



## LS 05

## Throughbeam photoelectric sensors



150mm

mini

VA  
Edelstahl

- Small construction volume enables application in small spaces
- Scratch resistant glass cover
- High insensitivity towards soiling and shocks
- Through selection of appropriate amplifiers optimally adaptable to applications
- Stainless steel version

ISO  
9001

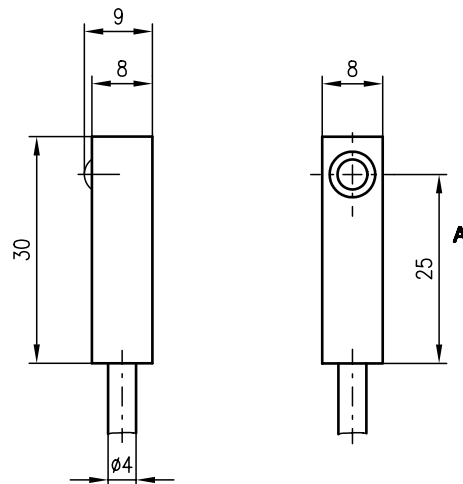


### Accessories:

(available separately)

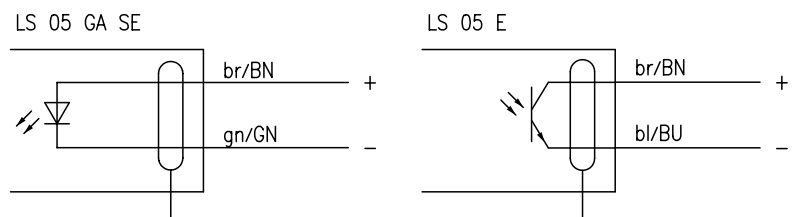
- Amplifier for mini photoelectric sensors, e.g.
  - VS 9/1 (Part No. 500 00632)
  - IVS 9/4.8 (Part No. 500 12303)
  - VS 27/24 (Part No. 500 82005)
  - IVS 28/44.8 (Part No. 500 19808)

### Dimensioned drawing



A Optical axis

### Electrical connection



Remark for receiver connection:  
 brown (br/BN) = white (ws/WH)  
 blue (bl/BU) = yellow (ge/YE)



### Specifications

#### Optical data

|                               |                       |
|-------------------------------|-----------------------|
| Operating range <sup>1)</sup> | 0 ... 150mm           |
| Light source                  | LED (modulated light) |
| Wavelength                    | 880nm                 |

#### Electrical data

|                                  |                      |
|----------------------------------|----------------------|
| Transmitter                      | GaAs                 |
| Transmitting current             | max. 200mA at D=0.05 |
| Receiver                         | Si phototransistor   |
| Inverse voltage U <sub>CEO</sub> | max. 35VDC           |

#### Mechanical data

|                     |                               |                         |
|---------------------|-------------------------------|-------------------------|
| Housing             | <b>Transmitter</b>            | <b>Receiver</b>         |
| Optics              | aluminium anodised            | natural colour anodised |
| Weight              | glass                         |                         |
| Cable length        | approx. 70g                   |                         |
| Cable cross-section | 2000mm                        |                         |
|                     | 2x0.14mm <sup>2</sup> +shield |                         |

#### Environmental data

|                                   |                                 |
|-----------------------------------|---------------------------------|
| Ambient temp. (operation/storage) | -20°C ... +60°C/-30°C ... +70°C |
| Protection class                  | IP 64                           |

1) The operating range of the throughbeam photoelectric sensor LS 05 GA depends on the selected amplifier

### Tables

### Diagrams

### Order guide

|                                | <b>Designation</b> | <b>Part No.</b> |
|--------------------------------|--------------------|-----------------|
| Transmitter and receiver       | LS 05 GA-G         |                 |
| Transmitter                    | LS 05 GA Se        | 500 00188       |
| Receiver                       | LS 05 E            | 500 00184       |
| <b>Stainless steel version</b> |                    |                 |
| Transmitter and receiver       | LS 05.5            |                 |
| Transmitter                    | LS 05 Se.5         | 500 60871       |
| Receiver                       | LS 05 E.5          | 500 60969       |

### Remarks

- If a cable lengthening should be necessary, make sure that the shield is lead continuously.