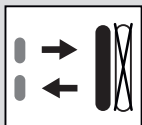


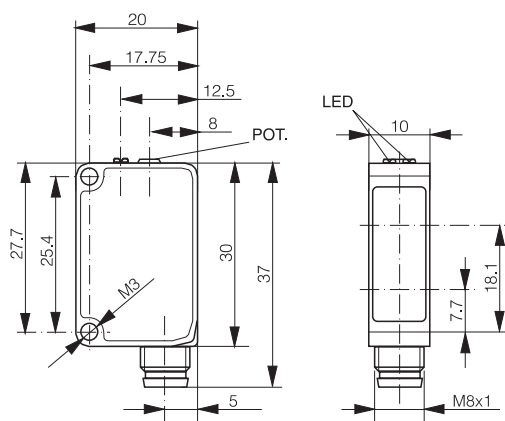
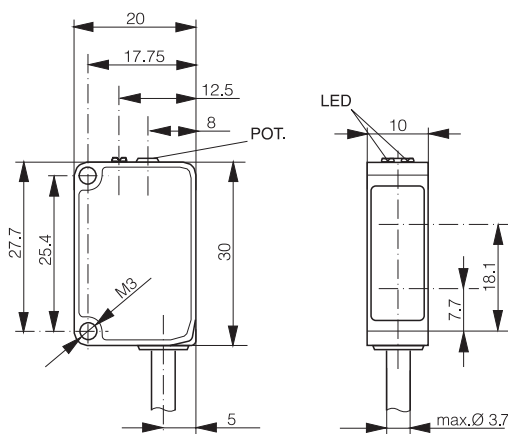


# PHOTOELECTRIC SENSOR BACKGROUND SUPPRESSION LHR-C23PA-PM



300 mm

- ✓ Miniature housing
- ✓ Sensitivity adjustment via potentiometer
- ✓ IO-Link
- ✓ Excellent black/white behavior
- ✓ Calibrated range
- ✓ Cross-talk immunity



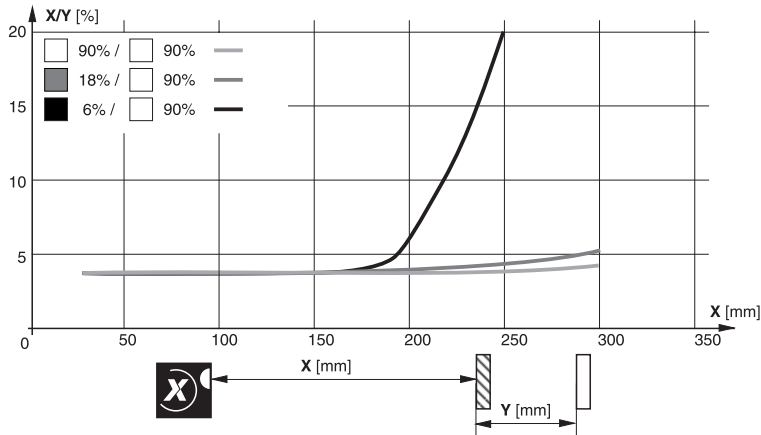
OPTICAL DATA		INTERFACE	
Sensing range max.	10...300 mm <sup>1</sup>	Sensitivity adjustment	25...300 mm, 3/4-turn pot.
Operating range	15...250 mm <sup>1</sup>	Indicator led, green	Excess gain
Light source	Pinpoint LED, red 640 nm	Indicator led, yellow	Sensing state
Light spot size (distance)	Ø 6 mm (100 mm)/Ø 10 mm (300 mm)	IO-Link	✓

<sup>1</sup>Object with 90% reflectance (standard white paper)

ELECTRICAL DATA		MECHANICAL DATA	
Supply voltage range (U <sub>b</sub> )	10...30 VDC	Enclosure rating	IP67
Residual ripple	≤ 10% V <sub>pp</sub>	Ambient temperature operation	-25...+65°C
Output current	≤ 100 mA	Shock and vibration	IEC 60947-5-2
Signal PNP high/low	≤ (U <sub>b</sub> -2.0 V)/approx. 0 V	Weight (connector version)	6 g
Signal NPN high/low	Approx. U <sub>b</sub> /≤ 2.0 V	Weight (cable version)	36 g (3-wire)/42 g (4-wire)
Power consumption (no load)	≤ 30 mA	Housing material	ABS
Response time <sup>1</sup>	≤ 500 μs (normal)/≤ 1 ms/≤ 340 μs	Window material	PMMA
Switching frequency <sup>1</sup>	≤ 1 kHz (normal)/≤ 500 Hz/≤ 1.5 kHz	Connection cable	PVC, 2 m, 3-wire or 4-wire
Short circuit protection	✓	Connector type	M8 3-pin or 4-pin
Voltage reversal protection	✓		

<sup>1</sup>By default, "Normal" mode. "Fine" and "Fast" modes selectable via IO-Link.

## BACKGROUND SHIFT

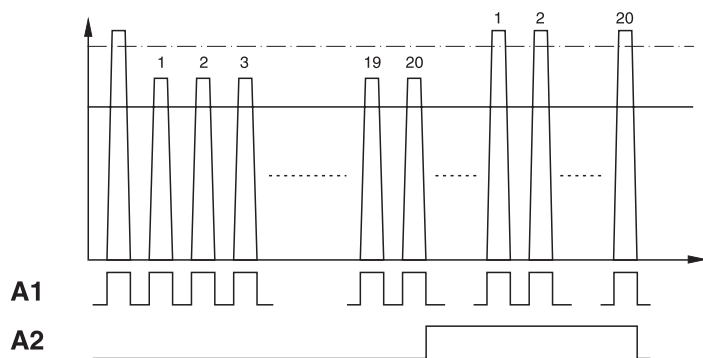


## IO-LINK FUNCTIONALITIES

## STABILITY ALARM OUTPUT (A2)

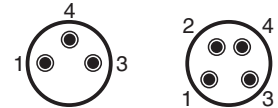
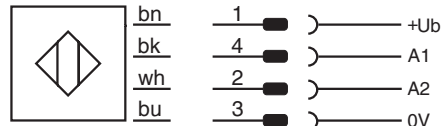
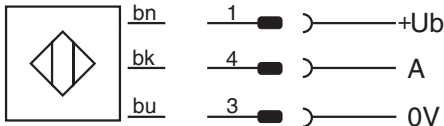
IO-Link version	1.0
SIO mode	Supported
Process data	Detection state & stability alarm
Baudrate	COM2 (38.4 kBaud)
Special functions	Output configuration, output timing, sensor mode, detection counter, event flags, maximum and actual sensor temperature

IO-Link specifications and IODD files may be downloaded from [www.contrinex.com](http://www.contrinex.com) (Download section)



## WIRING DIAGRAM

## PIN ASSIGNMENT



## AVAILABLE TYPES

Part number	Part reference	Polarity	Connection	Output (A1)	Output (A2)
620 600 144	LHR-C23PA-PMK-403	PNP	PVC, 2 m, 3-wire	Light-on/IO-Link	-
620 600 145	LHR-C23PA-PMK-603	PNP	PVC, 2 m, 4-wire	Light-on/IO-Link	Dark-on
620 600 146	LHR-C23PA-PMK-60C	PNP	PVC, 2 m, 4-wire	Light-on/IO-Link	Stability alarm
620 600 147	LHR-C23PA-PMK-301	NPN	PVC, 2 m, 3-wire	Light-on	-
620 600 148	LHR-C23PA-PMK-101	NPN	PVC, 2 m, 4-wire	Light-on	Dark-on
620 600 149	LHR-C23PA-PMK-10A	NPN	PVC, 2 m, 4-wire	Light-on	Stability alarm
620 600 150	LHR-C23PA-PMS-403	PNP	Connector M8 3-pin	Light-on/IO-Link	-
620 600 151	LHR-C23PA-PMS-603	PNP	Connector M8 4-pin	Light-on/IO-Link	Dark-on
620 600 152	LHR-C23PA-PMS-60C	PNP	Connector M8 4-pin	Light-on/IO-Link	Stability alarm
620 600 153	LHR-C23PA-PMS-301	NPN	Connector M8 3-pin	Light-on	-
620 600 154	LHR-C23PA-PMS-101	NPN	Connector M8 4-pin	Light-on	Dark-on
620 600 155	LHR-C23PA-PMS-10A	NPN	Connector M8 4-pin	Light-on	Stability alarm

Note: additional suffix can appear to indicate a revision version or a special version.

These proximity switches **must not be used** in applications where the **safety of people** is dependent on their functioning. Terms of delivery and rights to change design reserved.