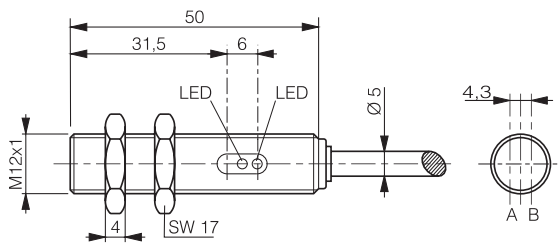
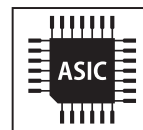


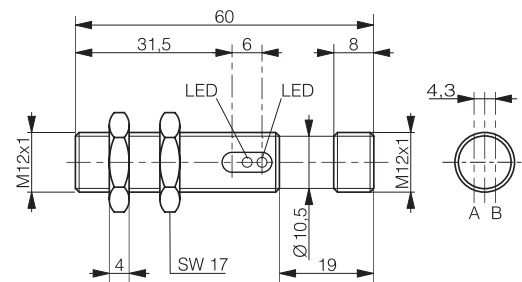
4000 mm

- ✓ M12 metal housing
- ✓ Sensitivity adjustment via IO-Link
- ✓ Focused RED light source
- ✓ Calibrated range
- ✓ Immune to mutual interference
- ✓ IO-Link v1.0



A: emitter axis B: receiver axis

LRR-M12MA-NMK-xxx



A: emitter axis B: receiver axis

LRR-M12MA-NMS-xxx

OPTICAL DATA		INTERFACE	
Sensing range typ. max.	15...4000 mm	Sensitivity adjustment	500...4000 mm, IO-Link only
Operating range	20...3200 mm	Indicator LED, green	Excess gain
Light source	LED, red 645 nm	Indicator LED, yellow	Sensing state
Light spot size (distance)	□ 20 mm (0.5 m) / □ 80 mm (2 m)	IO-Link	✓
		MTTF (@40°C)	686

¹Object with 90% reflectance (standard white paper)

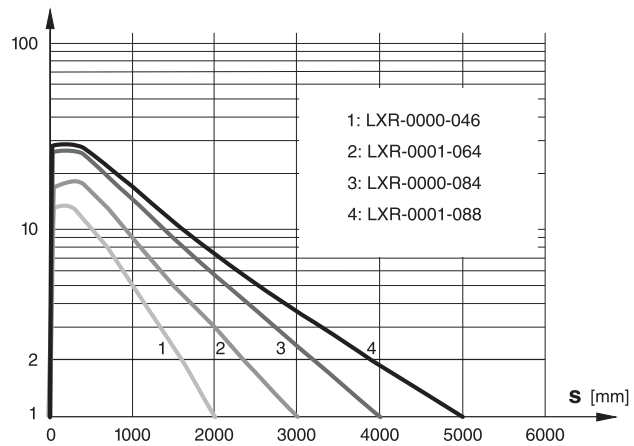
ELECTRICAL DATA		MECHANICAL DATA	
Supply voltage range (U _b)	10...30 VDC	Enclosure rating	IP 67
Residual ripple	≤ 10% V _{pp}	Ambient temperature operation	-25...+65 °C
Output current	≤ 200 mA	Shock and vibration	IEC 60947-5-2
Signal PNP high/low	≤ (U _b -2.0 V)/approx. 0 V	Housing material	Chrome-plated brass
Signal NPN high/low	Approx. U _b /≤ 2.0 V	Window material	PMMA
Power consumption (no load)	≤ 15mA		
Response time ¹	≤ 300 μs (normal) / ≤ 1 ms / ≤ 100 μs		
Switching frequency ¹	≤ 1.5 kHz (normal) / ≤ 500 Hz / ≤ 5 kHz		
Short circuit protection	✓		
Voltage reversal protection	✓		

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

SENSING RANGE

EXCESS GAIN

Target	Operating range	Sensing range max.
LXR-0000-046	70...1600 mm	60...2000 mm
LXR-0001-064	50...2400 mm	40...3000 mm
LXR-0000-084	20...3200 mm	15...4000 mm
LXR-0001-088	70...4000 mm	15...5000 mm



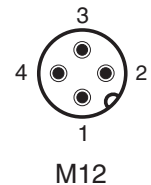
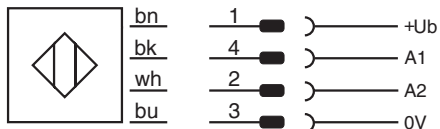
IO-LINK FUNCTIONALITIES

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)	Weight
620-600-410	LRR-M12MA-NMS-603	PNP	M12 4-pin	Light-on/IO-Link	Dark-on	14.3 g
620-600-411	LRR-M12MA-NMS-101	NPN	M12 4-pin	Light-on	Dark-on	14.3 g
620-600-408	LRR-M12MA-NMK-603	PNP	PVC, 2m, 4 wire	Light-on/IO-Link	Dark-on	79 g
620-600-409	LRR-M12MA-NMK-101	NPN	PVC, 2m, 4 wire	Light-on	Dark-on	79 g

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

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