



LS 85

Throughbeam photoelectric sensors



65m

230 V
AC

- AC version 230VAC with relay output
- Special voltages for universal application
- Light switching and delay before start-up for optimal adaptation to applications
- Connection via standard plug with screw connector up to 1.5mm²

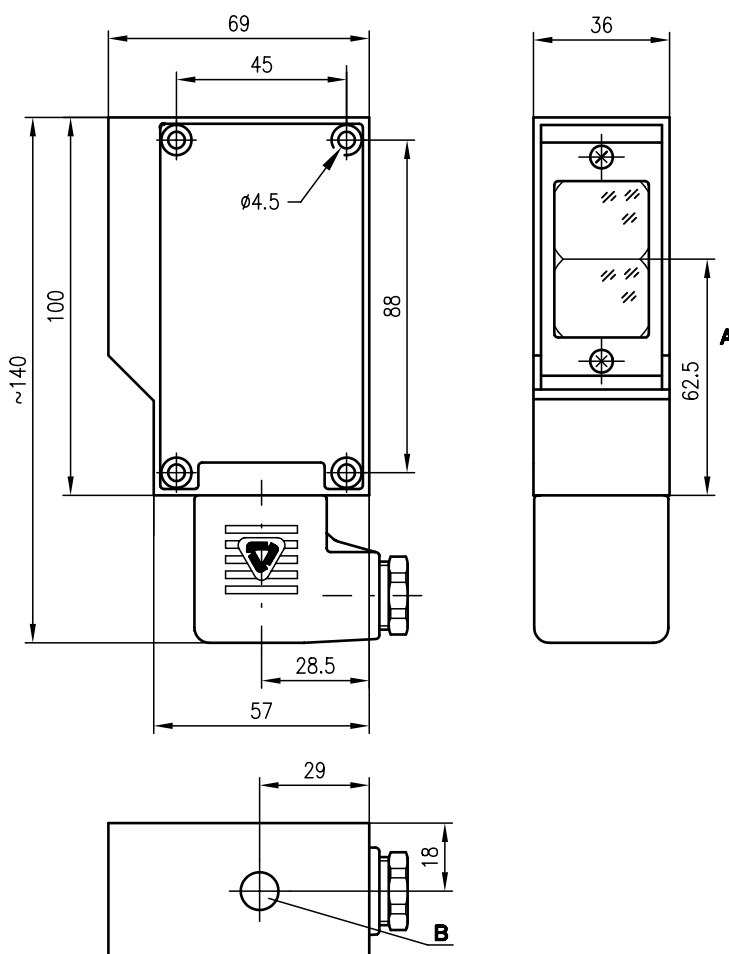


Accessories:

(available separately)

- Mounting systems (BT 85)
- Alignment aid ARH 2

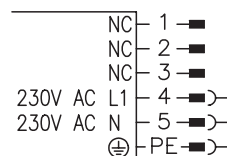
Dimensioned drawing



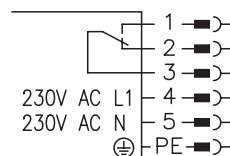
- A Optical axis
B Indicator diode

Electrical connection

Transmitter



Receiver





Specifications

Optical data

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

Timing

Sensor switching frequency	20 Hz
Sensor response time	25 ms
Delay before start-up	≤ 200 ms

Electrical data

Operating voltage U_B	230 VAC ± 10% 50/60 Hz
Power consumption	2.5 VA/3 VA
Switching output	relay, 1 change-over contact
Function characteristics	light switching
Switching voltage, relay	250 VAC/DC
Switching current, relay	250 VAC 3 A / 30 V DC 3 A
Switching power, relay	250 VAC – 50 W 250 VAC 60 VA ind. load

Indicators

LED yellow	light path free, alignment aid
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Mechanical data

Housing	diecast aluminium
Weight	transmitter 460 g, receiver 480 g
Optics cover	glass
Connection type	standard plug with screw connector up to 1.5 mm 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
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

	Designation	Part No.
Transmitter and receiver	LS 85/7	
Transmitter	LS 85/7 SE	500 00250
Receiver	LS 85/7 E	500 00251

Remarks