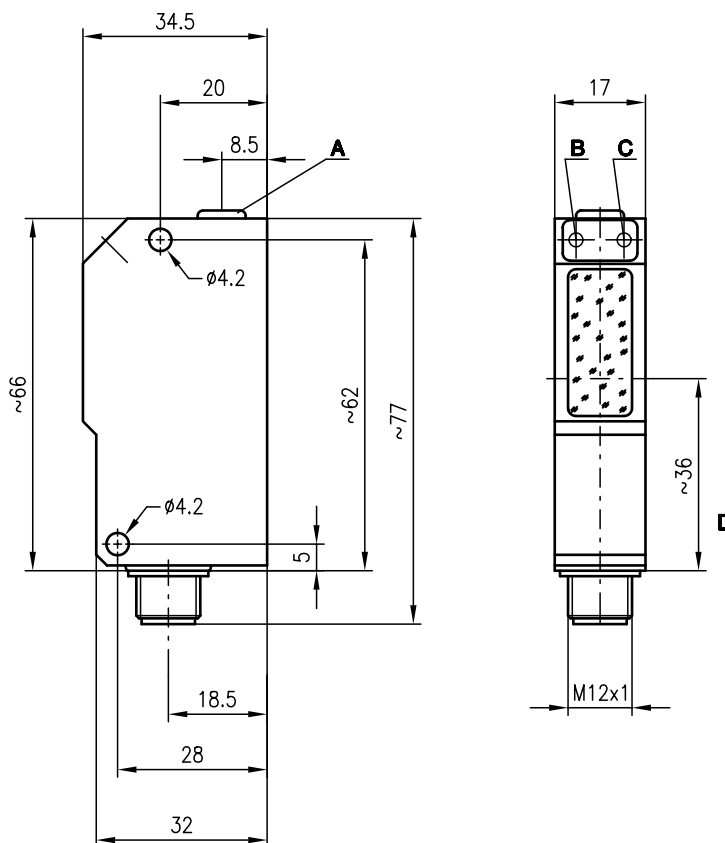


**ILSR 95****Throughbeam photoelectric sensors****0 ... 18m****10 - 30 V  
DC**

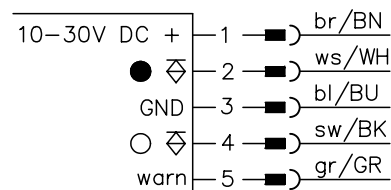
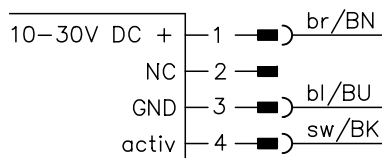
- Throughbeam photoelectric sensor with high performance reserve in red light
- High switching frequency for detection of fast events
- Small construction with glass cover and robust zinc diecast housing, protection class IP 67/IP 69K for industrial application
- Complementary switching outputs for light/dark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

**Accessories:****(available separately)**

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

**Dimensioned drawing**

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

**Electrical connection**

### Specifications

#### Optical data

|  |                       |
|--|-----------------------|
| Typ. operating range limit <sup>1)</sup> | 0 ... 18m             |
| Operating range <sup>2)</sup>            | 0 ... 12m             |
| Light source                             | LED (modulated light) |
| Wavelength                               | 660nm                 |

#### Timing

|                       |         |
|-----------------------|---------|
| Switching frequency   | 1000Hz  |
| Response time         | 0.5ms   |
| Delay before start-up | ≤ 100ms |

#### Electrical data

|                          |   |
|--------------------------|---|
| Operating voltage $U_B$  | 10 ... 30VDC (incl. residual ripple)    |
| Residual ripple          | ≤ 15% of $U_B$                          |
| Bias current             | ≤ 35mA                                  |
| Switching output         | 2 PNP transistor outputs, complementary |
| Function characteristics | light/dark switching                    |
| Signal voltage high/low  | ≥ ( $U_B - 2V$ )/≤ 2V                   |
| Output current           | max. 100mA                              |
| Sensitivity              | adjustable with multiturn potentiometer |

#### Indicators

|                     |   |
|---------------------|---|
| LED green           | ready                                   |
| LED yellow          | light path free                         |
| LED yellow flashing | light path free, no performance reserve |

#### Mechanical data

|                 |   |
|-----------------|---|
| Housing         | diecast zinc  |
| Optics cover    | glass   |
| Weight          | 90g   |
| Connection type | M12 connector, stainless steel<br>receiver 4-pin, transmitter 4-pin |

#### Environmental data

|   |  |
|---|--|
| Ambient temp. (operation/storage) <sup>3)</sup> | 25°C (-30°C) ... +60°C/-40°C ... +70°C |
| Protective circuit <sup>4)</sup>                | 2, 3                                   |
| VDE safety class <sup>5)</sup>                  | II, all-insulated                      |
| Protection class                                | IP 67, IP 69K <sup>6)</sup>            |
| LED class                                       | 1 (acc. to EN 60825-1)                 |
| Standards applied                               | IEC 60947-5-2                          |

#### Options

|  |                                     |
|--|-------------------------------------|
| <b>Activation input</b> activ          |                                     |
| Transmitter active/not active          | ≥ 8V/≤ 2V or not connected          |
| Activation/disable delay               | ≤ 1ms                               |
| Input resistance                       | 4.7kΩ ± 10%                         |
| <b>Warning output autoControl</b> warn |                                     |
| Signal voltage high/low                | PNP transistor, counting principle  |
| Output current                         | ≥ ( $U_B - 2V$ )/≤ 2V<br>max. 100mA |

- 1) Typ. operating range limit: max. attainable range without performance reserve  
 2) Operating range: recommended range with performance reserve  
 3) -30°C with operating voltage continuously applied  
 4) 2=polarity reversal protection, 3=short-circuit protection for all outputs  
 5) Rating voltage 250VAC  
 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

### Order guide

|                          | Designation       | Part No.  |
|--------------------------|-------------------|-----------|
| Transmitter and receiver | ILSR 95/44.8 L.1  |           |
| Transmitter              | LSR 95/2.8 SE-L.1 | 500 34509 |
| Receiver                 | ILSR 95/44 E-L.1  | 500 34510 |

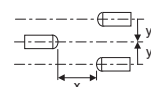
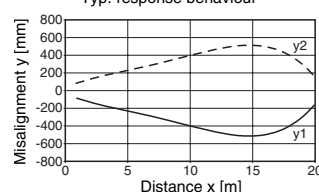
### Tables

|   |    |    |
|---|----|----|
| 0 | 12 | 18 |
|---|----|----|

|  |                                |
|--|--------------------------------|
|  | Operating range [m]            |
|  | Typ. operating range limit [m] |

### Diagrams

Typ. response behaviour



### Remarks