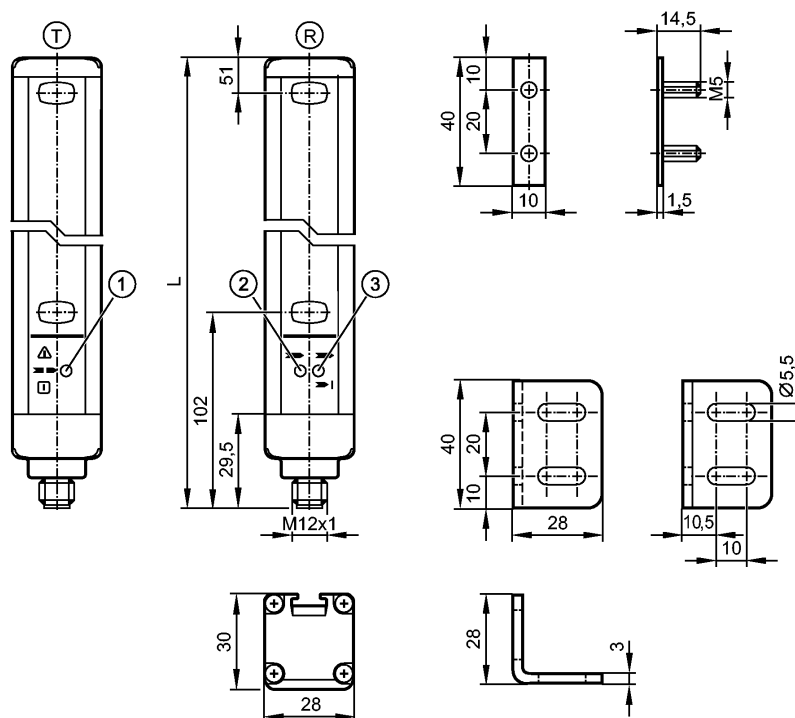


# OY115S

OYA0810-03-4-12-P-1

Photoelectric sensors

**Please note the wiring of the sensor and the sockets (see data sheet) as for 8-pole sockets the core colours are not standardised.**



T: Transmitter

R: Receiver

1: LED 3 colours (red/green/orange)

2: LED (yellow)

3: LED 2 colours (red/green)



## Product characteristics

Safety light grid

Length L: 953 mm

Connector

Complies with the requirements:

type 4 (IEC 61496-1)

SIL 3 (IEC 61508)

SILcl 3 (IEC 62061)

PL e (EN ISO 13849-1)

## Electrical data

|                             |      |                       |
|-----------------------------|------|-----------------------|
| Electrical design           |      | DC PNP                |
| Operating voltage           | [V]  | 24 DC (19.2...28.8)   |
| Current consumption         |      |                       |
| - Transmitter               | [mA] | 42                    |
| - Receiver                  | [mA] | 83                    |
| Type of light               |      | Infrared light 950 nm |
| Protection class            |      | III                   |
| Reverse polarity protection |      | yes                   |
| Power-on delay time         | [s]  | < 2                   |

## Outputs

## OY115S

OYA0810-03-4-12-P-1

Photoelectric sensors

|                                   |            |
|-----------------------------------|------------|
| Outputs (OSSDs)                   | 2 x PNP    |
| Max. current load per output [mA] | 400 (24 V) |
| Short-circuit protection          | yes        |

| Range                            |                |
|----------------------------------|----------------|
| Protected area height [mm]       | 810            |
| Number of beams                  | 3              |
| Protected area width (range) [m] | 0...4 / 3...12 |

| Reaction times     |   |
|--------------------|---|
| Response time [ms] | 3 |

| Environment                    |                                                |
|--------------------------------|------------------------------------------------|
| Applications                   | Class C to EN 60654-1 weatherproof application |
| Ambient temperature [°C]       | -10...55                                       |
| Storage temperature [°C]       | -20...70                                       |
| Max. relative air humidity [%] | 95                                             |
| Protection                     | IP 65 / IP 67                                  |

| Tests / approvals    |             |
|----------------------|-------------|
| EMC                  | IEC 61496-1 |
| Shock resistance     | IEC 61496-1 |
| Vibration resistance | IEC 61496-1 |

| Safety classification                 |                 |
|---------------------------------------|-----------------|
| Mission time TM [h]                   | 175200          |
| Test interval T1 [Years]              | 20              |
| Safety-related reliability PFHd [1/h] | 7.6E-09         |
| MTTFd [Years]                         | 100             |
| DC/CCF/Cat.                           | 96.2% / 80% / 2 |

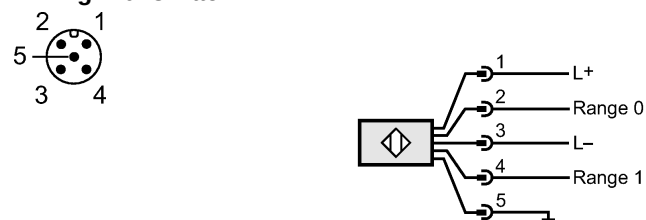
| Mechanical data   |                                |
|-------------------|--------------------------------|
| Length L [mm]     | 953                            |
| Housing materials | housing: aluminium; window: PC |
| Weight [kg]       | 3.17                           |

| Displays / operating elements |                                    |
|-------------------------------|------------------------------------|
| Display                       | LED yellow<br>LED green<br>LED Red |

### Electrical connection

|             |               |
|-------------|---------------|
| Transmitter |               |
| Connection  | M12 connector |

#### Wiring Transmitter



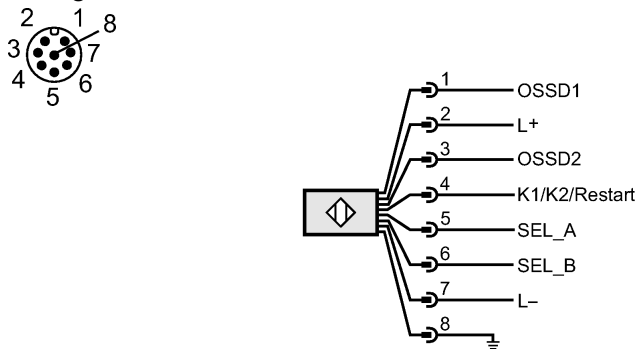
|            |               |
|------------|---------------|
| Receiver   |               |
| Connection | M12 connector |

OY115S

OYA0810-03-4-12-P-1

Photoelectric sensors

Wiring Receiver



|                              |                                            |        |
|------------------------------|--------------------------------------------|--------|
| Max. connection cable length | [m]                                        | 100 *) |
| Accessories                  |                                            |        |
| Accessories (included)       | 4 mounting brackets; 4 mounting nuts; nuts |        |
| Remarks                      |                                            |        |
| Remarks                      | *) for wire cross-section 0.34 mm²         |        |
| Pack quantity                | [piece]                                    | 1      |

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Please note the wiring of the sensor and the sockets (see data sheet) as for 8-pole sockets the core colours are not standardised.