

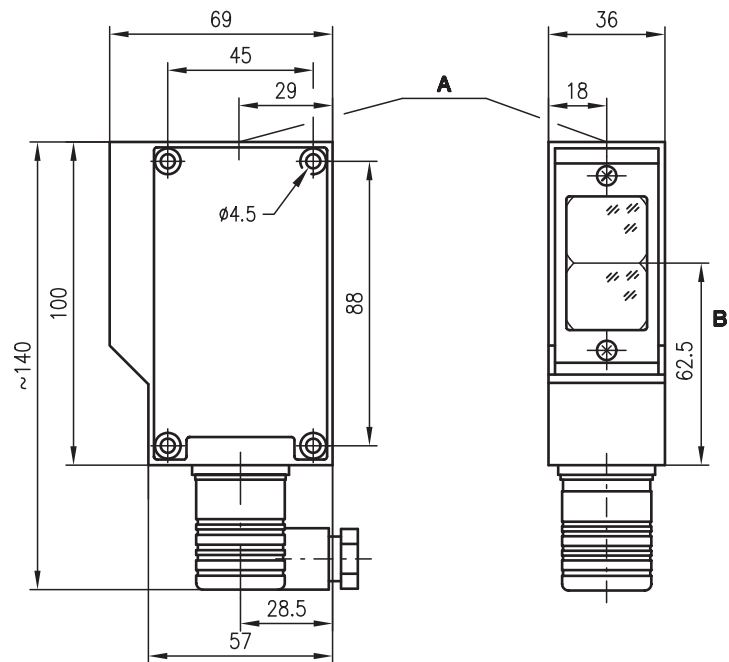


LS 85

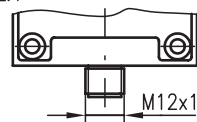
Throughbeam photoelectric sensors



Dimensioned drawing



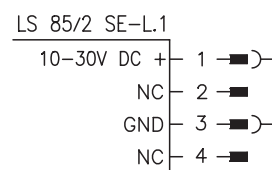
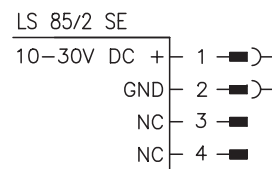
LS 85/4 E-L.1
LS 85/2 SE-L.1



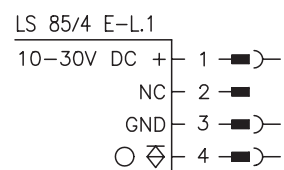
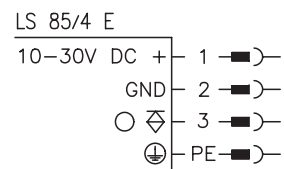
- A Indicator diode only at receiver
- B Optical axis

Electrical connection

Transmitter



Receiver



0 ... 65m



- Voltage ranges: 10 ... 30VDC and 24VDC
- Light switching and delay before start-up for optimal adaptation to applications
- Connection via M12 connector or standard plug with screw connector up to 1.5mm²



Accessories:

(available separately)

- Mounting systems (BT 85)
- M12 connectors (KD ...)
- Alignment aid ARH 2

We reserve the right to make changes • 85_a01e.fm



Specifications

Optical data

Typ. operating range limit ¹⁾	0 ... 65m
Operating range ²⁾	0 ... 50m
Light source	LED (modulated light)
Wavelength	880nm

Timing

Sensor switching frequency	100Hz
Sensor response time	2.5ms
Delay before start-up	≤ 200ms

Electrical data

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

Indicators

LED yellow	light path free, alignment aid
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Mechanical data

Housing	diecast aluminium
Weight	transmitter 350g, receiver 350g
Optics cover	glass
Connection type	M12 connector or standard plug with screw connector up to 1.5mm ²

Environmental data

Ambient temp. (operation/storage) ³⁾	-20°C ... +60°C / -30°C ... +70°C
Protective circuit ⁴⁾	1, 2, 3
VDE safety class	I, all-insulated (standard plug), III, all-insulated (M12 connector)
Protection class	IP 65
LED class	1 (acc. to EN 60825-1)
Standards applied	IEC 60947-5-2

Options

De-humidifying system	to prevent condensation on the optics (due to temperature changes)
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- 1) Typ. operating range limit: max. attainable range without performance reserve
- 2) Operating range: recommended range with performance reserve
- 3) -30°C with operating voltage continuously applied
- 4) 1=transient protection, 2=polarity reversal protection, 3=short circuit protection

Tables

Diagrams

Order guide

Selection table		Order code →					
Equipment ↓		LS 85/4 Part No. 500 00246 (Tr) Part No. 500 00248 (Re)	LS 85/4 L 1 Part No. 500 20263 (Tr) Part No. 500 20264 (Re)				
Housing	metal	●	●				
Connection	standard plug	●					
	M12 connector ¹⁾		●				
Features							
Voltage supply	10 ... 30VDC	●	●				
Switching output	PNP	●	●				
Dehumidification		●	●				

1) not part of the delivery contents

Remarks