

LS 64

Throughbeam photoelectric sensors

Dimensioned drawing

en 05-2014/08 50127330



0 ... 60m
0 ... 120m



- Throughbeam photoelectric sensor with infrared light
- 4-way LED indicator for fast status display and exact alignment
- Activation input for function testing and linking several optical axes
- Connection via M12 connector and plug

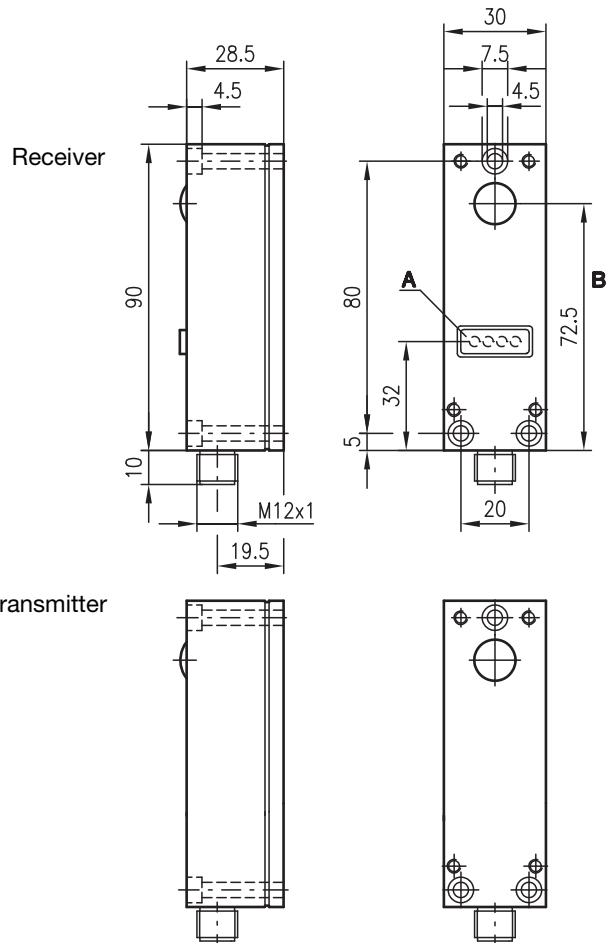
We reserve the right to make changes • DS_LS64_48L1_en_50127330.fm



Accessories:

(available separately)

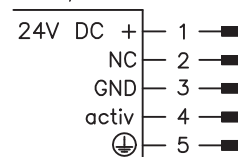
- Mounting systems (BT 64)
- Diaphragm (BL 64)
- M12 connectors (KD ...)
- Ready-made cables (K-D M12 ...)



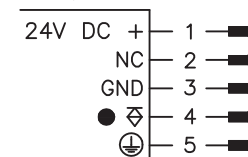
- A** Indicator diodes
- B** Optical axis

Electrical connection

LS 64/2.8 Se-L
LS 64/2.8 Se-L.1



LS 64/4 E-L



Specifications

Optical data	LS 64/4.8 L	LS 64/4.8 L.1
Typ. operating range limit 1)	0 ... 60m	0 ... 120m
Operating range 2)	0 ... 50m	0 ... 100m
Light source	LED (modulated light)	
Wavelength	880nm	
Timing		
Switching frequency	100Hz	
Response time	≤ 5ms	
Delay before start-up	≤ 100ms	
Electrical data		
Operating voltage U _B	24VDC ± 20%	
Residual ripple	≤ 10% of U _B	
Bias current		
Transmitter	≤ 65mA	
Receiver	≤ 35mA	
Switching output	PNP transistor	
Function characteristics	light switching	
Output current	max. 100mA	
Indicators		
Receiver		
4-fold LED red	switching state and alignment aid	
Function characteristics	off: no signal - output=low	
	LEDs on: number of illuminating LEDs as indicator	
	for receiving level - output=high	
Mechanical data		
Housing	diecast aluminium	
Optics	glass	
Weight	430g	
Connection type	M12 connector, stainless steel, 5-pin	
Environmental data		
Ambient temp. (operation/storage)	-20°C ... +60°C/-40°C ... +70°C	
Protective circuit 3)	1, 2, 3	
Protection class	IP 65	
Light source	exempt group (in acc. with EN 62471)	
Standards applied	IEC 60947-5-2	
Options		
Activation input activ		
Transmitter active/not active	≥ 8V/≤ 2V or not connected	
Activation/disable delay	0.5ms	

1) Typ. operating range limit: max. attainable range without performance reserve
 2) Operating range: recommended range with performance reserve
 3) 1=transient protection, 2=polarity reversal protection, 3=short-circuit protection for all outputs

Order guide

	Designation	Part No.
With M12 connector		
Transmitter and receiver	LS 64/4.8 L	
Transmitter	LS 64/2.8 Se-L	50029414
Receiver	LS 64/4 E-L	50029415
Transmitter and receiver	LS 64/4.8 L.1	
Transmitter	LS 64/2.8 Se-L.1	50029416
Receiver	LS 64/4 E-L	50029415

Tables

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.

- Optimal performance reserve is achieved when all four LEDs illuminate.
- The first red LED indicates the state of the switching output.
- The diameter of the darkening object must be ≥ 12mm.
- Operating range with diaphragm

LS 64/4.8 L	0 ... 2m
LS 64/4.8 L.1	0 ... 4m