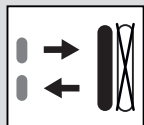




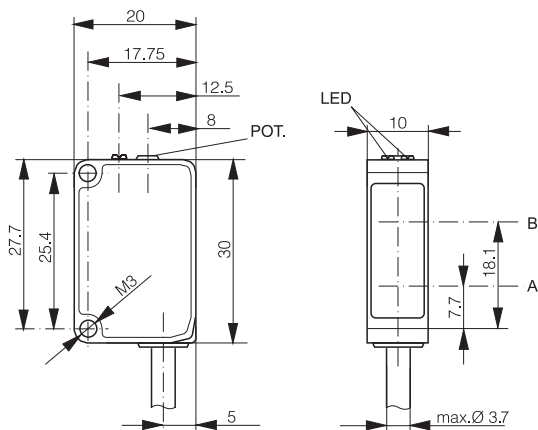
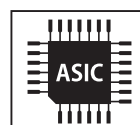
PHOTOELECTRIC SENSOR BACKGROUND SUPPRESSION LHR-C23PA-PM



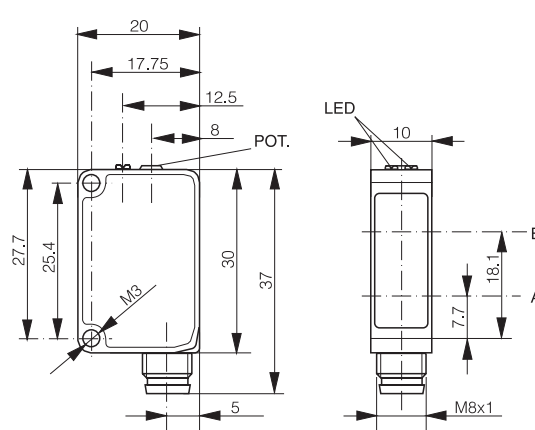
300 mm

- ✓ Miniature housing
- ✓ Sensitivity adjustment via potentiometer
- ✓ IO-Link
- ✓ Excellent black/white behavior
- ✓ Immunity to mutual interferences

HM 1607



A: emitter axis B: receiver axis



A: emitter axis B: receiver axis

OPTICAL DATA

Sensing range typ. max.	10...300 mm ¹
Operating range	15...250 mm ¹
Light source	Pinpoint LED, red 640 nm
Light spot size (distance)	Ø 6 mm (100 mm)/Ø 10 mm (300 mm)

¹Object with 90% reflectance (standard white paper)

INTERFACE

Sensitivity adjustment	30...300 mm, 3/4-turn pot.
Indicator LED, green	Excess gain
Indicator LED, yellow	Sensing state
IO-Link	✓

ELECTRICAL DATA

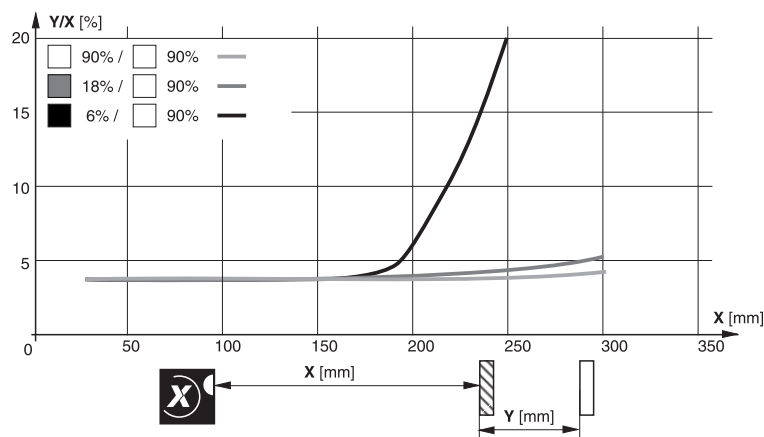
Supply voltage range (U _b)	10...30 VDC
Residual ripple	≤ 10% V _{pp}
Output current	≤ 100 mA
Signal PNP high/low	≤ (U _b -2.0 V)/approx. 0 V
Signal NPN high/low	Approx. U _b /≤ 2.0 V
Power consumption (no load)	≤ 30 mA
Response time ¹	≤ 500 μs (normal)/≤ 1 ms/≤ 340 μs
Switching frequency ¹	≤ 1 kHz (normal)/≤ 500 Hz/≤ 1.5 kHz
Short circuit protection	✓
Voltage reversal protection	✓

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

MECHANICAL DATA

Enclosure rating	IP67
Ambient temperature operation	-25...+65°C
Shock and vibration	IEC 60947-5-2
Weight (connector version)	6 g
Weight (cable version)	36 g (3-wire)/42 g (4-wire)
Housing material	ABS
Window material	PMMA
Connection cable	PVC, 2 m, 3-wire or 4-wire
Connector type	M8 3-pin or 4-pin

BACKGROUND SHIFT

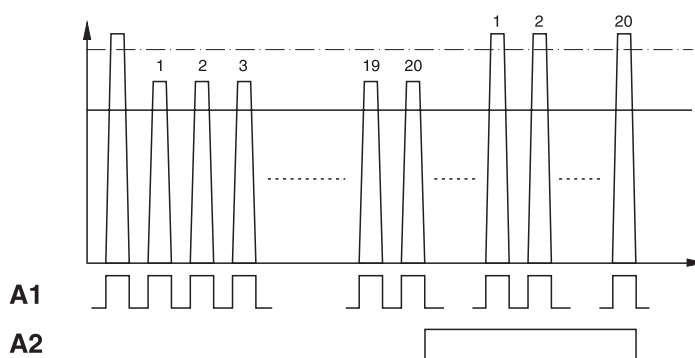


IO-LINK FUNCTIONALITIES

STABILITY ALARM OUTPUT (A2)

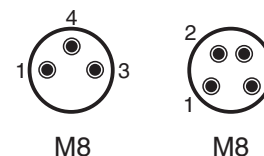
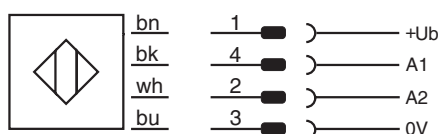
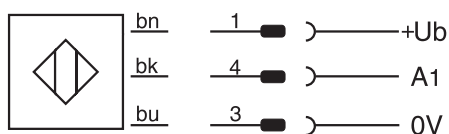
IO-Link version	1.0
SIO mode	Supported
Process data	Detection state & stability alarm
Baudrate	COM2 (38.4 kBaud)
Special functions	Output configuration, output timing, sensor mode, detection counter, event flags, maximum and actual sensor temperature

IO-Link specifications and IODD files may be downloaded from www.contrinex.com (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.

Operators of the products we supply are responsible for compliance with measures for the protection of persons. The use of our equipment in applications where the safety of persons might be at risk is only authorized if the operator observes and implements separate, appropriate and necessary measures for the protection of persons and machines. Terms of delivery and rights to change design reserved.