

LS 64

Throughbeam photoelectric sensors

en 05-2014/08 50127330

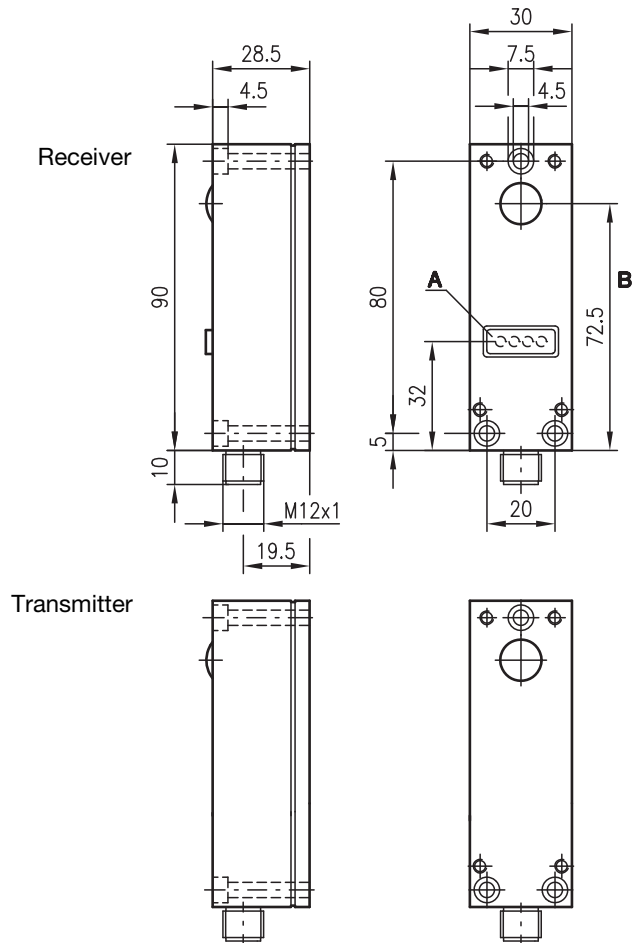


0 ... 60m
0 ... 120m

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

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

24V DC +	1	■
NC	2	■
GND	3	■
activ	4	■
⊕	5	■

LS 64/4 E-L

24V DC +	1	■
NC	2	■
GND	3	■
● ⊕	4	■
⊕	5	■

Accessories:

(available separately)

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

We reserve the right to make changes • DS_LS64_48L1_en_50127330.fm



Specifications

Optical data

Typ. operating range limit ¹⁾
Operating range ²⁾
Light source
Wavelength

LS 64/4.8 L

0 ... 60m
0 ... 50m
LED (modulated light)
880nm

LS 64/4.8 L.1

0 ... 120m
0 ... 100m

Timing

Switching frequency
Response time
Delay before start-up

100Hz
≤ 5ms
≤ 100ms

Electrical data

Operating voltage U_B
Residual ripple
Bias current
Transmitter
Receiver
Switching output
Function characteristics
Output current

24VDC ± 20%
≤ 10% of U_B
≤ 65mA
≤ 35mA
PNP transistor
light switching
max. 100mA

Indicators

Receiver
4-fold LED red
Function characteristics

switching state and alignment aid
off: no signal - output=low
LEDs on: number of illuminating LEDs as indicator
for receiving level - output=high

Mechanical data

Housing
Optics
Weight
Connection type

diecast aluminium
glass
430g
M12 connector, stainless steel, 5-pin

Environmental data

Ambient temp. (operation/storage)
Protective circuit ³⁾
Protection class
Light source
Standards applied

-20°C ... +60°C/-40°C ... +70°C
1, 2, 3
IP 65
exempt group (in acc. with EN 62471)
IEC 60947-5-2

Options

Activation input activ
Transmitter active/not active
Activation/disable delay

≥ 8V/≤ 2V or not connected
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

With M12 connector

Transmitter and receiver
Transmitter
Receiver

Designation

LS 64/4.8 L
LS 64/2.8 Se-L
LS 64/4 E-L

Part No.

50029414
50029415

Transmitter and receiver
Transmitter
Receiver

LS 64/4.8 L.1
LS 64/2.8 Se-L.1
LS 64/4 E-L

50029416
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