



## LS 29

## Throughbeam photoelectric sensor



0 ... 35m



- High performance throughbeam photoelectric sensor for connection to separate amplifier
- Round metal housing M12x1 with protection class IP 67
- 90° deflection via extension unit
- Alignment aid through LED indicator on the transmitter
- Penetration of multilayered coloured foils, in connection with VS 29/44.8

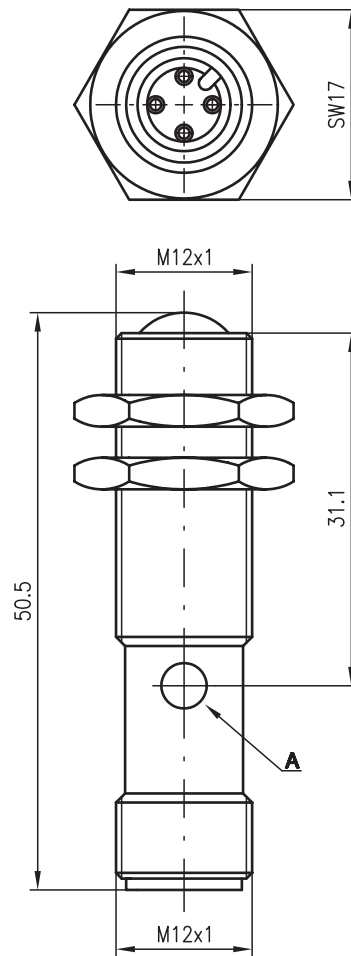


### Accessories:

(available separately)

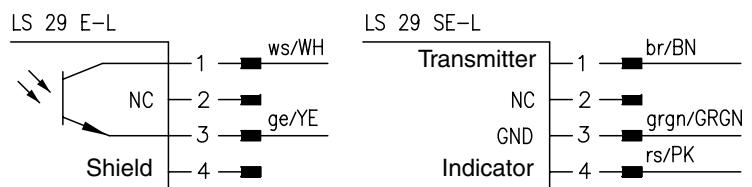
- Amplifier VS 29/44.8 (Part No. 500 80860)
- Diaphragm BL 29 hole Ø1 mm (Part No. 500 82260)
- Deflection mirror US 29 (Part No. 500 80863)
- Cable for transmitter:
  - BK7 KB-029-5000-3-SE (Part No. 500 80864)
  - BK7 KB-029-5000-3A-SE (Part No. 500 81156)
- Cable for receiver:
  - BK7 KB-029-5000-2-E (Part No. 500 81157)
  - BK7 KB-029-5000-2A-E (Part No. 500 81158)

### Dimensioned drawing



A Indicator diode

### Electrical connection





### Specifications

#### Optical data

Operating range <sup>1)</sup> see table  
 Light source LED (modulated light)  
 Wavelength 880nm

#### Timing

Switching frequency see amplifier  
 Response time see amplifier  
 Delay before start-up see amplifier

#### Electrical data

Pre-amplifier integrated in receiver  
 Operating voltage only via separate amplifier

#### Indicators

LED yellow (on transmitter) light path free, alignment aid

#### Mechanical data

Housing M12 stainless steel  
 Optics glass  
 Weight 12g each  
 Connection type M12 connector  
 Cable see remarks

#### Environmental data

Ambient temp. (operation/storage) -25°C ... +60°C/-30°C ... +70°C  
 Protection class IP 67  
 Standards applied IEC 60947-5-2

1) Operating range: recommended range with performance reserve

### Tables

Operating range with	
VS 29/44.8	35m

### Diagrams

### Order guide

	Designation	Part No.
Transmitter and receiver	LS 29 L	
Transmitter	LS 29 Se-L	500 80861
Receiver	LS 29 E-L	500 80862

### Remarks

- Shielded cables KB 029... are recommended, others upon request.
- Mount receiver close to the amplifier.
- The performance reserve reduces itself about 20% when using the US 29.