

LS 97/4D.E-S12.Y1

Throughbeam photoelectric sensor receiver

en 01-2018/09 50138087

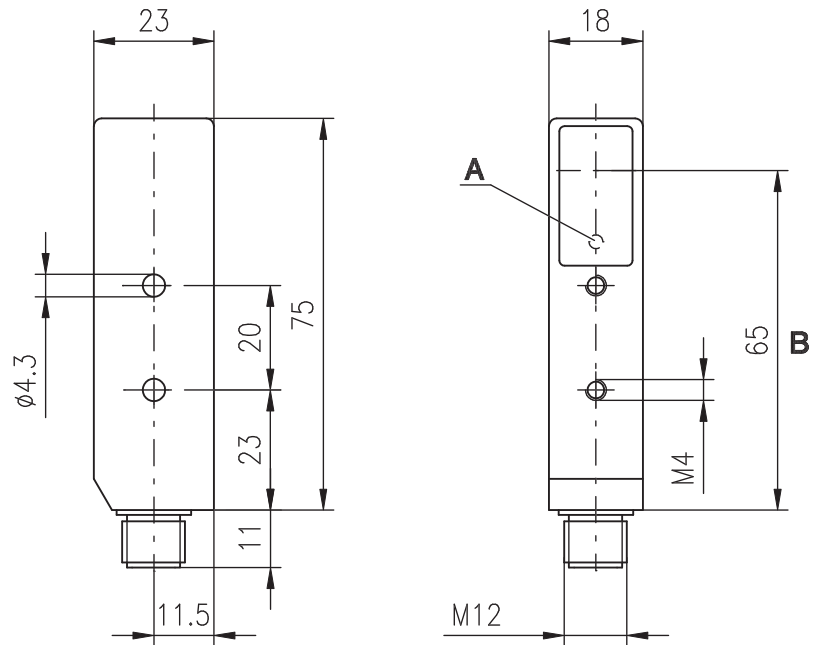


4m



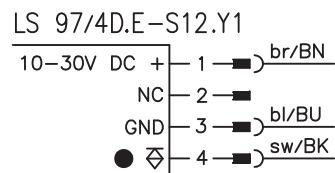
- Receiver with high resolution
- Together with LSSRL 8-S12.Y1 forms a light curtain with a detection range of approx. 12 mm
- Small construction with glass cover and robust metal housing for protection against environmental influences
- Connection via M12 connector
- Additional indicator diode on the front part (for exact alignment)

Dimensioned drawing



- A** Indicator diode
- B** Optical axis

Electrical connection



We reserve the right to make changes • PAL_LS97_4DES12Y1_en_50138087.fm



Accessories:

(available separately)

- M12 connectors (KD ...)
- Ready-made cables (KD ...)

Specifications

Optical data

Typ. operating range limit ¹⁾	0 ... 4.0m
Operating range ²⁾	0 ... 3.0m
Light source transmitter	Laser class 2
Wavelength transmitter	655nm (visible red light)
Detection range	approx. 12mm
Resolution	≥ 6mm diameter (object size)

Timing

Switching frequency	200Hz
Response time	2.5ms
Delay before start-up	≤ 100ms

Electrical data

Operating voltage U_B	10 ... 30VDC (incl. residual ripple)
Residual ripple	≤ 15% of U_B
Bias current	≤ 40mA
Switching output	PNP transistor output
Function characteristics	dark switching
Signal voltage high/low	≥ ($U_B - 2V$) / ≤ 2V
Output current	max. 100mA
Sensitivity	permanently set

Indicators

LED yellow	light path free
LED yellow flashing	light path free, no performance reserve

Mechanical data

Housing	diecast zinc
Optics cover	glass
Weight	85g
Connection type	M12 connector 4-pin, stainless steel

Environmental data

Ambient temp. (operation/storage)	-20°C ... +60°C / -30°C ... +70°C
Protective circuit ³⁾	2, 3
safety class	III
Protection class	IP 67
Standards applied	IEC 60947-5-2

1) Typ. operating range limit: max. attainable range without performance reserve

2) Operating range: recommended range with performance reserve

3) 2=polarity reversal protection, 3=short-circuit protection for all outputs

Tables

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0	3	4
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<input type="checkbox"/>	Operating range [m]
<input type="checkbox"/>	Typ. operating range limit [m]

Diagrams

Order guide

	Designation	Part no.
With M12 connector		
Receiver	LS 97/4D.E-S12.Y1	50137742
Dedicated Transmitter	LSSRL 8-S12.Y1	50137743

Remarks

Operate in accordance with intended use!

- ⚠ This product is not a safety sensor and is not intended as personnel protection.
- ⚠ The product may only be put into operation by competent persons.
- ⚠ Only use the product in accordance with the intended use.