</b>
Cable Red light 617 nm)	<b>LD30ETDR10BPA2IO</b>	<b>LD30CNDR10BPA2IO</b>	<b>PD30ETDR10BPA2IO</b>	<b>PD30CTDR10BPA2IO</b>

### Photoelectric Retro-reflective sensors

### Photoelectric Background suppression sensors



Family	<b>PD30E - Stainless steel</b>	<b>PD30C - ABS</b>	<b>PD30E - Stainless steel</b>	<b>PD30C - ABS</b>
Sensing distance, Sn	6000 mm (PointSpot 5000 mm)		200 mm, 250 mm or 350 mm	
Range	Adj. 100 ... 6000 mm (PointSpot 100 ... 5000 mm)		Adj. 23 ... 210 mm, 23 ... 260 mm or 23 ... 360 mm,	
Connection	M8-plug 4 pin or 2m PVC cable		M8-plug 4 pin or 2m PVC cable	
Housing Plug / Cable	11 x 21 x 31,4 mm	10,8 x 20 x 30 mm	11 x 21 x 31,4 mm	10,8 x 20 x 30 mm
Material	Stainless Steel AISI316L	ABS	Stainless Steel AISI316L	ABS
Degree of protection	IP67, IP68, IP69K	IP67	IP67, IP68, IP69K	IP67
Operating temperature	-25° ... +60°C (-13° ... +140°F)		-25° ... +60°C (-13° ... +140°F)	
Approvals / Certifications	CE - cULus (UL508)	CE - cULus (UL508) - ECOLAB	CE - cULus (UL508)	CE - cULus (UL508) - ECOLAB
Main feature	Predictive maintenance (QoR, QoT, Temperature and waterdrop alarms), Speed and Length; Pattern recognition, Divider; Object and Gap		Predictive maintenance (QoR, QoT, Temperature and waterdrop alarms), Speed and Length; Pattern recognition, Divider; Object and Gap	
Plug Infrared	<b>PD30ETXXXBPM5IO</b>	<b>PD30CTXXXBPM5IO</b>	<b>PD30ETBI20BPM5IO</b>	<b>PD30CTBI20BPM5IO</b>
Plug Red light	<b>PD30ETYYYBPM5IO</b>	<b>PD30CTYYYBPM5IO</b>	<b>PD30ETBY20BPM5IO</b>	<b>PD30CTBY20BPM5IO</b>
Cable Infrared	<b>PD30ETBI20BPA2IO</b>	<b>PD30CTBI20BPA2IO</b>	<b>PD30ETBY20BPA2IO</b>	<b>PD30CTBY20BPA2IO</b>
Cable Red light	<b>PD30ETYYYBPA2IO</b>	<b>PD30CTYYYBPA2IO</b>	<b>PD30ETBY20BPA2IO</b>	<b>PD30CTBY20BPA2IO</b>

**RR60** = Red light (620 nm) / **PR60** = Red light Polarized (620 nm) / **PS50** = Red light Polarized + Pointspot (620 nm) / **BR20** = Red light (620 nm) / **BR35** = Red light long range (620 nm) / **BS25** = Red light pointspot (620 nm)

CARLO GAVAZZI Automation Components. Specifications are subject to change without notice. Illustrations are for example only.

# IO-Link devices

## Inductive proximity sensors M12 / M18 DC - Full metal



Family	ICF12 - Flush mountable	ICF12 - Non-flush mountable	ICF18 - Flush mountable	ICF18 - Non-flush mountable
Sensing distance, Sn	4 mm	8 mm	8 mm	14 mm
Range	Adj. 1.3 / 2 / 3 / 4 mm	Adj. 2.6 / 4 / 6 / 8 mm	Adj. 2.6 / 4 / 6 / 8 mm	Adj. 4.6 / 7 / 10.5 / 14 mm
Connection	3-wire: M12-plug / 2m PUR cable	3-wire: M12-plug / 2m PUR cable	3-wire: M12-plug / 2m PUR cable	3-wire: M12-plug / 2m PUR cable
Housing Plug / Cable	M12 x 70.2 mm / M12 x 52 mm	M12 x 74.2 mm / M12 x 56 mm	M18 x 72.5 mm / M18 x 52 mm	M18 x 82.5 mm / M18 x 62 mm
Material	Stainless steel AISI304	Stainless steel AISI304	Stainless steel AISI304	Stainless steel AISI304
Degree of protection	IP67, IP68, IP69K	IP67, IP68, IP69K	IP67, IP68, IP69K	IP67, IP68, IP69K
Operating temperature	-40°C ... +85°C (-40°F ... +185°F) / +100°C (+212°F) for 15' cleaning process			
Approvals / Certifications	CE - cULus - ECOLAB	CE - cULus - ECOLAB	CE - cULus - ECOLAB	CE - cULus - ECOLAB

Main features: Configurable smart sensors; Presence or Frequency Detection mode; Switchpoint mode: Single Point, Two Point or Window; Time delay: ON, OFF, One shot; Output: NPN, PNP or Push-Pull, NO or NC; Sn: configurable; Hysteresis: standard or extended; Divider function; Temperature alarm; Proximity alarm; Low margin alarm; Activation level; Find my sensor

Plug	<b>ICF12L45F04M110</b>	<b>ICF12L45N08M110</b>	<b>ICF18L45F08M110</b>	<b>ICF18L45N14M110</b>
Cable	<b>ICF12L45F04B210</b>	<b>ICF12L45N08B210</b>	<b>ICF18L45F08B210</b>	<b>ICF18L45N14B210</b>

## Inductive proximity sensors M30 DC - Full metal Inductive proximity sensors Ø4 / M5 DC



Family	ICF30 - Flush mountable	ICF30 - Non-flush mountable	IBS04 - Flush mountable	ICS05 - Flush mountable
Sensing distance, Sn	15 mm	22 mm	1.3 mm	M5 x 38.2 mm
Range	Adj. 4.9 / 7.5 / 11.2 / 15 mm	Adj. 7.3 / 11 / 16.5 / 22 mm	Adj. 0.8 / 1.3 mm	Adj. 0.8 / 1.3 mm
Connection	3-wire: M12-plug / 2m PUR cable	3-wire: M12-plug / 2m PUR cable	3-wire: M8-plug 3-pin / 2m PVC cable	3-wire: M8-plug 3-pin / 2m PVC cable
Housing Plug / Cable	M30 x 74.2 mm / M30 x 52 mm	M30 x 86.2 mm / M30 x 64 mm	Ø4 x 38.2 mm / Ø4 x 28.2 mm	M5 x 38.2 mm / M5 x 28.2 mm
Material	Stainless steel AISI304	Stainless steel AISI304	Stainless steel AISI304	Stainless steel AISI304
Degree of protection	IP67, IP68, IP69K	IP67, IP68, IP69K	IP67	IP67
Operating temperature	-40°C ... +85°C (-40°F ... +185°F) / +100°C (+212°F) for 15' cleaning process		-25°C ... +80°C (-13°F ... +176°F)	
Approvals / Certifications	CE - cULus - ECOLAB	CE - cULus - ECOLAB	CE - UL - CSA	CE - UL - CSA

Main features: Config. smart sensors; Pres./Freq. Detec. mode; Switchpoint mode: 1-Point, 2-Point or Window; Time delay: ON, OFF, One shot; Output: NPN, PNP or Push-Pull, NO or NC; Sn: config.; Hysteresis: standard or extended; Divider function; Temp. alarm; Proxi. alarm; Low margin alarm; Activ. level; Find my sensor

Plug	<b>ICF30L45F15M110</b>	<b>ICF30L45N22M110</b>	<b>IBS04SF15M510</b>	<b>ICS05S23F15M510</b>
Cable	<b>ICF30L45F15B210</b>	<b>ICF30L45N22B210</b>	<b>IBS04SF15A210</b>	<b>ICS05S23F15A210</b>

## Inductive proximity sensors M8 DC



Family	ICS08 - Flush mountable		ICS08 - Non-flush mountable	
Sensing distance, Sn	2 mm	2 mm	4 mm	4 mm
Range	Adj. 1 / 2 mm	Adj. 1 / 2 mm	Adj. 2 / 4 mm	Adj. 2 / 4 mm
Connection	3-wire: M8-plug 3-pin / 2m PVC cable	3-wire: M8-plug 3-pin / 2m PVC cable	3-wire: M8-plug 3-pin / 2m PVC cable	3-wire: M8-plug 3-pin / 2m PVC cable
Housing Plug / Cable	M8 x 40 mm / M8 x 31 mm	M8 x 55 mm / M8 x 46 mm	M8 x 43 mm / M8 x 34 mm	M8 x 58 mm / M8 x 49 mm
Material	Stainless steel AISI304	Stainless steel AISI304	Stainless steel AISI304	Stainless steel AISI304
Degree of protection	IP67	IP67	IP67	IP67
Operating temperature	-25°C ... +80°C (-13°F ... +176°F)		-25°C ... +80°C (-13°F ... +176°F)	
Approvals / Certifications	CE - UL - CSA	CE - UL - CSA	CE - UL - CSA	CE - UL - CSA

Main features: Configurable smart sensors; Presence or Frequency Detection mode; Switchpoint mode: Single Point, Two Point or Window; Time delay: ON, OFF, One shot; Output: NPN, PNP or Push-Pull, NO or NC; Sn: configurable; Hysteresis: standard or extended; Divider function; Temperature alarm

Plug	<b>ICS08S30F20M510</b>	<b>ICS08L45F20M510</b>	<b>ICS08S30N40M510</b>	<b>ICS08L45N40M510</b>
Cable	<b>ICS08S30F20A210</b>	<b>ICS08L45F20A210</b>	<b>ICS08S30N40A210</b>	<b>ICS08L45N40A210</b>



# IO-Link devices

## Inductive proximity sensors M12 DC



Family	ICB12 - Flush mountable		ICB12 - Non-flush mountable	
Sensing distance, Sn	4 mm		8 mm	
Range	Adj. 1.3 / 2 / 3 / 4 mm		Adj. 2.6 / 4 / 6 / 8 mm	
Connection	3-wire: M12-plug / 2m PVC cable		3-wire: M12-plug / 2m PVC cable	
Housing Plug / Cable	M12 x 50.2 mm / M12 x 32 mm	M12 x 70.2 mm / M12 x 52 mm	M12 x 54.2 mm / M12 x 36 mm	M12 x 74.2 mm / M12 x 56 mm
Material	Nickel-plated brass		Nickel-plated brass	
Degree of protection	IP67		IP67	
Operating temperature	-25°C ... +70°C (-13°F ... +158°F) / -40°C ... +70 °C (-40°F ... +158°F) for plug version			
Approvals / Certifications	CE - cULus		CE - cULus	

**Main features** Configurable smart sensors; Presence or Frequency Detection mode; Switchpoint mode: Single Point, Two Point or Window; Time delay: ON, OFF, One shot; Output: NPN, PNP or Push-Pull, NO or NC; Sn: configurable; Hysteresis: standard or extended; Divider function; Temperature alarm

Plug	<b>ICB12S30F04M110</b>	<b>ICB12L50F04M110</b>	<b>ICB12S30N08M110</b>	<b>ICB12L50N08M110</b>
Cable	<b>ICB12S30F04A210</b>	<b>ICB12L50F04A210</b>	<b>ICB12S30N08A210</b>	<b>ICB12L50N08A210</b>

## Inductive proximity sensors M18 DC



Family	ICB18 - Flush mountable		ICB18 - Non-flush mountable	
Sensing distance, Sn	8 mm		14 mm	
Range	Adj. 2.6 / 4 / 6 / 8 mm		Adj. 4.6 / 7 / 10.5 / 14 mm	
Connection	3-wire: M12-plug / 2m PVC cable		3-wire: M12-plug / 2m PVC cable	
Housing Plug / Cable	M18 x 54 mm / M18 x 32 mm	M18 x 74 mm / M18 x 52 mm	M18 x 64 mm / M18 x 42 mm	M18 x 84 mm / M18 x 62 mm
Material	Nickel-plated brass		Nickel-plated brass	
Degree of protection	IP67		IP67	
Operating temperature	-25°C ... +70°C (-13°F ... +158°F) / -40°C ... +70 °C (-40°F ... +158°F) for plug version			
Approvals / Certifications	CE - cULus		CE - cULus	

**Main features** Configurable smart sensors; Presence or Frequency Detection mode; Switchpoint mode: Single Point, Two Point or Window; Time delay: ON, OFF, One shot; Output: NPN, PNP or Push-Pull, NO or NC; Sn: configurable; Hysteresis: standard or extended; Divider function; Temperature alarm

Plug	<b>ICB18S30F08M110</b>	<b>ICB18L50F08M110</b>	<b>ICB18S30N14M110</b>	<b>ICB18L50N14M110</b>
Cable	<b>ICB18S30F08A210</b>	<b>ICB18L50F08A210</b>	<b>ICB18S30N14A210</b>	<b>ICB18L50N14A210</b>

## Inductive proximity sensors M30 DC



Family	ICB30 - Flush mountable		ICB30 - Non-flush mountable	
Sensing distance, Sn	15 mm		22 mm	
Range	Adj. 4.9 / 7.5 / 11.2 / 15 mm		Adj. 7.3 / 11 / 16.5 / 22 mm	
Connection	3-wire: M12-plug / 2m PVC cable		3-wire: M12-plug / 2m PVC cable	
Housing Plug / Cable	M30 x 55 mm / M30 x 32 mm	M30 x 75 mm / M30 x 52 mm	M30 x 67 mm / M30 x 44 mm	M12 x 87 mm / M30 x 64 mm
Material	Nickel-plated brass		Nickel-plated brass	
Degree of protection	IP67		IP67	
Operating temperature	-25°C ... +70°C (-13°F ... +158°F) / -40°C ... +70°C (-40°F ... +158°F) for plug version			
Approvals / Certifications	CE - cULus		CE - cULus	

**Main features** Configurable smart sensors; Presence or Frequency Detection mode; Switchpoint mode: Single Point, Two Point or Window; Time delay: ON, OFF, One shot; Output: NPN, PNP or Push-Pull, NO or NC; Sn: configurable; Hysteresis: standard or extended; Divider function; Temperature alarm

Plug	<b>ICB30S30F15M110</b>	<b>ICB30L50F15M110</b>	<b>ICB30S30N22M110</b>	<b>ICB30L50N22M110</b>
Cable	<b>ICB30S30F15A210</b>	<b>ICB30L50F15A210</b>	<b>ICB30S30N22A210</b>	<b>ICB30L50N22A210</b>

# IO-Link devices

## Capacitive proximity sensors M18 / M30 DC 4<sup>th</sup> Gen. TRIPLESIELD™ PBT



Family	CA18 - Flush mountable	CA18 - Non-flush mountable	CA30 - Flush mountable	CA30 - Non-flush mountable
Sensing distance, Sn	8 mm	12 mm	16 mm	25 mm
Range	Extended	Extended	Extended	Extended
Connection	4-wire: M12-plug / 2m PVC cable	4-wire: M12-plug / 2m PVC cable	4-wire: M12-plug / 2m PVC cable	4-wire: M12-plug / 2m PVC cable
Housing Plug / Cable	M18 x 85 mm / M18 x 86 mm	M18 x 85 mm / M18 x 86 mm	M30 x 74 mm / M30 x 81 mm	M30 x 74 mm / M30 x 81 mm
Material	PBT	PBT	PBT	PBT
Degree of protection	IP67, IP68, IP69K	IP67, IP68, IP69K	IP67, IP68, IP69K	IP67, IP68, IP69K
Operating temperature	-30°C ... +85°C (-22°F ... +185°F) / +120°C (+248°F) Sensor face			
Approvals / Certifications	CE - cULus - ECOLAB	CE - cULus - ECOLAB	CE - cULus - ECOLAB	CE - cULus - ECOLAB

### Main features

4<sup>th</sup> Generation TRIPLESIELD™; Configurable smart sensors; Time delay, ON, OFF, One shot; Logic: AND, OR, XOR, Gated SR-FF; External input; Outputs: NPN, PNP or Push-Pull; Diagnostic functions: Operation hours, Power cycles, Detection cycles, Temperatures, Short-circuit, Maintenance

Plug	CA18CAF08BPM110	CA18CAN12BPM110	CA30CAF16BPM110	CA30CAN25BPM110
Cable	CA18CAF08BPA210	CA18CAN12BPA210	CA30CAF16BPA210	CA30CAN25BPA210

## Capacitive proximity sensors M18 / M30 DC 4<sup>th</sup> Gen. TRIPLESIELD™ Stainless Steel



Family	CA18 - Flush mountable	CA18 - Non-flush mountable	CA30 - Flush mountable	CA30 - Non-flush mountable
Sensing distance, Sn	8 mm	12 mm	16 mm	25 mm
Range	Extended	Extended	Extended	Extended
Connection	4-wire: M12-plug / 2m PVC cable	4-wire: M12-plug / 2m PVC cable	4-wire: M12-plug / 2m PVC cable	4-wire: M12-plug / 2m PVC cable
Housing Plug / Cable	M18 x 85 mm / M18 x 86 mm	M18 x 85 mm / M18 x 86 mm	M30 x 74 mm / M30 x 81 mm	M30 x 74 mm / M30 x 81 mm
Material	Stainless steel - AISI316L	Stainless steel - AISI316L	Stainless steel - AISI316L	Stainless steel - AISI316L
Degree of protection	IP67, IP68, IP69K	IP67, IP68, IP69K	IP67, IP68, IP69K	IP67, IP68, IP69K
Operating temperature	-30°C ... +85°C (-22°F ... +185°F) / +120°C (+248°F) Sensor face			
Approvals / Certifications	CE - cULus - ECOLAB	CE - cULus - ECOLAB	CE - cULus - ECOLAB	CE - cULus - ECOLAB

### Main features

4<sup>th</sup> Generation TRIPLESIELD™; Configurable smart sensors; Time delay, ON, OFF, One shot; Logic: AND, OR, XOR, Gated SR-FF; External input; Outputs: NPN, PNP or Push-Pull; Diagnostic functions: Operation hours, Power cycles, Detection cycles, Temperatures, Short-circuit, Maintenance

Plug	CA18EAF08BPM110	CA18EAN12BPM110	CA30EAF16BPM110	CA30EAN25BPM110
Cable	CA18EAF08BPA210	CA18EAN12BPA210	CA30EAF16BPA210	CA30EAN25BPA210

## Capacitive proximity sensors M18 / M30 DC 4<sup>th</sup> Gen. TRIPLESIELD™ PTFE



Family	CA18 - Flush mountable	CA18 - Non-flush mountable	CA30 - Flush mountable	CA30 - Non-flush mountable
Sensing distance, Sn	8 mm	12 mm	16 mm	25 mm
Range	Extended	Extended	Extended	Extended
Connection	4-wire: M12-plug / 2m PVC cable	4-wire: M12-plug / 2m PVC cable	4-wire: M12-plug / 2m PVC cable	4-wire: M12-plug / 2m PVC cable
Housing Plug / Cable	M18 x 85 mm / M18 x 86 mm	M18 x 85 mm / M18 x 86 mm	M30 x 74 mm / M30 x 81 mm	M30 x 74 mm / M30 x 81 mm
Material	PTFE	PTFE	PTFE	PTFE
Degree of protection	IP67, IP68, IP69K	IP67, IP68, IP69K	IP67, IP68, IP69K	IP67, IP68, IP69K
Operating temperature	-30°C ... +85°C (-22°F ... +185°F) / +120°C (+248°F) Sensor face			
Approvals / Certifications	CE - cULus - ECOLAB	CE - cULus - ECOLAB	CE - cULus - ECOLAB	CE - cULus - ECOLAB

### Main features

4<sup>th</sup> Generation TRIPLESIELD™; Configurable smart sensors; Time delay, ON, OFF, One shot; Logic: AND, OR, XOR, Gated SR-FF; External input; Outputs: NPN, PNP or Push-Pull; Diagnostic functions: Operation hours, Power cycles, Detection cycles, Temperatures, Short-circuit, Maintenance

Plug	CA18FAF08BPM110	CA18FAN12BPM110	CA30FAF16BPM110	CA30FAN25BPM110
Cable	CA18FAF08BPA210	CA18FAN12BPA210	CA30FAF16BPA210	CA30FAN25BPA210



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