

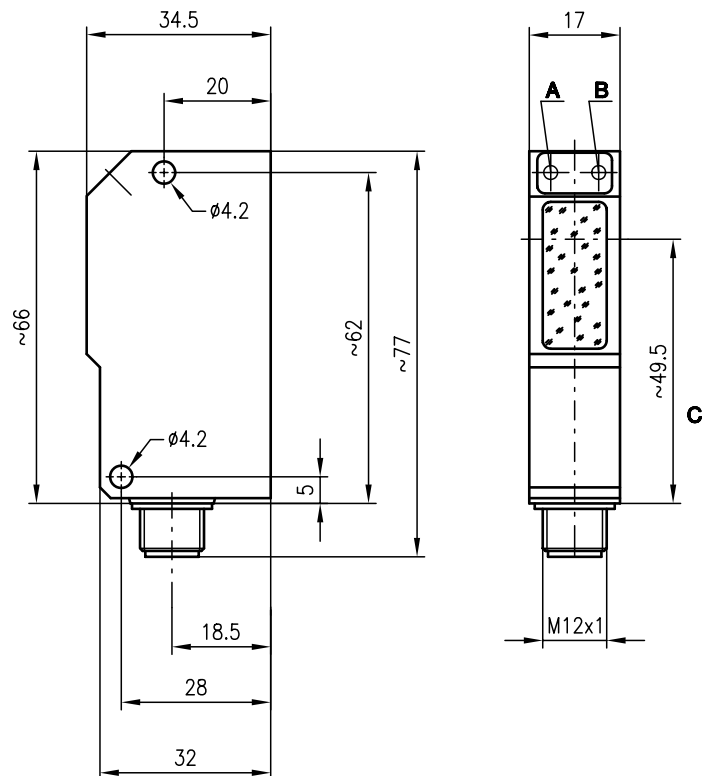
ILS 95
Throughbeam photoelectric sensors

0 ... 20m
**10 - 30 V
DC**

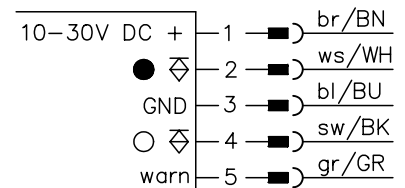
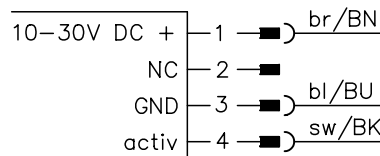
- Throughbeam photoelectric sensor with high performance reserve using visible red light or infrared light
- High switching frequency for detection of fast events
- Small construction with glass cover and robust zinc diecast housing, protection class IP 67 for industrial application
- Complementary outputs for light/dark switching or as a control function


Accessories:
(available separately)

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

Dimensioned drawing


- A Switching indicator yellow
 B Operation indicator green
 C Optical axis

Electrical connection


Specifications

Optical data

Typ. operating range limit ¹⁾
 Operating range ²⁾
 Light source
 Wavelength

ILS 95/44.8 L.1

Infrared light
 0 ... 20m
 0 ... 12m
 LED (modulated light)
 880nm

ILSR 95/44.8 L

Red light
 0 ... 20m
 0 ... 12m
 LED (modulated light)
 660nm

Timing

Switching frequency
 Response time
 Delay before start-up

1000Hz
 0.5ms
 ≤ 100ms

Electrical data

Operating voltage U_B
 Residual ripple
 Bias current
 Switching output
 Function characteristics
 Signal voltage high/low
 Output current

10 ... 30VDC (incl. residual ripple)
 ≤ 15% of U_B
 ≤ 35mA
 2 PNP transistor outputs, complementary
 light/dark switching
 $\geq (U_B - 2V) / \leq 2V$
 max. 100mA

Indicators

LED green
 LED yellow
 LED yellow flashing

ready
 light path free
 light path free, no performance reserve

Mechanical data

Housing
 Optics cover
 Weight
 Connection type

diecast zinc
 glass
 90g
 M12 connector, stainless steel
 receiver 5-pin, transmitter 4-pin

Environmental data

Ambient temp. (operation/storage) ³⁾
 Protective circuit ⁴⁾
 VDE safety class ⁵⁾
 Protection class
 Standards applied

-25°C (-30°C) ... +60°C/-40°C ... +70°C
 2, 3
 II, all-insulated
 IP 67
 IEC 60947-5-2

Options

Activation input active
 Transmitter active/not active
 Activation/disable delay
 Input resistance
Warning output autoControl warn
 Signal voltage high/low
 Output current

$\geq 8V / \leq 2V$ or not connected
 ≤ 1ms
 4.7 kΩ ± 10%
 PNP transistor, counting principle
 $\geq (U_B - 2V) / \leq 2V$
 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

Order guide

Infrared light

Transmitter and receiver
 Transmitter
 Receiver

ILS 95/44.8 L.1
 LS 95/2.8 SE-L.1
 ILS 95/44 E-L.1

500 26835
 500 26836

Red light

Transmitter and receiver
 Transmitter
 Receiver

ILSR 95/44.8 L
 LSR 95/2.8 SE-L
 ILSR 95/44 E-L

500 25606
 500 25608

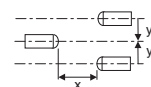
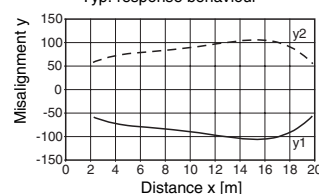
Tables

0	12	20
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Operating range [m]
 Typ. operating range limit [m]

Diagrams

Typ. response behaviour



Remarks

- The throughbeam photoelectric sensor using visible red light is also available with integrated AS-i chip for direct connection to the AS-i system.