### **ILSR 95**

# Throughbeam photoelectric sensors

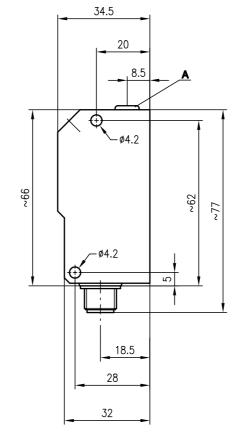




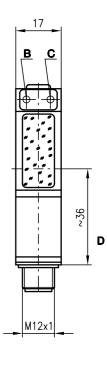
0 ... 18m



- Throughbeam photoelectric sensor with high performance reserve in red light
- High switching frequency for detection of fast events
- Small construction with glass cover and robust zinc diecast housing, protection class IP 67/IP 69K for industrial application
- Complementary switching outputs for light/ dark switching or as a control function
- Very good alignment through wide switching lobe
- Sensitivity adjustment for optimal adaptation to the application



**Dimensioned drawing** 



- A Sensitivity adjustment
- **B** Switching indicator yellow
- C Operation indicator green
- D Optical axis

## **Electrical connection**









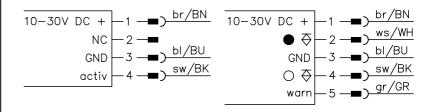






(available separately)

- Mounting systems (BT 95, UMS 1)
- M12 connectors (KD ...)





#### **ILSR 95**

# **Specifications**

**Optical data** 

Typ. operating range limit 1) Operating range 2) 0 ... 18m

0 ... 12m LED (modulated light) Light source 660 nm

Wavelength

Timing

Switching frequency 1000Hz Response time  $0.5\,\mathrm{ms}$ Delay before start-up ≤ 100ms

**Electrical data** 

Operating voltage U<sub>B</sub> Residual ripple 10 ... 30 VDC (incl. residual ripple)  $\leq$  15% of  $U_B$ 

Bias current

2 PNP transistor outputs, complementary light/dark switching Switching output Function characteristics ≥ (U<sub>B</sub>-2V)/≤ 2V max. 100 mA Signal voltage high/low

Output current Sensitivity adjustable with multiturn potentiometer

**Indicators** 

LED green LED yellow LED yellow flashing ready light path free

light path free, no performance reserve

Mechanical data

Housing diecast zinc Optics cover Weight

glass 90g M12 connector, stainless steel Connection type receiver 4-pin, transmitter 4-pin

**Environmental data** 

Ambient temp. (operation/storage)<sup>3)</sup>
Protective circuit <sup>4)</sup> 25°C (-30°C) ... +60°C/-40°C ... +70°C

2, 3 II, all-insulated IP 67, IP 69K <sup>6</sup>) 1 (acc. to EN 60825-1) VDE safety class <sup>5)</sup> Protection class LED class IEC 60947-5-2

Standards applied

**Options** 

Activation input activ

Transmitter active/not active  $\geq 8V/\leq 2V$  or not connected Activation/disable delay

 $\leq 1 \text{ ms}$  $\leq 1 \text{ ms}$  $4.7 \text{ k}\Omega \pm 10\%$ Input resistance

Warning output autoControl warn PNP transistor, counting principle

 $\geq$  (U<sub>B</sub>-2V)/ $\leq$  2V max. 100 mA Signal voltage high/low Output current

1) Typ. operating range limit: max. attainable range without performance reserve 2) Operating range: recommended range with performance reserve

-30°C with operating voltage continuously applied

2=polarity reversal protection, 3=short-circuit protection for all outputs

Rating voltage 250 VAC

6) IP 69K test acc. to DIN 40050 part 9 simulated, high pressure cleaning conditions without the use of additives, acids and bases are not part of the test

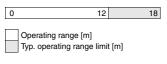
Designation

Part No.

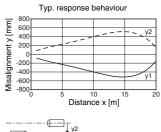
# Order guide

| •                 |                  |
|-------------------|------------------|
| LSR 95/44.8 L.1   |                  |
| LSR 95/2.8 SE-L.1 | 500 34509        |
| LSR 95/44 E-L.1   | 500 34510        |
|                   | SR 95/2.8 SE-L.1 |

#### **Tables**



## **Diagrams**





#### Remarks