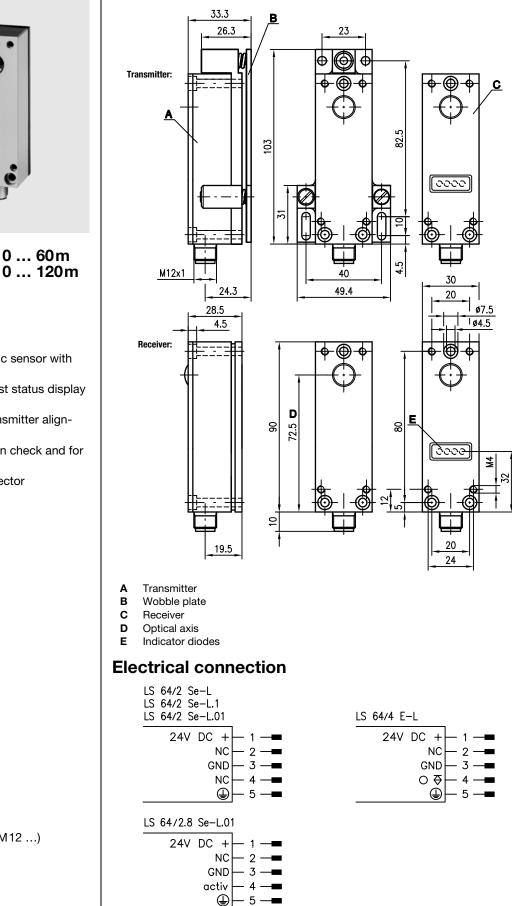
#### Throughbeam photoelectric sensors

### **Dimensioned drawing**



03-2015/06 50119301 en

24 V

LS 64



- Throughbeam photoelectric sensor with infrared light
- 4-way LED indicator for fast status display and exact alignment
- Integrated mechanical transmitter alignment aid
- Activation input for function check and for • linking several axes
- Connection via M12 connector





#### Accessories:

- (available separately)
- M12 connectors (KD ... )
- Ready-made cables (K-D M12 ...)

We reserve the right to make changes • DS\_LS64\_4L1\_en\_50119301.fm

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LS 64/4 L, LS 64/4 L.1- 03 LS 64/4.8 L.01 - 03

| Specifications                                                                                                                                                              |                                                                                                                                                                                                                           |                                                                                                                   | Tables  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|---------|
|                                                                                                                                                                             |                                                                                                                                                                                                                           | LS 64/4 L.1                                                                                                       |         |
| <b>Optical data</b><br>Typ. operating range limit <sup>1)</sup><br>Operating range <sup>2)</sup><br>Light source<br>Wavelength                                              | <b>LS 64/4 L</b><br>0 60m<br>0 50m<br>LED (modulated lig<br>880nm                                                                                                                                                         | <b>LS 64/4.8 L.01</b><br>0 120m<br>0 100m                                                                         |         |
| <b>Timing</b><br>Switching frequency<br>Response time<br>Delay before start-up                                                                                              | 100Hz<br>≤ 5ms<br>≤ 100ms                                                                                                                                                                                                 |                                                                                                                   |         |
| Electrical data<br>Operating voltage U <sub>B</sub><br>Residual ripple<br>Open-circuit current<br>Transmitter<br>Receiver<br>Switching output<br>Function<br>Output current | $\begin{array}{l} 24 \text{VDC} \pm 20 \% \\ \leq 10 \% \text{ of } \text{U}_{\text{B}} \\ \leq 65 \text{ mA} \\ \leq 35 \text{ mA} \\ \text{PNP transistor} \\ \text{light switching} \\ \text{max. 100 mA} \end{array}$ |                                                                                                                   |         |
| Indicators<br>Receiver                                                                                                                                                      |                                                                                                                                                                                                                           |                                                                                                                   |         |
| 4-fold LED red<br>Function                                                                                                                                                  | LEDs on: nu                                                                                                                                                                                                               | l alignment aid<br>signal - output=low<br>mber of illuminating LEDs as indicator<br>receiving level - output=high | Diagrar |
| Mechanical data                                                                                                                                                             |                                                                                                                                                                                                                           |                                                                                                                   |         |
| Housing<br>Optics<br>Weight<br>Connection type<br>Transmitter alignment aid                                                                                                 | diecast aluminum<br>glass<br>430g<br>M12 connector, sta<br>Integrated wobble                                                                                                                                              | ainless steel, 5-pin<br>olate                                                                                     |         |
| Environmental data<br>Ambient temp. (operation/storage)<br>Protective circuit <sup>3)</sup><br>Degree of protection<br>Light source<br>Standards applied                    | -20°C +60°C/-40°C +70°C<br>1, 2, 3<br>IP 65<br>exempt group (in acc. with EN 62471)<br>IEC 60947-5-2                                                                                                                      |                                                                                                                   |         |
| Options<br>Activation input active<br>Transmitter active/not active<br>Activation/disable delay                                                                             | ≥ 8V/≤ 2V or not co<br>0.5ms                                                                                                                                                                                              | onnected                                                                                                          |         |

a) 1=transient protection, 2=polarity reversal protection, 3=short circuit protection for all outputs

## **Order guide**

|                                                                                                      | Designation                                        | Part no.             |
|------------------------------------------------------------------------------------------------------|----------------------------------------------------|----------------------|
| <b>Operating range 60m</b><br>Transmitter and receiver<br>Transmitter                                | LS 64/4 L<br>LS 64/2 Se-L                          | 50031557             |
| Receiver                                                                                             | LS 64/4 E-L                                        | 50029415             |
| <b>Operating range 120m</b><br>Transmitter and receiver<br>Transmitter<br>Receiver                   | LS 64/4 L.1<br>LS 64/2 Se-L.1<br>LS 64/4 E-L       | 50031558<br>50029415 |
| <b>Operating range 120m, activation input</b><br>Transmitter and receiver<br>Transmitter<br>Receiver | LS 64/4.8 L.01<br>LS 64/2.8 Se-L.01<br>LS 64/4 E-L | 50129554<br>50029415 |

#### **Remarks**

# Operate in accordance with intended use! This product is not a safety sensor The product may only be put into operation by competent persons. Solution of the product in accor-

- dance with the intended use.
- Optimal function reserve is achieved when all four LEDs illuminate.
- The first red LED indicates • the state of the switching output.
- Blackening object diameter must be  $\geq 12$  mm.

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LS 64

ms