



Overview

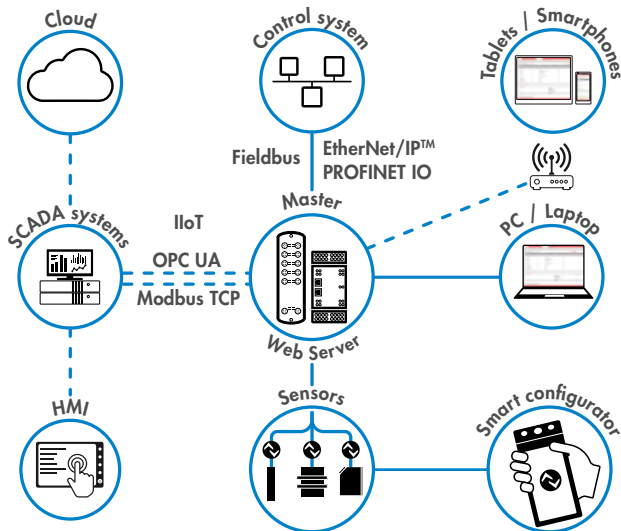
IO-Link devices

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	▼	▼	▼	▼
	Temperature alarm	▼	▼	▼	▼
Detection 2	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	▼	▼	▼	▼
	Frequency detection Mode	▼	▼	▼	▼
Sensitivity control	External input	▼	▼	▼	▼
	Teach or configuration by IO-Link	▼	▼	▼	▼
	Trimmer input	▼	▼	▼	▼
Logic functions	Teach by wire	▼	▼	▼	▼
	Logic function (AND/OR/X-OR/Gated SR-FF)	▼	▼	▼	▼
Logging functions	High temperature	▼	▼	▼	▼
	Low temperature	▼	▼	▼	▼
	Operating cycle	▼	▼	▼	▼
	Operating hour	▼	▼	▼	▼
	Download counter	▼	▼	▼	▼
Timer functions	Power cycle	▼	▼	▼	▼
	On-delay	▼	▼	▼	▼
	Off-delay	▼	▼	▼	▼
	On and Off delay	▼	▼	▼	▼
	One Shot (leading or trailing edge)	▼	▼	▼	▼
Other features	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)	▼	▼	▼	▼
	Find My Sensor Flashing LEDs	▼	▼	▼	▼
Output 1	Pattern recognition	▼	▼	▼	▼
	Speed and length	▼	▼	▼	▼
	Object and Gap Monitoring	▼	▼	▼	▼
Output 2	Configurable Sensor (NPN, PNP, push-pull)	▼	▼	▼	▼
	Output state selection NO/NC	▼	▼	▼	▼
	Frequency output state	▼	▼	▼	▼
Output 2	Configurable Sensor (NPN, PNP, push-pull, external input)	▼	▼	▼	▼
	Output state selection NO/NC	▼	▼	▼	▼





Overview

IO-Link devices





	IO-Link masters		Smart configurator
			
Family	YNI15 - DIN rail control cabinet	YL212 - Machine mounting	SCTL55 - Handheld
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

	YNI15CEI8RPIO YNI15CPN8RPIO	YL212CEI8M1IO YL212CPN8M1IO	SCTL55
	Photoelectric Time of Flight (ToF) sensors		Photoelectric Diffuse reflective sensors

				
Family	LD30E - Stainless steel	LD30C - ABS	PD30E - Stainless Steel	PD30C - ABS
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	
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)	LD30ETBI10BPM5IO	LD30CNBI10BPM5IO	PD30ETDI10BPM5IO	PD30CTDI10BPM5IO
Plug Red light 617 nm)			PD30ETDR10BPM5IO	PD30CTDR10BPM5IO
Cable Infrared (850 nm)	LD30ETBI10BPA2IO	LD30CNBI10BPA2IO	PD30ETDI10BPA2IO	PD30CTDI10BPA2IO
Cable Red light 617 nm)			PD30ETDR10BPA2IO	PD30CTDR10BPA2IO

	Photoelectric Retro-reflective sensors		Photoelectric Background suppression sensors	
--	--	--	--	--

				
Family	PD30E - Stainless steel	PD30C - ABS	PD30E - Stainless steel	PD30C - ABS
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			PD30ETBI20BPM5IO	PD30CTBI20BPM5IO
Plug Red light	PD30ETXXXXBPM5IO	PD30CTXXXXBPM5IO	PD30ETYYYYBPM5IO	PD30CTYYYYBPM5IO
Cable Infrared			PD30ETBI20BPA2IO	PD30CTBI20BPA2IO
Cable Red light	PD30ETXXXXBPBA2IO	PD30CTXXXXBPBA2IO	PD30ETYYYYBPA2IO	PD30CTYYYYBPA2IO

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	ICF12L45F04M110	ICF12L45N08M110	ICF18L45F08M110	ICF18L45N14M110
Cable	ICF12L45F04B210	ICF12L45N08B210	ICF18L45F08B210	ICF18L45N14B210

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	ICF30L45F15M110	ICF30L45N22M110	IBS04SF15M510	ICS05S23F15M510
Cable	ICF30L45F15B210	ICF30L45N22B210	IBS04SF15A210	ICS05S23F15A210

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	ICS08S30F20M510	ICS08L45F20M510	ICS08S30N40M510	ICS08L45N40M510
Cable	ICS08S30F20A210	ICS08L45F20A210	ICS08S30N40A210	ICS08L45N40A210

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	ICB12S30F04M110	ICB12L50F04M110	ICB12S30N08M110	ICB12L50N08M110
Cable	ICB12S30F04A210	ICB12L50F04A210	ICB12S30N08A210	ICB12L50N08A210

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	ICB18S30F08M110	ICB18L50F08M110	ICB18S30N14M110	ICB18L50N14M110
Cable	ICB18S30F08A210	ICB18L50F08A210	ICB18S30N14A210	ICB18L50N14A210

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	ICB30S30F15M110	ICB30L50F15M110	ICB30S30N22M110	ICB30L50N22M110
Cable	ICB30S30F15A210	ICB30L50F15A210	ICB30S30N22A210	ICB30L50N22A210

IO-Link devices

Capacitive proximity sensors M18 / M30 DC 4th 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

4th 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 4th 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

4th 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 4th 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

4th 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



OUR SALES NETWORK IN EUROPE

AUSTRIA

Carlo Gavazzi GmbH
Ketzergasse 374,
A-1230 Wien
Tel. +43 1 888 4112
Fax +43 1 889 1053
office@carlogavazzi.at

FINLAND

Carlo Gavazzi OY AB
Ahventie, 4 B
FI-02170 Espoo
Tel. +358 9 756 2000
myynti@gavazzi.fi

GREAT BRITAIN

Carlo Gavazzi UK Ltd
4.4 Frimley Business Park,
Frimley, Camberley,
Surrey GU16 7SG
Tel. +44 1 276 854110
Fax +44 1 276 682140
sales@carlogavazzi.co.uk

NORWAY

Carlo Gavazzi AS
Melkeveien 13,
N-3919 Porsgrunn
Tel. +47 35 93 08 00
Fax +47 35 93 08 01
post@gavazzi.no

SWEDEN

Carlo Gavazzi AB
V:a Kyrkogatan 1,
S-652 24 Karlstad
Tel. +46 54 85 11 25
Fax +46 54 85 11 77
info@carlogavazzi.se

BELGIUM

Carlo Gavazzi NV/SA
Mechelsesteenweg 311,
B-1800 Vilvoorde
Tel. +32 2 257 41 20
sales@carlogavazzi.be

FRANCE

Carlo Gavazzi Sarl
Zac de Paris Nord II, 69,
rue de la Belle Etoile,
F-95956 Roissy CDG Cedex
Tel. +33 1 49 38 98 60
Fax +33 1 48 63 27 43
french.team@carlogavazzi.fr

ITALY

Carlo Gavazzi SpA
Via Milano 13,
I-20045 Lainate (MI)
Tel. +39 02 931 76 1
Fax +39 02 931 76 301
info@gavazziacbu.it

PORTUGAL

Carlo Gavazzi Lda
Rua dos Jerónimos 38-B,
P-1400-212 Lisboa
Tel. +351 21 361 70 60
Fax +351 21 362 13 73
carlogavazzi@carlogavazzi.pt

SWITZERLAND

Carlo Gavazzi AG
Verkauf Schweiz/Vente Suisse
Sumpfstrasse 3,
CH-6312 Steinhausen
Tel. +41 41 747 45 35
Fax +41 41 740 45 40
info@carlogavazzi.ch

DENMARK

Carlo Gavazzi Handel A/S
Over Hadstenvej 40,
DK-8370 Hadsten
Tel. +45 89 60 61 00
Fax +45 86 98 15 30
handel@gavazzi.dk

GERMANY

Carlo Gavazzi GmbH
Pfnorstr. 10-14
D-64293 Darmstadt
Tel. +49 6151 81 00 0
Fax +49 6151 81 00 40
info@gavazzi.de

NETHERLANDS

Carlo Gavazzi BV
Wijkmeerweg 23,
NL-1948 NT Beverwijk
Tel. +31 251 22 93 45
info@carlogavazzi.nl

SPAIN

Carlo Gavazzi SA
Avda. Iparraguirre, 80-82,
E-48940 Leioa (Bizkaia)
Tel. +34 94 480 40 37
Fax +34 94 431 60 81
gavazzi@gavazzi.es

OUR SALES NETWORK IN THE AMERICAS

USA

Carlo Gavazzi Inc.
750 Hastings Lane,
Buffalo Grove, IL 60089-6904,
USA
Tel. +1 847 465 61 00
sales@carlogavazzi.com

CANADA

Carlo Gavazzi Inc.
2660 Meadowvale Boulevard,
Mississauga, ON L5N 6M6,
Canada
Tel. +1 905 542 0979
Fax +1 905 542 2248
gavazzi@carlogavazzi.com

MEXICO

Carlo Gavazzi Mexico S.A. de C.V.
Circuito Puericultores 22,
Ciudad Satelite
Naucalpan de Juárez,
Edo Mex. CP 53100 - Mexico
Tel. +52 55 5373 7042
Fax +52 55 5373 7042
mexicosales@carlogavazzi.com

BRAZIL

Carlo Gavazzi Automação Ltda.
Av. Francisco Matarazzo,
1752 Conjunto 2108
CEP 05001-200 -
São Paulo - SP - Brazil
Tel. +55 11 3052 0832
Fax +55 11 3057 1753
info@carlogavazzi.com.br

OUR SALES NETWORK IN ASIA AND PACIFIC

SINGAPORE

Carlo Gavazzi Automation
Singapore Pte. Ltd.
61 Tai Seng Avenue #05-06
Print Media Hub
@ Paya Lebar iPark
Singapore 534167
Tel. +65 67 466 990
Fax +65 67 461 980
info@carlogavazzi.com.sg

TAIWAN

Branch of Carlo Gavazzi Automation
Singapore Pte. Ltd.
12F-3, No. 530, Yingcai Rd.,
West Dist., Taichung City
403518,
Taiwan, China
Tel. +886 4 2258 4001
Fax +886 4 2258 4002

MALAYSIA

Carlo Gavazzi Automation (M)
SDN. BHD.
D12-06-G, Block D12,
Pusat Perdagangan Dana 1,
Jalan PUJ 1A/46,
47301 - Petaling Jaya,
Selangor, Malaysia
Tel. +60 3 7842 7299
Fax +60 3 7842 7399
info@gavazzi-asia.com

CHINA

Carlo Gavazzi Automation
(China) Co. Ltd.
Unit 2308, 23/F.,
News Building, Block 1, 1002
Middle Shennan Zhong Road,
Futian District,
Shenzhen, China
Tel. +86 755 8369 9500
Fax +86 755 8369 9300
sales@carlogavazzi.cn

HONG KONG

Carlo Gavazzi Automation
Hong Kong Ltd.
Unit No. 16 on 25th Floor,
One Midtown,
No. 11 Hoi Shing Road, Tsuen Wan,
New Territories, Hong Kong
Tel. +852 26261332
Fax +852 26261316

OUR COMPETENCE CENTRES AND PRODUCTION SITES

DENMARK

Carlo Gavazzi Industri A/S
Hadsten

MALTA

Carlo Gavazzi Ltd
Zejtun

ITALY

Carlo Gavazzi Controls SpA
Belluno

LITHUANIA

Uab Carlo Gavazzi Industri Kaunas
Kaunas

CHINA

Carlo Gavazzi Automation
(Kunshan) Co., Ltd.
Kunshan

HEADQUARTERS

CARLO GAVAZZI AUTOMATION SPA

Via Milano, 13
I-20045 - Lainate (MI) - ITALY
Tel. +39 02 931 761
info@gavazziautomation.com

Energy to Components!

www.gavazziautomation.com