M18P SERIES

SHORTER, MORE POWERFUL

✓ **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**

A Swiss Company

CONTRINEX
SENSORS SAFETY RFID

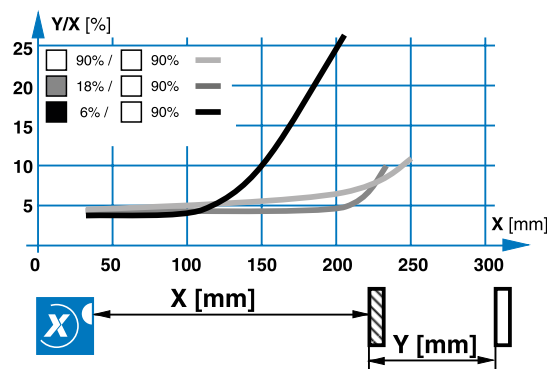| PART REFERENCE	ART. NO.	SN	OPERATING PRINCIPLE	CONNECTION
LTR-M18PA-PMK-403	620-600-168	1200 mm	Diffuse	Cable
LTR-M18PA-PMS-403	620-600-174	1200 mm	Diffuse	Connector M12
LRR-M18PA-NMK-404	620-600-182	7000 mm	Retro-reflex	Cable
LRR-M18PA-NMS-404	620-600-188	7000 mm	Retro-reflex	Connector M12
LLR-M18PA-NMK-400	620-600-194	30,000 mm	Through-beam (emitter)	Cable
LLR-M18PA-NMS-400	620-600-195	30,000 mm	Through-beam (emitter)	Connector M12
LLR-M18PA-NMK-404	620-600-196	30,000 mm	Through-beam (receiver)	Cable
LLR-M18PA-NMS-404	620-600-202	30,000 mm	Through-beam (receiver)	Connector M12
LHR-M18PA-PMK-403	620-600-208	250 mm	Background suppression	Cable
LHR-M18PA-PMS-403	620-600-214	250 mm	Background suppression	Connector M12
LHR-M18PA-TMK-403	620-600-220	250 mm	Background suppression	Cable
LHR-M18PA-TMS-403	620-600-226	250 mm	Background suppression	Connector M12

NPN types and other outputs also available

90° ACCESSORIES

PART REFERENCE	ART. NO.	MATERIAL	SUITABLE FOR
LTW-M18PA-000	622-000-096	ABS / PMMA	LTR-M18PA, LRR-M18PA
LHW-M18PA-000	622-000-098	ABS / PMMA	LHR-M18PA
LLW-M18PA-000	622-000-097	ABS / PMMA	LLR-M18PA

LEAD PRODUCT

DIFFUSE SENSOR WITH BACKGROUND SUPPRESSION

* Pinpoint LED
* Special CONTRINEX optics
* Excellent black-on-white performance
* Long sensing range, 250 mm on white, 225 mm on gray and 200 mm on black

IO-Link

SMART COMMUNICATION WITH CONTRINEX SENSORS

* Continuous monitoring of process data
* Continuous diagnosis of sensor status
* Advanced parameter settings, sensitivity adjustment, remote teach function
* Easy check of sensor ID, to ensure the right sensor is at the right place
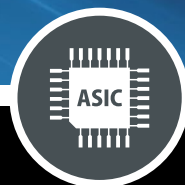
DATA MONITORING   DIAGNOSIS   SENSITIVITY   TEACH   LIGHT-ON/DARK-ON SELECTION   SENSOR MODE

DELAY   STRETCH   SEQUENCE SELECTION   DETECTION COUNTER   TEMPERATURE

Terms of delivery and right to change design reserved.

HEADQUARTERS

CONTRINEX AG Industrial Electronics
Route du Paqui 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

© CONTRINEX AG 2018
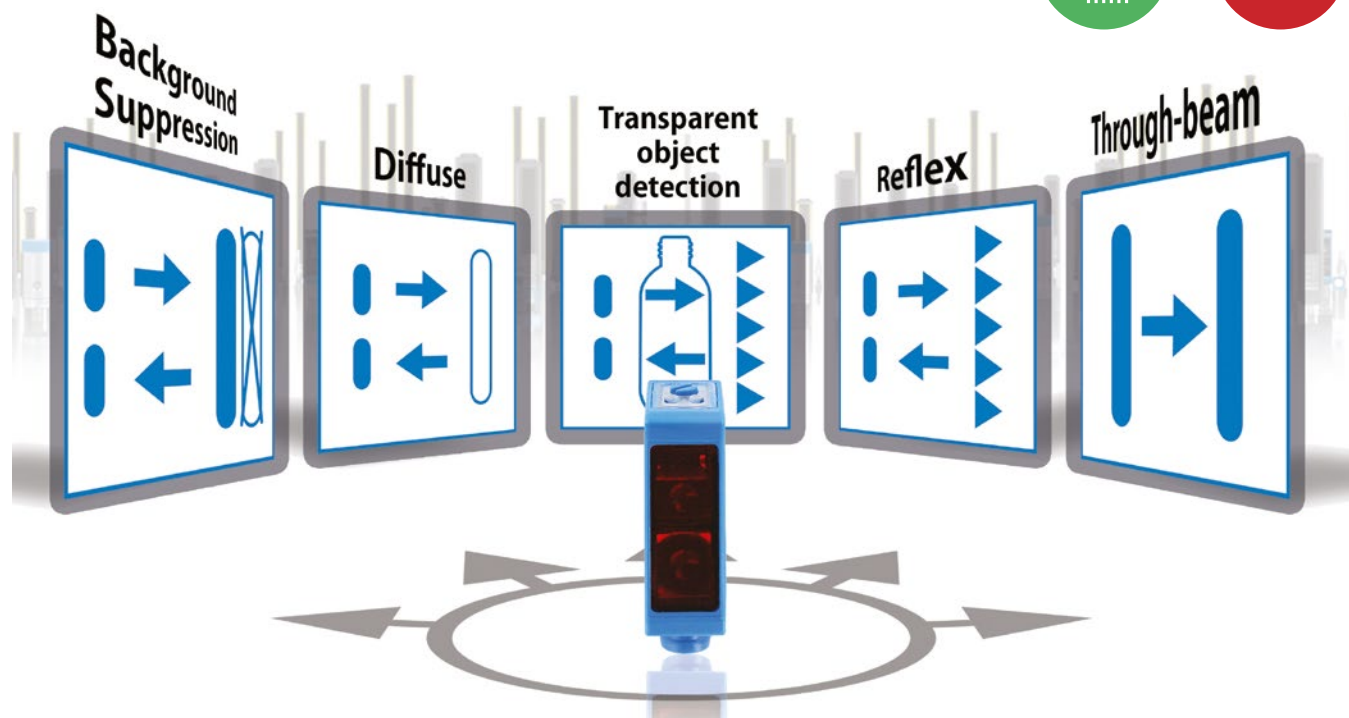999 411 002 - 09.18 - 1'000

PHOTOELECTRIC SENSORS

C23 SERIES

THE ALLROUNDERS
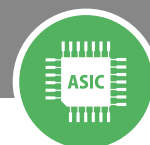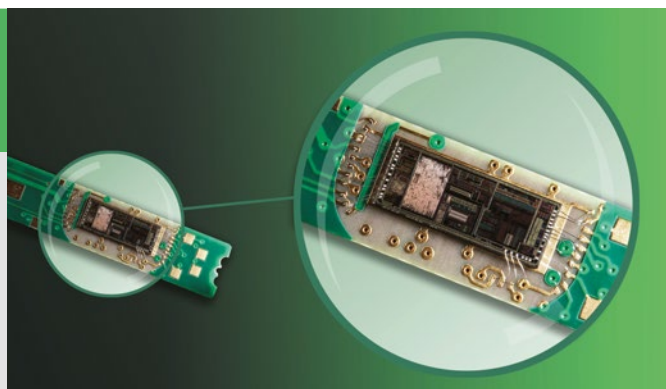
A Swiss Company

CONTRINEX
SENSORS SAFETY RFID

THE IDEAL SOLUTION FOR EVERY APPLICATION

Whatever the application, C23 series sensors meet its highest demands. Their miniature size, first-class sensing ranges, Ecolab-certified housings and practical accessories are ideal for limited spaces or hygienic areas. Versions with background suppression and pinpoint LED ensure high reliability and extended detection ranges, while types with patented UV technology set new benchmarks for transparent object detection. All PNP types include IO-Link communication, a key enabling technology for Industry 4.0 and the Industrial Internet of Things.

POWERFUL CONTRINEX ASIC
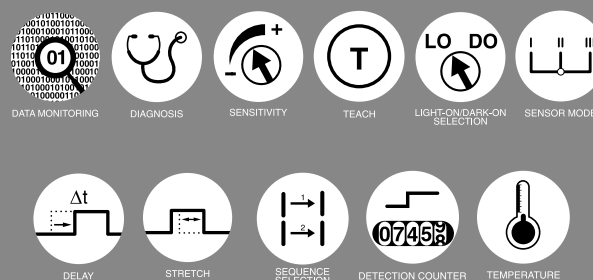### FROM THE WORLD LEADER IN SENSOR ASIC TECHNOLOGY

* First-class sensing ranges, trimmed in production
* Emitting current regulation
* Mutual interference immunity
* Adjustment processing via potentiometer or teach button
* Stability alarm processing
* Integrated IO-Link

IO-Link
SMART COMMUNICATION WITH CONTRINEX SENSORS

* Continuous monitoring of process data
* Continuous diagnosis of sensor status
* Advanced parameter settings, sensitivity adjustment, remote teach function
* Easy check of sensor ID, to ensure the right sensor is at the right place

DATA MONITORING | DIAGNOSIS | SENSITIVITY | TEACH | LIGHT-ON/DARK-ON SELECTION | SENSOR MODE

DELAY | STRETCH | SEQUENCE SELECTION | DETECTION COUNTER | TEMPERATURE

FEATURES OF C23 SERIES

DIFFUSE, REFLEX, TRANSPARENT STANDARD, THROUGH-BEAM

* High quality sensors with first-class sensing ranges
* Miniature plastic housing, 20 mm x 30 mm x 10 mm
* Red light
* IO-Link interface available on PNP types
* Mutual interference immunity
* Versions available with stability alarm as second output
* Enclosure rating IP67, Ecolab approved
* Versatile mounting brackets for ease of installation

Diffuse operating principle:
* Sensing range up to 1500 mm
* Special version with remote adjustment via IO-Link

Reflex operating principle:
* Sensing range up to 8000 mm
* Red polarized light

Reflex operating principle for transparent object:
* Sensing range up to 5000 mm
* Red polarized light

Through-beam operating principle:
* Sensing range up to 30,000 mm
* Mutual interference immunity by setting emitter/receiver pairs via IO-Link

SELECTION OF PRODUCTS

	PART REFERENCE	ART. NO.	SENSING RANGE	ADJUST-MENT	OUTPUT*	CONNEC-TION*
DIFFUSE	LTR-C23PA-PMS-403	620-600-106	3…1500 mm	Potentio-meter	PNP Light-ON	Connector M8 3-pin
	LTR-C23PA-NMS-403	620-600-113	3…1500 mm	IO-Link	PNP Light-ON	Connector M8 3-pin
REFLEX	LRR-C23PA-NMS-404	620-600-120	20…8000 mm	IO-Link	PNP Dark-ON	Connector M8 3-pin
TRANSPARENT STANDARD	TRR-C23PA-TMS-603	620-600-300	10…5000 mm	Teach or IO-Link	PNP Light-ON + Dark-ON	Connector M8 4-pin
	TRR-C23PA-PMS-603	620-600-308	10…5000 mm	Potentio-meter	PNP Light-ON + Dark-ON	Connector M8 4-pin
THROUGH-BEAM	LLR-C23PA-NMS-400	620-600-127	0…30,000 mm	-	Emitter	Connector M8 3-pin
	LLR-C23PA-NMS-404	620-600-134	0…30,000 mm	IO-Link	PNP Dark-ON	Connector M8 3-pin

* NPN versions, cable versions and other outputs also available
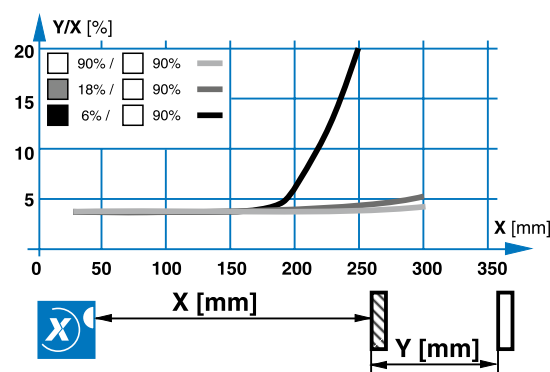
BACKGROUND SUPPRESSION

In a packaging application, the flexible mounting system of C23 sensors ensures easy installation. A background suppression type with teach function, mounted above the conveyor belt, provides highly reliable sensing. Its simple one- or two-step teach procedure optimizes initial sensor set-up. Sensing range is adjustable either via the teach button or via IO-Link. The IO-Link interface also allows stored sensitivity parameters to be updated remotely, without manual intervention.

EXTENDED SENSING RANGE, HIGH RELIABILITY
LHR: DIFFUSE SENSOR WITH BACKGROUND SUPPRESSION

* Pinpoint LED
* Contrinex optics for excellent black-on-white performance and extended sensing ranges
* 300 mm sensing range on white and gray, 250 mm on black
* Adjustment via potentiometer, teach button or IO-Link
* Dual output with stability alarm
* Mutual interference immunity
* Enclosure rating IP67, Ecolab approved

SELECTION OF PRODUCTS

PART REFERENCE	ART. NO.	SENSING RANGE	ADJUSTMENT	OUTPUT*	CONNECTION*
LHR-C23PA-PMS-403	620-600-150	10…300 mm	Potentiometer	PNP Light-ON	Connector M8 3-pin
LHR-C23PA-PMS-603	620-600-151	10…300 mm	Potentiometer	PNP Light-ON + Dark-ON	Connector M8 4-pin
LHR-C23PA-PMS-60C	620-600-152	10…300 mm	Potentiometer	PNP Light-ON + Stability alarm	Connector M8 4-pin
LHR-C23PA-TMS-403	620-600-162	10…300 mm	Teach or IO-Link	PNP Light-ON	Connector M8 3-pin
LHR-C23PA-TMS-603	620-600-163	10…300 mm	Teach or IO-Link	PNP Light-ON + Dark-ON	Connector M8 4-pin
LHR-C23PA-TMS-60C	620-600-164	10…300 mm	Teach or IO-Link	PNP Light-ON + Stability alarm	Connector M8 4-pin

* NPN versions and cable versions also available

UV TECHNOLOGY

New Contrinex patented UV technology

Received intensity

Conventional technology

Received intensity

UV light intensity is greatly reduced by transparent material, resulting in important received light intensity loss when a transparent object is in the light path. This makes detection extremely reliable and adjustment easy. With conventional technology, light intensity is only slightly reduced by transparent material. Fine adjustment is critical and detection can be unreliable with difficult materials and applications.

UNIQUE PATENTED TECHNOLOGY WITH UV LIGHT
TRU: NEW BENCHMARK IN TRANSPARENT OBJECT DETECTION

* Extremely reliable detection thanks to strong absorption of UV light by plastic and glass material
* Easy sensor set-up, even for thinnest transparent objects
* Low environmental sensitivity minimizes threshold adjustments and maximizes uptime

* Autocollimated, polarized UV light beam eliminates blind zone, allowing detection of targets close to the sensor or through a small notch
* Sensing range up to 1200 mm
* Adjustment by teach button or IO-Link
* Mutual interference immunity
* Enclosure rating IP67, Ecolab approved

SELECTION OF PRODUCTS

PART REFERENCE	ART. NO.	SENSING RANGE	ADJUSTMENT	OUTPUT*	CONNECTION
TRU-C23PA-TMK-603	620-600-312	0…1200 mm	Teach or IO-Link	PNP, Light-ON + Dark-ON	Cable 4-wire
TRU-C23PA-TMK-60D	620-600-313	0…1200 mm	Teach or IO-Link	PNP, Dark-ON + Stability alarm	Cable 4-wire
TRU-C23PA-TMS-603	620-600-316	0…1200 mm	Teach or IO-Link	PNP, Light-ON + Dark-ON	Connector M8 4-pin
TRU-C23PA-TMS-60D	620-600-317	0…1200 mm	Teach or IO-Link	PNP, Dark-ON + Stability alarm	Connector M8 4-pin

* NPN versions also available

ACCESSORIES

MOUNTING BRACKETS

LXW-C23PA-000
622-000-090

LXW-C23PA -001
622 000 091

LXW-C23PA -002
622 000 092

LXW-C23PA-003
622-000-093

REFLECTORS*
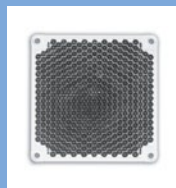
LXR-0000-025
622-000-094
∅ 25 mm

LXR-0000-084
622-000-075
∅ 82 mm

LXR-0001-064
622-000-076
60 x 41 mm

LXR-0001-065
622-000-079
60 x 51 mm

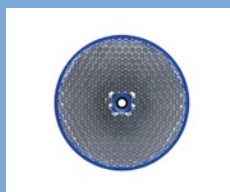LXR-0001-088
622-000-080
80 x 85 mm

LXR-0002-100
622-000-081
100 x 100 mm

* Other reflectors available

REFLECTORS FOR UV

LXU-0000-025
605-000-306
∅ 25 mm

LXU-0000-084
605-000-307
∅ 82 mm

LXU-0001-064
605-000-308
60 x 41 mm

LXU-0001-032
605-000-309
32 x 20 mm

CONNECTING CABLES**

PART REFERENCE	ART. NO.	SIZE	PINS	CONFIG.	MATERIAL	LENGTH
S08-3FVG-020	623-100-102	M8	3	Straight	PVC	2 m
S08-3FVW-020	623-100-101	M8	3	Right angle	PVC	2 m
S08-3FUG-020	623-100-106	M8	3	Straight	PUR	2 m
S08-3FUW-020	623-100-103	M8	3	Right angle	PUR	2 m

** Connector M8 4-pin and other lengths also available

Terms of delivery and right to change design reserved.

HEADQUARTERS

CONTRINEX AG Industrial Electronics
route du Paqui 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

HEMOMATIK
www.hemomatik.se

Ordertel **08-771 00 04**   Växel   08-771 02 20
Orderfax **08-771 62 00**   Teknisk 08-771 35 80
Länna, S-142 50 SKOGÅS (Stockholm)