LS 64 — Throughbeam photoelectric sensors

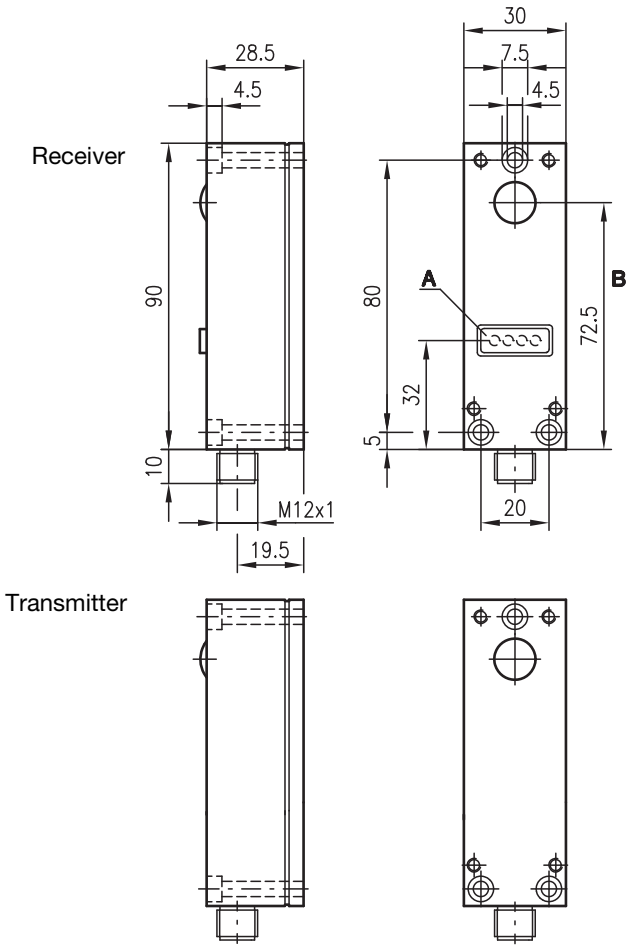
en 05-2014/08 50127330

0 … 60m
0 … 120m

24 V
DC

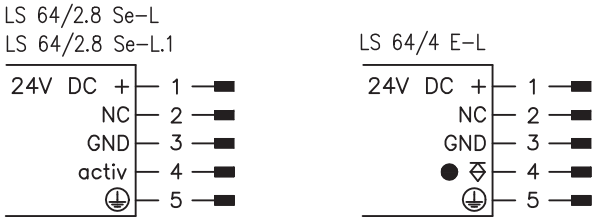
- Throughbeam photoelectric sensor with infrared light
- 4-way LED indicator for fast status display and exact alignment
- Activation input for function testing and linking several optical axes
- Connection via M12 connector and plug

Dimensioned drawing



A Indicator diodes
B Optical axis

Electrical connection



IEC 60947... IEC 60947... IP 65

Accessories:

(available separately)

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

Specifications

	LS 64/4.8 L	LS 64/4.8 L.1
Optical data		
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

Tables

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

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