

Winter 2017 / 2018



SAFETY

- ✓ SLIM TYPE-2 SAFETY LIGHT CURTAINS
- ✓ MAGNETIC AND RFID SAFETY SENSORS

INDUCTIVE SENSORS

- ✓ CHIP-IMMUNE
- ✓ MARITIME (DNV-GL APPROVED)

PHOTOELECTRIC SENSORS

- ✓ M18 SERIES
- ✓ DISTANCE MEASURING

RFID

- ✓ UHT TAGS
- ✓ FUNCTION BLOCK LIBRARY

NEWS

LARGE SAFETY PORTFOLIO



A
Swiss
Company





SAFETINEX SLIM TYPE 2

ROBUST AND SPACE SAVING

Strong, slim light curtains for protection where space is limited



SAFETINEX SLIM: TYPE 2 LIGHT CURTAINS IN SLIM HOUSING

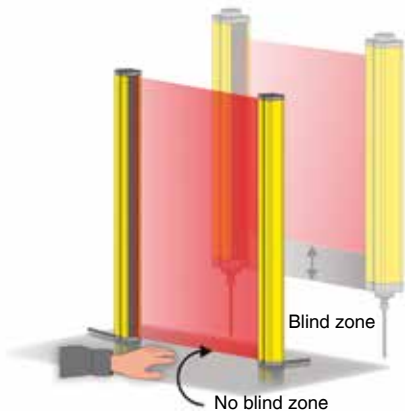
STRONG, SLIM LIGHT CURTAINS FOR PROTECTION WHERE SPACE IS LIMITED

Manufactured with robust aluminum housings, the new Safetinx Slim units are well-suited to the production environment and will withstand shocks and vibrations. Industry-standard PNP configuration allows connection to the controller via an integral 5-pin M12 cable connector. The integrated alignment LED provides easy installation and permanent autocontrol ensures reliable operation of the light curtain.

Safetinx Slim devices offer good optoelectronic performance with a much smaller footprint (26 mm x 26 mm) than standard size light curtains (42 mm x 48 mm). Moreover, the protective height of these devices is equal to their length, eliminating any blind zone or loss of resolution, even when mounted in combination. Improved workplace ergonomics can therefore be combined with optimum operator protection.

Your advantages

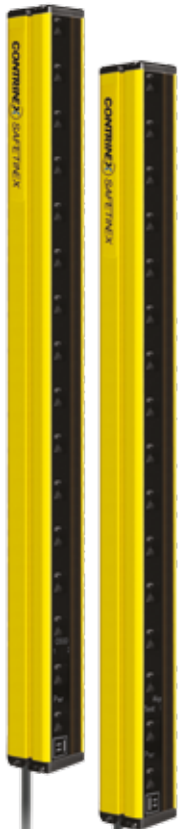
- ✓ Slim profile of only 26 mm x 26 mm
- ✓ No blind zone
- ✓ Permanent autocontrol
- ✓ IP 65 protection
- ✓ Hand resolution (30 mm)
- ✓ Excellent safety rating to EN/ISO 13849-1 and IEC 61496-1-2 Cat. 2 PL c



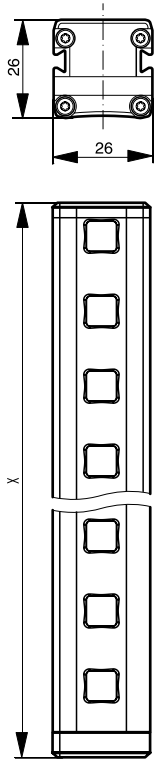
TYPICAL APPLICATIONS

- Metal forming
- Printing machines
- Assembly machines with limited risk
- Pick and place systems
- Logistics conveyors



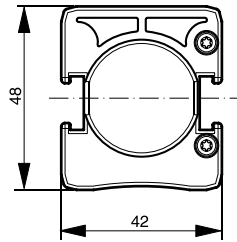


SLIM HOUSING

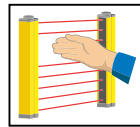


X = protective height

NORMAL HOUSING



NEW		SAFETINEX TYPE 2 SLIM HOUSING			
PART REFERENCE (KIT = SENDER + RECEIVER)	HOUSING SIZE (MM)	PROTECTIVE HEIGHT (MM)	RESOLUTION (MM)	CONNECTION	SAFETY LEVEL
YBBS-30K2-0170-P012	26 x 26	170	30	M12, 5-pole	Cat. 2, PL c
YBBS-30K2-0330-P012	26 x 26	330	30	M12, 5-pole	Cat. 2, PL c
YBBS-30K2-0490-P012	26 x 26	490	30	M12, 5-pole	Cat. 2, PL c
YBBS-30K2-0650-P012	26 x 26	650	30	M12, 5-pole	Cat. 2, PL c
YBBS-30K2-0810-P012	26 x 26	810	30	M12, 5-pole	Cat. 2, PL c
YBBS-30K2-0970-P012	26 x 26	970	30	M12, 5-pole	Cat. 2, PL c
YBBS-30K2-1130-P012	26 x 26	1130	30	M12, 5-pole	Cat. 2, PL c
YBBS-30K2-1290-P012	26 x 26	1290	30	M12, 5-pole	Cat. 2, PL c
YBBS-30K2-1450-P012	26 x 26	1450	30	M12, 5-pole	Cat. 2, PL c
YBBS-30K2-1610-P012	26 x 26	1610	30	M12, 5-pole	Cat. 2, PL c



SLIM TYPE-2 LIGHT CURTAINS – ACCESSORIES

STANDARD MOUNTING BRACKET (NO. 5)

A set of standard mounting brackets is provided with each light curtain package. These two-part brackets in robust plastic are used for mounting Safetinx YBBS Type 2 light curtains at both ends. They offer 3 possible orientations (0, 90 or 180 degrees) with +/- 3 degrees for fine alignment.

OPTIONAL MOUNTING BRACKET (NO. 6)

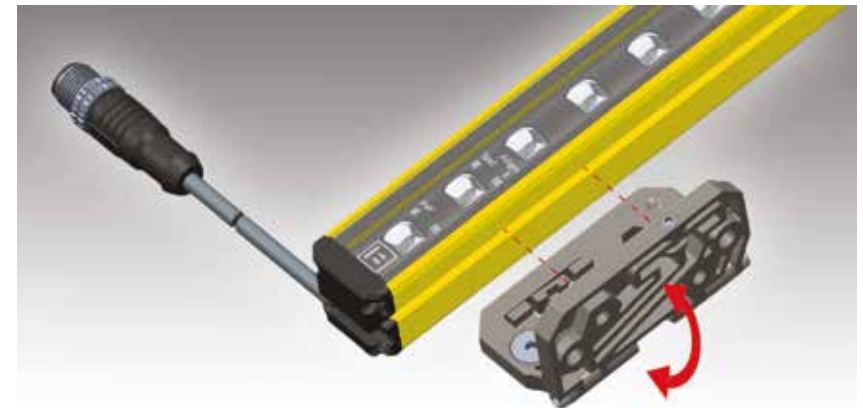
These metal brackets are the strongest, most adaptable fixture available. Their use allows Slim light curtains to be mounted with no blind zone. Supplied in pairs, they can either be used singly for easy, robust mounting or in combination. When combined, this bracket allows Slim light curtains to be positioned at a particular angle with respect to the machine.

OPTIONAL MOUNTING BRACKET (NO. 7)

This highly adaptable metal bracket combines the advantages of brackets 5 and 6. Suitable for side or end fixing, it allows Slim light curtains to be mounted with no blind zone.

SIGNAL FILTER

Suitable for use with all Contrinex light curtains, this device protects the light curtain against any electrical interference from the controller or PLC.



ACCESSORIES



A set of YXW-0005-000 brackets is provided as standard in each package together with the light curtain. Part reference YXW-0005-000 comprises a set of brackets for one unit, not for a pair of light curtains.



Part reference YXW-0006-000 comprises a package of two units together with all the necessary screws, including the M5 mounting screws. It can either be used as two separate brackets or as one assembly.



Part reference YXW-0007-000 comprises a set of brackets for one unit, not for a pair of light curtains.

ACCESSORIES

MOUNTING BRACKETS

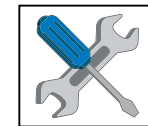
PART REFERENCE	ART. NO.	DESCRIPTION
YXW-0005-000	622-000-747	Standard mounting bracket no. 5
YXW-0006-000	622-000-767	Optional mounting bracket no. 6
YXW-0007-000	622-000-768	Optional mounting bracket no. 7

FILTER

PART REFERENCE	ART. NO.	DESCRIPTION
YXF-0001-000	622-000-101	Signal filter

SAFETINEX RELAY

PART REFERENCE	HOUSING WIDTH (MM)	NUMBER OF CONTACTS	RESPONSE TIME (MS)	CONNECTION	SAFETY LEVEL
YRB-4EML-31S	22.5	3	10	Screw terminal	Cat. 4, PL e







SAFETINEX SENSORS

FLEXIBLE, COST-EFFECTIVE, SAFE

Non-contact safety sensors with magnetic or RFID coding for door monitoring up to safety cat. 4 (PL e)



YSM SERIES: SAFETY SENSORS, MAGNETICALLY CODED

The new YSM series of safety sensors is suitable for monitoring guard doors, hoods or covers. Thanks to non-contact operation and coded communication, the service life of these compact sensors is very long. Housings are ECOLAB®-approved and rated to IP 6K9K, making them suitable for washdown applications.

For any machine requiring a fixed guard door or cover, the YSM series ensures reliable state monitoring (door open or closed). A magnetically coded system (type 4 according to ISO 14119) makes the YSM series immune to mutual interference and highly resistant to tampering. It is also possible to mount the actuator behind a stainless steel plate, which further reduces accessibility.

Your advantages

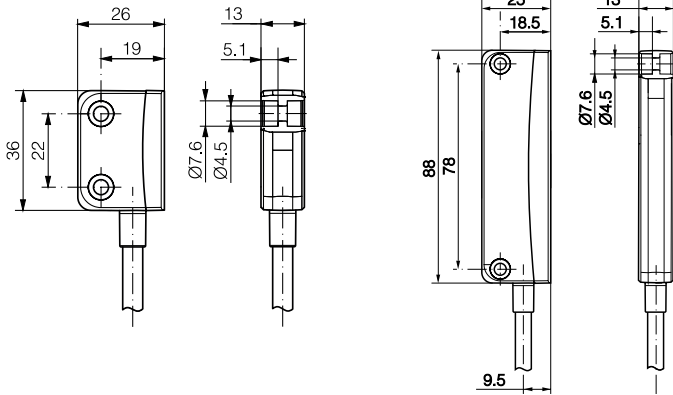
- ✓ Long switching distance for more installation flexibility, up to 18 mm
- ✓ Cat. 4 according to ISO 13849-1
- ✓ Extremely compact size
- ✓ Frontal or frontal 90° actuation
- ✓ PVC cable or M12 pigtail connection
- ✓ Enclosure rating IP6K9K, ECOLAB® certified



TYPICAL APPLICATIONS

- Press machines
- Pharmaceutical machines
- Robot cells
- Conveyors
- Assembly lines
- Injection molding machines





NEW		YSM SERIES			
PART REFERENCE	SIZE (MM)	SAO*	SAR**	ACTUATION	CONNECTION
YSM-22K4-MSFN-C050	36 x 26 x 13	4 mm	10 mm	Frontal	PVC, 5 m, 4 wire
YSM-22K4-MEFN-C050	36 x 26 x 13	8 mm	17 mm	Frontal	PVC, 5 m, 4 wire
YSM-22K4-MSAN-C050	36 x 26 x 13	4 mm	10 mm	Frontal 90°	PVC, 5 m, 4 wire
YSM-22K4-MEAN-C050	36 x 26 x 13	8 mm	17 mm	Frontal 90°	PVC, 5 m, 4 wire
YSM-22K4-MSFN-P012	36 x 26 x 13	4 mm	10 mm	Frontal	PVC, 0.15 m + M12 4-pin
YSM-22K4-MEFN-P012	36 x 26 x 13	8 mm	17 mm	Frontal	PVC, 0.15 m + M12 4-pin
YSM-22K4-MSAN-P012	36 x 26 x 13	4 mm	10 mm	Frontal 90°	PVC, 0.15 m + M12 4-pin
YSM-22K4-MEAN-P012	36 x 26 x 13	8 mm	17 mm	Frontal 90°	PVC, 0.15 m + M12 4-pin
YSM-78KA-MEFN-C050	88 x 25 x 13	8 mm	18 mm	Frontal	PVC, 5 m, 4 wire
YSM-78KA-MEAN-C050	88 x 25 x 13	8 mm	18 mm	Frontal 90°	PVC, 5 m, 4 wire
YSM-78KA-MEFN-P012	88 x 25 x 13	8 mm	18 mm	Frontal	PVC, 0.15 m + M12 4-pin
YSM-78KA-MEAN-P012	88 x 25 x 13	8 mm	18 mm	Frontal 90°	PVC, 0.15 m + M12 4-pin

*Sao: safe switch-on distance

**Sar: safe switch-off distance

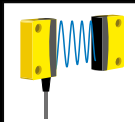
ACCESSORIES

CONNECTING CABLES

PART REFERENCE	ART. NO.	SIZE	PINS	CONFIGURATION	MATERIAL	LENGTH
S12-4FUG-020	623-100-052	M12	4	Straight	PUR	2 m
S12-4FUG-050	623-100-032	M12	4	Straight	PUR	5 m
S12-4FUG-100	623-100-053	M12	4	Straight	PUR	10 m
S12-4FVG-020	623-100-030	M12	4	Straight	PVC	2 m
S12-4FVG-050	623-100-051	M12	4	Straight	PVC	5 m
S12-4FVG-100	623-100-050	M12	4	Straight	PVC	10 m

SPACERS

PART REFERENCE	ART. NO.	SIZE
YXS-2200-000	605-000-764	22 mm
YXS-7800-000	605-000-765	78 mm



YSR SERIES: SAFETY SENSORS, RFID CODED

The new YSR series of safety sensors is suitable for monitoring guard doors, hoods or covers. Thanks to non-contact operation and RFID-coded communication, the service life of these compact sensors is very long. Housings are ECOLAB®-approved and rated to IP 6K9K, making them suitable for washdown applications.

RFID technology enables the user to assign a unique code to each sensor and actuator system, which greatly reduces the risk of tampering. The OSSD output and inputs of YSR sensors can also be used for series connection, allowing up to 30 sensors to connect with just one relay or controller.

Since each sensor can provide individual feedback, it is possible to identify which guard doors are open and which are closed. This is particularly useful when many sensors are connected in series.

For any machine requiring a fixed guard door or cover, the YSR series ensures reliable state monitoring (door open or closed). Thanks to its serial connection capability, the YSR series is particularly suitable for applications using multiple sensors, such as long packaging or assembly lines.



APPLICATIONS

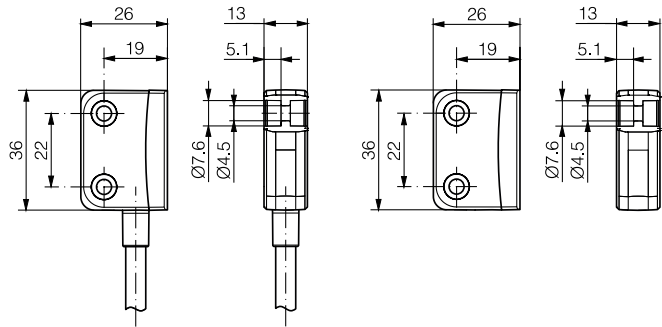
Your advantages

- ✓ Long switching distance for more installation flexibility, up to 18 mm
- ✓ Cat. 4 according to ISO 13849-1
- ✓ Extremely compact size
- ✓ PVC cable or M12 pigtail connection
- ✓ Enclosure rating IP6K9K, ECOLAB® certified
- ✓ Serial connection
- ✓ EDM (external device monitoring) and Feedback signal
- ✓ Random or teachable RFID code, type 4 according to ISO 14119

Typical applications

- Packaging
- Pharmaceutical machines
- Robot cells
- Conveyors
- Assembly lines





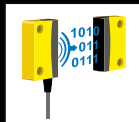
NEW		YSR SERIES			
PART REFERENCE	SIZE (MM)	SAO*	SAR**	ACTUATION	CONNECTION
YSR-22K4-RESE-C050	36 x 26 x 13	8 mm	18 mm	Random code	PVC, 5 m, 4 wire
YSR-22K4-TESE-C050	36 x 26 x 13	8 mm	18 mm	Teachable code	PVC, 5 m, 4 wire
YSR-22K4-RESE-P012	36 x 26 x 13	8 mm	18 mm	Random code	PVC, 0.15 m + M12 8-pin
YSR-22K4-TESE-P012	36 x 26 x 13	8 mm	18 mm	Teachable code	PVC, 0.15 m + M12 8-pin

*Sao: safe switch-on distance

**Sar: safe switch-off distance

ACCESSORIES						
CONNECTING CABLES						
PART REFERENCE	ART. NO.	SIZE	PINS	CONFIGURATION	MATERIAL	LENGTH
S12-4FUG-020	623-100-052	M12	4	Straight	PUR	2 m
S12-4FUG-050	623-100-032	M12	4	Straight	PUR	5 m
S12-4FUG-100	623-100-053	M12	4	Straight	PUR	10 m
S12-8FUG-020	623-100-131	M12	8	Straight	PUR	2 m
S12-8FUG-050	623-100-132	M12	8	Straight	PUR	5 m
S12-8FUG-100	623-100-133	M12	8	Straight	PUR	10 m

T-CONNECTORS			
PART REFERENCE	ART. NO.	SIZE	PINS
V12-8TPD-000-NN2	605-003-000	M12	8, 4, 4
V12-8TPD-000-NN3	605-003-001	M12	8, 8, 4
V12-4TPD-000-NN1	605-002-346	M12	4, 4, 4
V12-4TPD-000-NNN	605-002-347	M12	4







**INDUCTIVE
CHIP-IMMUNE**

**FOR THE HARSHTEST
MACHINING ENVIRONMENTS**

Full Inox sensors not influenced by chips of iron, aluminum, stainless steel, brass, copper or titanium

INDUCTIVE CHIP-IMMUNE

IMMUNE TO CHIPS OF IRON, ALUMINUM, STAINLESS STEEL, BRASS, COPPER OR TITANIUM

Even when covered with chips of many types of metal, the new inductive sensors will reliably detect targets made of these metals. The sensors achieve this with a slightly modified form of the Condet® technology. In a one-piece stainless steel housing with IP68 and IP69K protection rating and a wide operating temperature range from -25 to +85°C (-13 to +185°F), they are particularly suitable for use in the harsh environments of the machining industry. Depending on sensor diameter, operating distances of 3, 5 or 12 mm are available. The sensors operate at frequencies of 90, 200 or 400 Hz. In the PNP version, sensors also include an IO-Link interface for point-to-point communication with the controller of the system.

Your advantages

- ✓ Detection not influenced by chips of steel, stainless steel, aluminum, brass, copper or titanium
- ✓ Detection of targets made of the above metals
- ✓ Robust, one-piece stainless-steel housing, protection rating IP68 and IP69K
- ✓ Temperature range -25 to +85°C (-13 to +185°F)
- ✓ Size M12, M18 and M30
- ✓ Operating distances up to 12 mm
- ✓ IO-Link

✓ Steel



✓ Stainless Steel



✓ Aluminum



✓ Brass



✓ Copper



✓ Titanium



APPLICATION: METAL RECYCLING

In metal recycling, Chip-Immune inductive sensors can reliably detect the presence or position of various metal flaps, doors, drawers and other objects, without interference from fragments of metallic residue.

Unique Condet® technology not only ensures long sensor life, but also chip immunity and reliable switching with a wide range of metals.

- Easy to install - no need for any programming or adjustment
- Easy to integrate - no need to avoid areas possibly contaminated by metal chips
- Fit and forget - virtually indestructible one-piece, stainless-steel housing
- Impervious, corrosion resistant, vibration and shock proof
- Pressure resistant up to 80 bar (1160 psi)

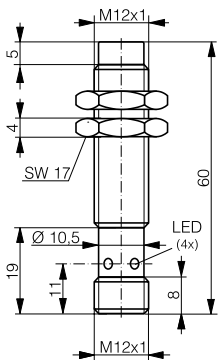




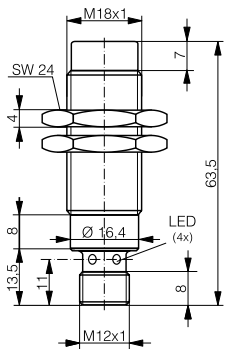
NEW

CHIP-IMMUNE SENSORS

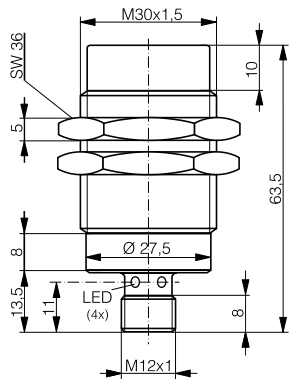
PART REFERENCE	ART. NO.	Ø	SN	MOUNTING	CONNECTION	OUTPUT
DW-AS-713-M12-967	320-420-712	M12	3	Non-embeddable	M12 4-pin	PNP NO
DW-AS-713-M18-967	320-420-713	M18	5	Non-embeddable	M12 4-pin	PNP NO
DW-AS-713-M30-967	320-420-690	M30	12	Non-embeddable	M12 4-pin	PNP NO



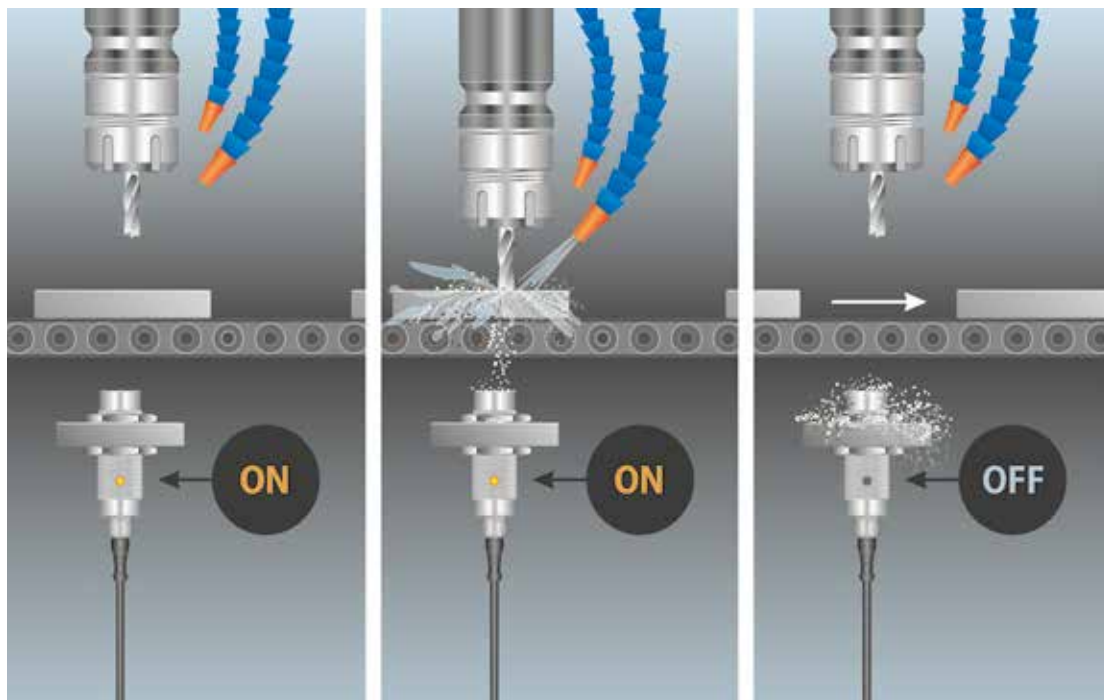
DW-AS-713-M12-967



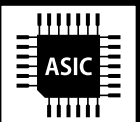
DW-AS-713-M18-967



DW-AS-713-M30-967



An inductive sensor checks the presence of a metal conveyor tray during an in-line machining process, in which metal chips and lubrication fluid flow onto the sensing face. Despite the presence of many metal chips on the sensor, switching remains reliable without the need for cleaning.







INDUCTIVE MARITIME **FOR SHIPS, PORTS AND OFFSHORE**

Seawater resistant, GL-approved sensors with special EMC protection and IO-Link

INDUCTIVE MARITIME SENSORS, GL APPROVED

A new range of embeddable Maritime inductive sensors, certified by Germanischer Lloyd, offers unrivalled performance features. With an enclosure rating of IP68 and IP69K, they are not only impervious, but also corrosion-proof and resistant to salt water. Their EMC protection also meets specific maritime requirements, particularly with regard to power supply variations and low frequency immunity. In addition, all PNP types include an IO-Link interface, which can be used not only to read sensor data (e.g. number of switching events, chip temperature, etc.) but also to modify certain parameters, such as switching from NO to NC function or programming an ON or OFF delay. Full Inox types in a one-piece, stainless-steel housing offer the longest service life of any inductive sensor on the market, even in the harshest marine environments.

Your advantages

- ✓ GL approved, class DNV-GL-CG-0339
- ✓ Extremely rugged sensors, fit for Industry 4.0
- ✓ Special EMC protection
- ✓ Resistant to corrosion and salt water
- ✓ Impervious, enclosure rating IP68 and IP69K
- ✓ Temperature range -40 ... +85°C / -40 ... +185°F
- ✓ Full Inox types:
 - one-piece stainless-steel housing (V4A/AISI 316L), factor 1 on steel and aluminum
- ✓ Pressure-resistance available up to 500 bar (800 bar peak)
- ✓ IO-Link interface

Typical applications

- Equipment for ships
- Offshore wind farms
- Container handling equipment
- Port installations

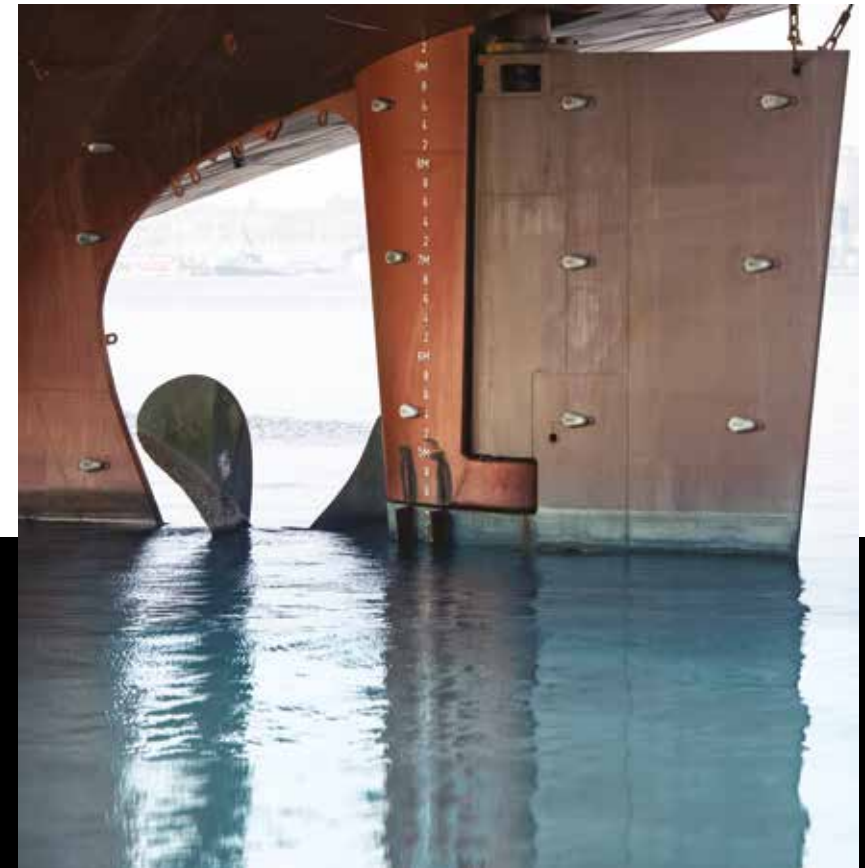


100%
SALTWATER-PROOF

APPLICATION: SHIP RUDDER

Inductive sensors installed as limit switches on ship rudders provide a signal when the maximum rudder angles are reached. GL approved sensors exclude the risk of disturbance from electromagnetic interference, corrosion or mechanical shocks.

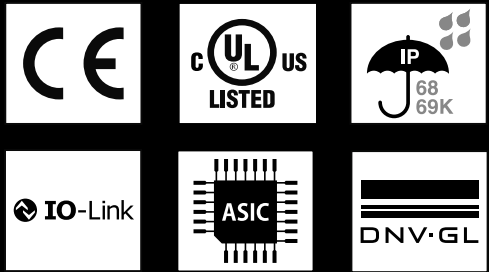
- Robust construction withstands corrosion and salt water
- Exceptionally reliable, fit-and-forget operation in a remote, harsh environment
- Simple sensor system providing contactless operation and long range
- Maintenance costs reduced through use of IO-Link





NEW		INDUCTIVE MARITIME				
PART REFERENCE	ART. NO.	Ø	SN	MOUNTING	CONNECTION	OUTPUT
DW-MS-703-P12G	320-420-748	M12	1.5	Embeddable	M12	PNP NO
DW-MD-703-P12G	320-420-749	M12	1.5	Embeddable	PUR cable	PNP NO
DW-MS-703-M12	320-420-750	M12	6	Embeddable	M12	PNP NO
DW-MD-703-M12	320-420-751	M12	6	Embeddable	tbd	PNP NO
DW-MS-703-M18-002	320-420-752	M18	10	Embeddable	M12	PNP NO
DW-MD-703-M18	320-420-753	M18	10	Embeddable	tbd	PNP NO
DW-MS-703-M30-002	320-420-754	M30	20	Embeddable	M12	PNP NO
DW-MD-703-M30	320-420-755	M30	20	Embeddable	tbd	PNP NO
DW-MD-703-C23	320-420-756	C23	7	Embeddable	PVC cable	PNP NO
DW-MV-703-C23-276	320-420-757	C23	7	Embeddable	M8 pigtail	PNP NO

Contrinex Maritime sensors meet DNV GL quality requirements for the safe operation of ships and offshore installations according to international standards.







PHOTOELECTRIC M18 SERIES

SHORTER, MORE POWERFUL

High specification ASIC sensor in short M18 plastic housing with IO-Link

HIGH SPECIFICATION ASIC SENSOR IN SHORT M18 PLASTIC HOUSING

The new M18 photoelectric sensor series with short plastic housing offers advanced diffuse, reflex, through-beam and background suppression operating principles that provide solutions for a wide range of industries and applications. The series is complemented by accessories for right-angle emission. With IO-Link communication on all PNP sensors, the M18 series fills the gap between machines and the digital world, meeting the demands of smart factories.

Your advantages

- ✓ First class sensing ranges
- ✓ Small housing: M18 x 33 mm (cable version), M18 x 37 mm (connector version)
- ✓ Excellent background suppression characteristics with Pinpoint LED
- ✓ Mutual interference immunity
- ✓ IO-Link on all PNP sensors
- ✓ Easy flush mounting
- ✓ Easy-to-mount special accessories for right-angle emission

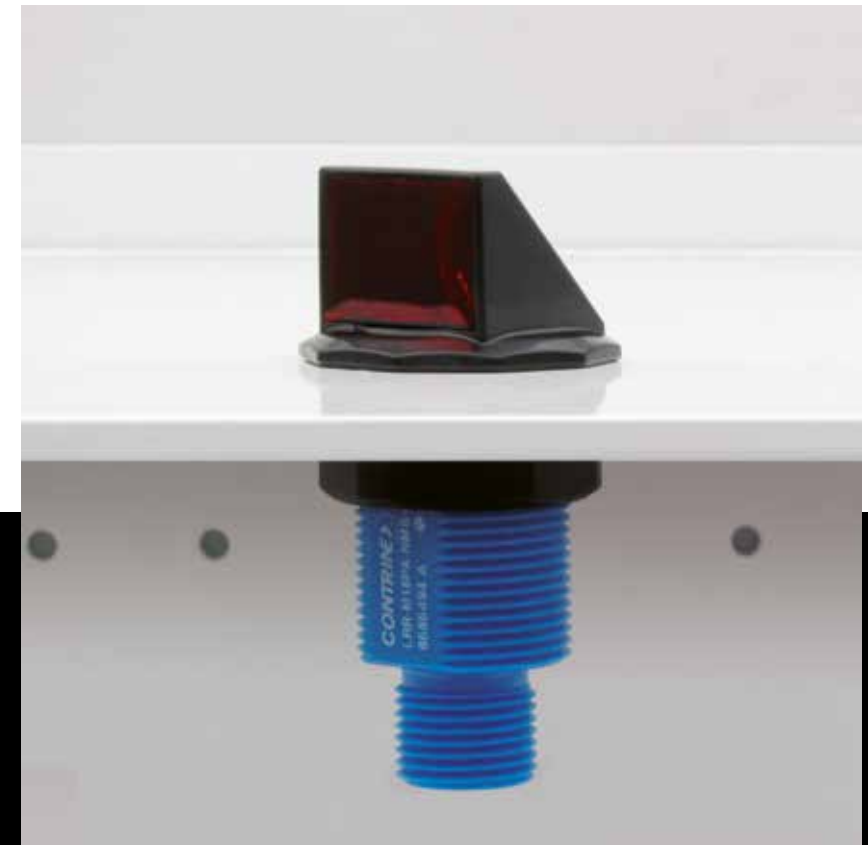


APPLICATION: PACKAGING

The photoelectric M18 series, with its short housing and long sensing ranges, is a perfect fit for packaging applications. It can be flush-mounted directly on parts of the packaging machine. Moreover, special right-angle accessories provide additional mounting and detection solutions (see example below).

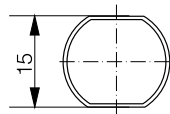
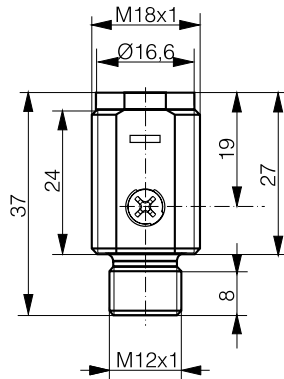
- M18 short housing with easy flush-mounting
- Long sensing ranges
- IO-Link

RIGHT-ANGLE EMISSION ACCESSORY





M18 SERIES



NEW

M18 SERIES

PART REFERENCE	ART. NO.	SENSING RANGE	OPERATING PRINCIPLE	OUTPUT *	CONNECTION
LTR-M18PA-PMK-403	620-600-168	1200 mm	Diffuse	PNP Light-ON / IO-Link	Cable
LTR-M18PA-PMS-403	620-600-174	1200 mm	Diffuse	PNP Light-ON / IO-Link	Connector M12
LRR-M18PA-NMK-404	620-600-182	7000 mm	Retro-reflex	PNP Dark-ON / IO-Link	Cable
LRR-M18PA-NMS-404	620-600-188	7000 mm	Retro-reflex	PNP Dark-ON / IO-Link	Connector M12
LLR-M18PA-NMK-400	620-600-194	30,000 mm	Through-beam emitter	IO-Link	Cable
LLR-M18PA-NMS-400	620-600-195	30,000 mm	Through-beam emitter	IO-Link	Connector M12
LLR-M18PA-NMK-404	620-600-196	30,000 mm	Through-beam receiver	PNP Dark-ON / IO-Link	Cable
LLR-M18PA-NMS-404	620-600-202	30,000 mm	Through-beam receiver	PNP Dark-ON / IO-Link	Connector M12
LHR-M18PA-PMK-403	620-600-208	250 mm	Background suppression	PNP Light-ON / IO-Link	Cable
LHR-M18PA-PMS-403	620-600-214	250 mm	Background suppression	PNP Light-ON / IO-Link	Connector M12
LHR-M18PA-TMK-403	620-600-220	250 mm	Background suppression	PNP Light-ON / IO-Link	Cable
LHR-M18PA-TMS-403	620-600-226	250 mm	Background suppression	PNP Light-ON / IO-Link	Connector M12

* NPN type and other outputs also available

ACCESSORIES

MOUNTING BRACKETS

PART REFERENCE	ART. NO.	DESCRIPTION
LTW-M18PA-000	622-000-096	Special mounting for 90 degrees emission for LTR-M18 or LRR-M18
LLW-M18PA-000	622-000-097	Special mounting for 90 degrees emission for LLR-M18
LHW-M18PA-000	622-000-098	Special mounting for 90 degrees emission for LHR-M18
LXW-M18PA-000	622-000-099	Mounting head (10 pcs/pack). Note: 1 head delivered with sensor
LXW-M18PA-001	622-000-100	Mounting nut (10 pcs/pack). Note: 2 nuts delivered with sensor







Use  **IO-Link**
Universal · Smart · Easy



PHOTOELECTRIC DISTANCE

LASER PRECISION, IO-LINK

New sensors for short- or long-range distance measurement: DTL-C23 and -C55

DTL-C55 WITH IO-LINK FOR DIGITAL DISTANCE MEASUREMENT

The new DTL-C55 distance sensor uses the optical time-of-flight (TOF) method to measure distances up to 5000 mm. In the IO-Link version, measurements are passed directly to the control system as millimeter values in digital form, with no need for an additional analog-to-digital converter and no signal drop for long lines. The IO-Link Smart Sensor Profile simplifies handling and minimizes integration cost. This profile also supports initial setup of sensors with user-friendly standard parameters and teach functions. Existing control system parameters are transferred to each newly installed sensor via the bus. In addition, IO-Link provides comprehensive diagnostic options and additional information such as operating hours, signal quality or the number of switching operations.

With two virtual switching points settable either via teach-in or direct parameter write-in, the sensor is particularly suitable for use in mobile logistics. For example, on forklift trucks its long measurement range will reliably detect goods already on shelves and measure any free space for more items, ensuring full utilization of storage.

TIME-OF-FLIGHT TECHNOLOGY

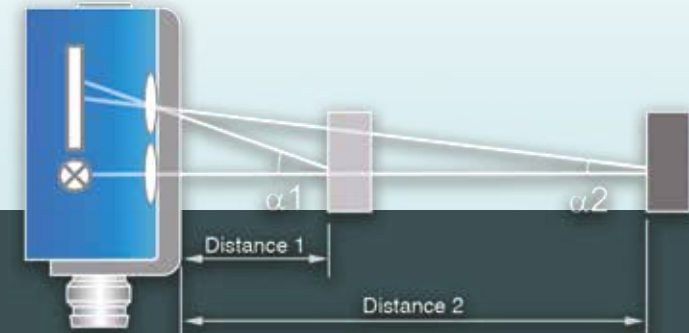


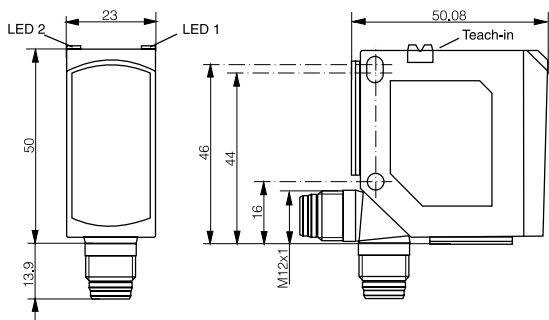
DTL-C23 FOR PRECISE SHORT-RANGE DISTANCE MEASUREMENT

The DTL-C23 distance sensor operates according to the principle of laser triangulation and measures distances of 20 to 100 mm at a resolution of 0.12 mm and linearity of ± 0.25 mm. With a measuring point diameter of only 1.5 mm, repeatability is < 0.25 mm at a distance of 80 mm.

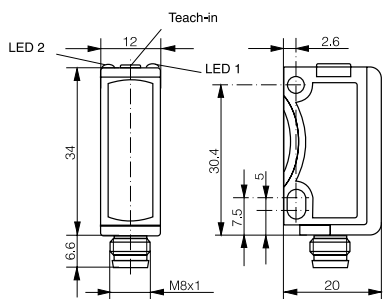
A typical application is measuring the thickness of material on winding rolls. By setting the range of the 1 to 10 V analog output to the start and end thicknesses, optimum resolution can easily be obtained. This compact sensor is also suitable for small-part detection and checking of position, height or thickness.

TRIANGULATION PRINCIPLE





NEW		DTL-C55			
PART REFERENCE	ART. NO.	MEASURING RANGE	OUTPUT	INPUT	CONNECTION
DTL-C55PA-TMS-407-505	628-000-702	60 ... 5000	Light-ON / Dark-ON / IO-Link	Teach	Connector M12 4-pin



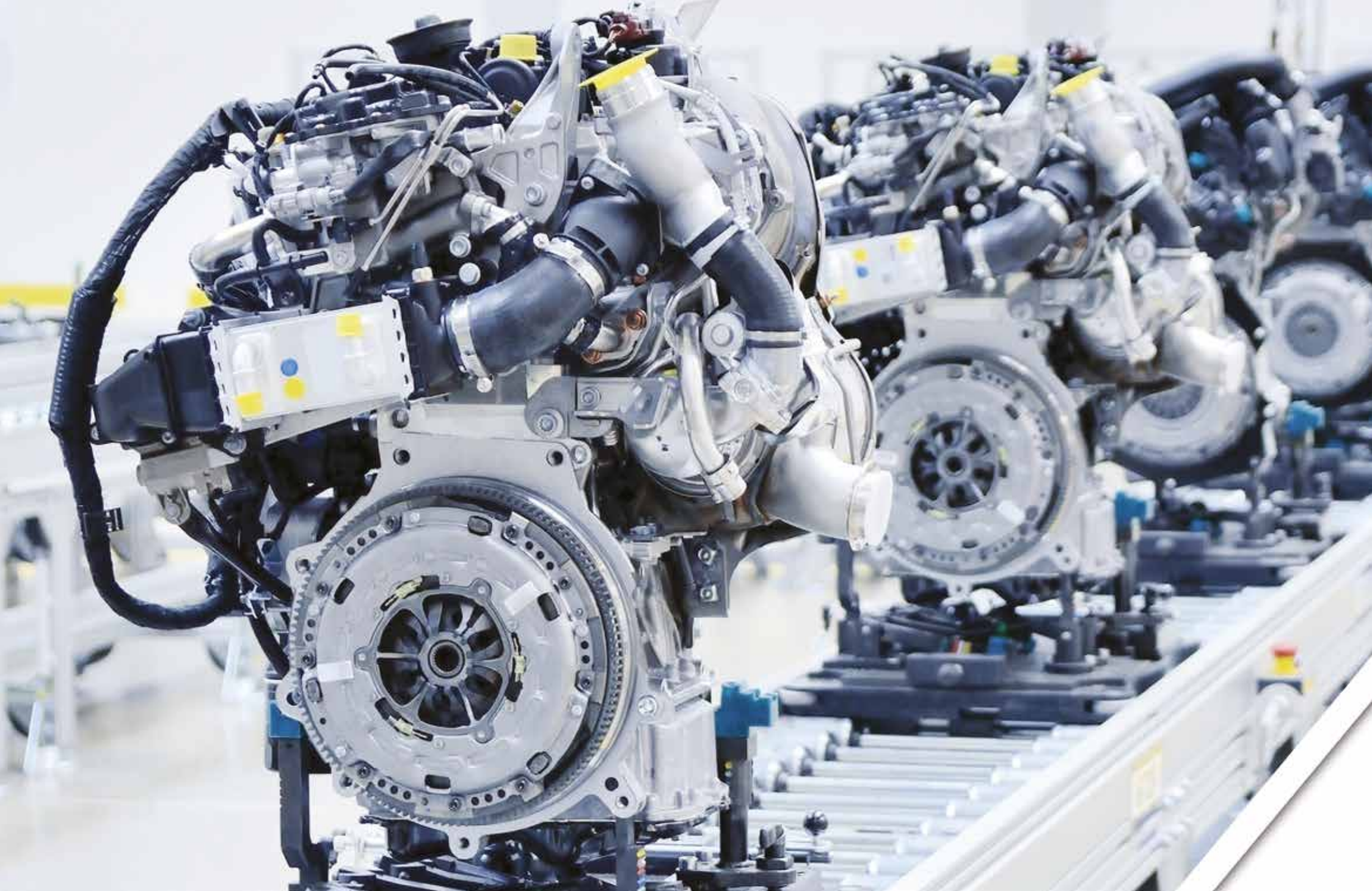
NEW		DTL-C23			
PART REFERENCE	ART. NO.	MEASURING RANGE	OUTPUT 1	OUTPUT 2	CONNECTION
DTL-C23PB-TMS-139-501	628-000-701	20 ... 100	Light-ON / Dark-ON	1...10 V	Connector M8 4-pin

DTL-C55PA-TMS-407-505:



DTL-C23PB-TMS-139-501:







RFID HARDWARE AND SOFTWARE

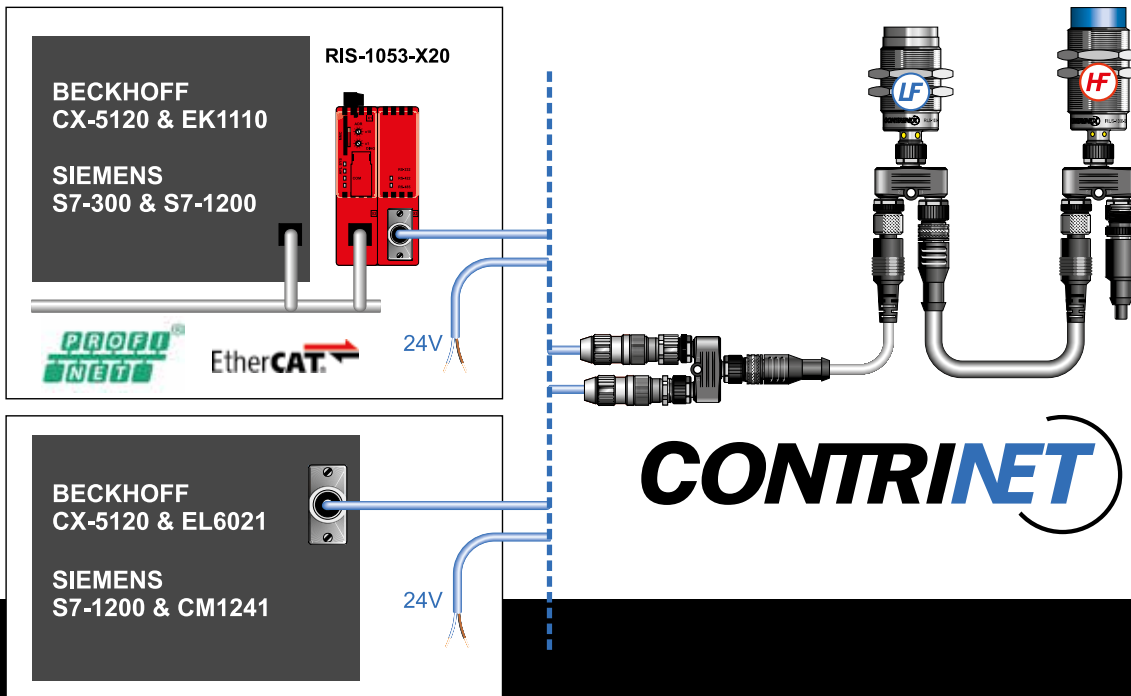
**HIGH PERFORMANCE MADE
EASY**

Industrial RFID's most rugged components - now with new function block library to simplify system integration



FUNCTION BLOCK LIBRARY FOR EASY PROGRAMMING

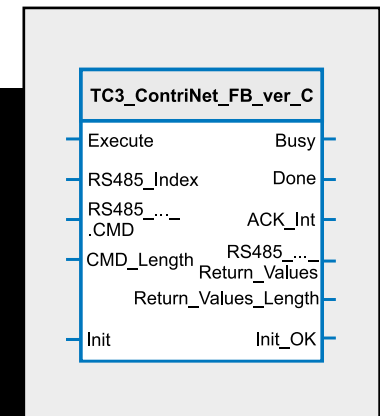
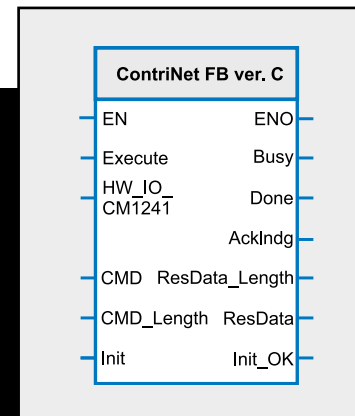
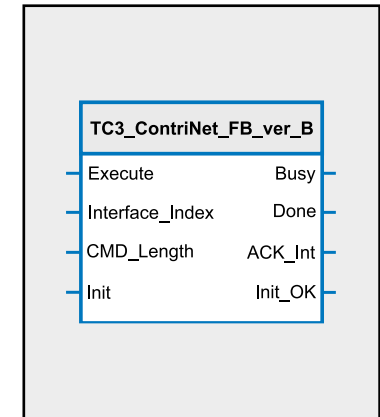
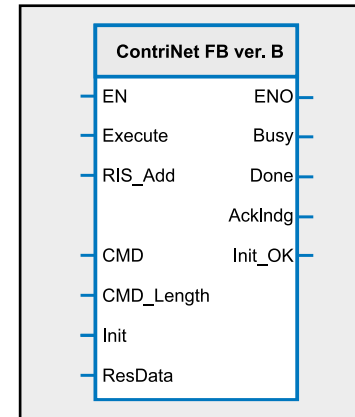
The flexibility of ContriNET open-source software is valued by RFID professionals worldwide. Now new tools make program development even easier. A library of generic PLC function blocks (GFBs) simplifies integration of Contrinex's read-write modules (RWMs). GFBs are available for a wide range of communication protocols, including ProfiNET, EtherCAT, direct RS-485 and IO-Link. In addition to GFBs, Contrinex has developed a range of easy-to-use, simplified function blocks (SFBs) for fast implementation of basic RFID commands, such as RFID Status, RFID Read and RFID Write. SFBs can usually be assigned without further documentation, making programs easier to develop and maintain.



GENERIC FUNCTION BLOCK COVERAGE

Function block (FB) for ContriNET RWMs

- Generic function blocks available for ProfiNET, EtherCAT and direct RS-485 communication protocols
- Siemens and Beckhoff PLC architectures supported, interoperability with Codesys PLC
- Unique project example to highlight differences between the different function block implementations
- FBs for ContriNET RWMs
- FBs for IO-Link RWMs



TAGS FOR USE IN HIGH TEMPERATURE ZONES

Contrinex has added a new transponder with massively increased storage capacity to its UHT series of tags for ultra-high temperature applications. The RTP-0502-062 tag features 2 kilobytes of FRAM memory. 100 percent silicone-free and capable of resisting temperatures from -25°C to +250°C (-13°F to +482°F), it is ideal for use in industrial paintshops.

The new FRAM memory is a type of non-volatile memory with low power consumption, high speed and long life expectancy, even under intense read/write cycling. Contrinex's expertise in building rugged transponders ensures outstanding performance in high temperature rinsing, coating and burning operations. In such demanding environments, it meets the highest data reliability requirements.

Advantages of Contrinex UHT tags

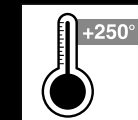
- ✓ Resistant to temperatures from -25°C to +250°C (-13°F to +482°F)
- ✓ Exceptionally long service life (1000 hrs / 1000 cycles)
- ✓ 100 % silicone-free, ideal for industrial paintshops
- ✓ Resistant to dirt and detergents
- ✓ Enclosure rating IP68/IP69K
- ✓ ISO/IEC 15693-compatible

NEW TAGS FOR TEMPERATURES UP TO 250 °C		
PART REFERENCE	ART. NO.	USER MEMORY
RTP-0502-022	720 000 200	160 Byte
RTP-0502-062	720 000 205	2 kByte
RTP-0502-082	720 000 203	112 Byte



APPLICATION: PAINTSHOP

The conveyor frame, complete with car parts and transponders, passes through a paint-curing oven for more than 30 minutes. Oven temperatures of up to 250°C are no problem for the highly reliable UHT tags from Contrinex.



CONTRINEX

Contrinex is a leading manufacturer of sensors for factory automation. The Swiss company, headquartered in Corminboeuf near Fribourg (CH), has a unique and innovative range of products whose features far surpass those of standard sensors.

Since its foundation in 1972 by Peter Heimlicher, Dipl Ing ETH, Contrinex has grown from a one-man operation to a multinational group with over 500 employees worldwide. More than 15 subsidiaries cover the core markets in Europe, Asia, North and South America.

Contrinex manufactures its own sensors, safety and RFID systems in 5 production locations: Switzerland, Hungary, China, Brazil and Sri Lanka.

At a glance

- Technology leading manufacturer of inductive and photoelectric sensors as well as safety and RFID systems
- World market leader for miniature sensors, sensors with long operating distances and devices for particularly demanding operating conditions (all-metal, high-pressure and high-temperature resistant sensors)
- Represented in over 60 countries worldwide, headquarters in Switzerland
- 8000 products

Technology leader for sensor intelligence and industrial RFID

CONTRINEX - SENSE MORE, DO MORE



CONTRINEX PRODUCTS

SENSORS

INDUCTIVE

BASIC
MINIATURE
EXTREME
EXTRA PRESSURE
HIGH PRESSURE
EXTRA TEMPERATURE
HIGH TEMPERATURE
WASHDOWN
ANALOG OUTPUT
2-WIRE
WELD-IMMUNE
CHIP-IMMUNE
MARITIME
SPECIAL

PHOTOELECTRIC

STANDARD
MINIATURE
TRANSPARENT OBJECT
FIBER-OPTIC AMPLIFIERS, FIBERS
DISTANCE
COLOR AND CONTRAST
LIGHT GRIDS

ULTRASONIC

MINIATURE
SMALL
COMPACT

CAPACITIVE

BASIC
HIGH PERFORMANCE

SAFETY

LIGHT CURTAINS

FINGER PROTECTION Type 4
HAND PROTECTION Type 4 and Type 2
ACCESS CONTROL Type 4
SAFETY SENSORS
– MAGNETICALLY CODED
– RFID CODED
SAFETY ACCESSORIES

RFID

LOW AND HIGH FREQUENCY

TRANSPONDERS
CONTRINET READ/WRITE MODULES
IO-LINK READ/WRITE MODULES
HANDHELD DEVICES
ACCESSORIES
SOFTWARE
STARTER KITS



EUROPE

Austria
Belgium*
Croatia
Czech Republic
Denmark
Estonia
Finland
France*
Germany*

Great Britain*

Greece
Hungary
Ireland
Italy*
Luxembourg
Netherlands
Norway
Poland
Portugal*

Romania
Russian Federation
Slovakia
Slovenia
Spain
Sweden
Switzerland*
Turkey
Ukraine

AFRICA

Morocco
South Africa

THE AMERICAS

Argentina
Brazil*

Canada
Chile
Mexico*
Peru
United States*
Venezuela

ASIA

China*
India*
Indonesia
Japan*
Korea
Malaysia

Pakistan
Philippines
Singapore*
Taiwan
Thailand
Vietnam

AUSTRALASIA

Australia
New Zealand

MIDDLE EAST

Israel
United Arab Emirates

* Contrinex subsidiary

HEADQUARTERS

CONTRINEX AG Industrial Electronics
route du Pâqui 5 - PO Box - CH 1720 Corminboeuf - Switzerland
Tel: +41 26 460 46 46 - **Fax:** +41 26 460 46 40
Internet: www.contrinex.com - **E-mail:** info@contrinex.com



www.contrinex.com