

Technical drawing of the M12x1 nut, showing front, side, and detail views with dimensions in mm.

**Front View (Top):** Overall length 122 mm. Thread length 114 mm. Flange thickness 13 mm. Thread specification M12x1. Callouts 1, 2, 3, 4, and 5 indicate specific features.

**Side View (Right):** Shows the profile of the nut with callout P.

**Top View (Bottom Left):** Outer diameter 50 mm. Inner hole diameter 30 mm. Flange thickness 10.5 mm.

**Bottom View (Bottom Right):** Overall width 50 mm. Flange thickness 10.5 mm. Inner hole diameter 30 mm. Thread specification M6. Overall height 11.8 mm.

**Detail View (Bottom Right):** Shows the thread profile with dimensions 5.7, 5, and 1.

- |   |                 |
|---|-----------------|
| A | active element  |
| P | passive element |
| 1 | LED orange      |
| 2 | LED red         |
| 3 | LED green       |
| 4 | LED yellow      |
| 5 | display         |



|                   |                |
|-------------------|----------------|
| Type of light     | infrared light |
| Electrical design | PNP            |



## Safety light grids

OYD0810-03-4-06-P-1

|                                                  |                                                |  |
|--------------------------------------------------|------------------------------------------------|--|
| Protection                                       | IP 65                                          |  |
| Application                                      |                                                |  |
| Protective function                              | access prevention body protection              |  |
| Electrical data                                  |                                                |  |
| Operating voltage tolerance [%]                  | 20                                             |  |
| Operating voltage [V]                            | 24 DC                                          |  |
| Current consumption [mA]                         | 250                                            |  |
| Protection class                                 | III                                            |  |
| Reverse polarity protection                      | yes                                            |  |
| Power-on delay time [s]                          | < 10                                           |  |
| Type of light                                    | infrared light                                 |  |
| Wave length [nm]                                 | 950                                            |  |
| Outputs                                          |                                                |  |
| Electrical design                                | PNP                                            |  |
| Number of OSSD outputs                           | 2                                              |  |
| Max. current load per OSSD output [mA]           | 500; (24 V)                                    |  |
| Short-circuit protection                         | yes                                            |  |
| Detection zone                                   |                                                |  |
| Protected area height [mm]                       | 810                                            |  |
| Number of beams                                  | 3                                              |  |
| Protection area width (low light intensity) [m]  | 0...6                                          |  |
| Protection area width (high light intensity) [m] | 0...6                                          |  |
| Active/passive system                            | yes                                            |  |
| Response times                                   |                                                |  |
| Response time [ms]                               | 10.5                                           |  |
| Operating conditions                             |                                                |  |
| Applications                                     | class C to EN 60654-1 weatherproof application |  |
| Ambient temperature [°C]                         | -10...55                                       |  |
| Max. relative air humidity [%]                   | 95                                             |  |
| Protection                                       | IP 65                                          |  |
| Tests / approvals                                |                                                |  |
| EMC                                              | IEC 61496-1                                    |  |
| Shock resistance                                 | IEC 61496-1                                    |  |
| Vibration resistance                             | IEC 61496-1                                    |  |
| Safety classification                            |                                                |  |
| ESPE type (IEC 61496-1)                          | 4                                              |  |
| Complies with the requirements                   | ISO 13849-1: 2015 category 4, PL e             |  |
|                                                  | IEC 61508 SIL 3                                |  |
|                                                  | IEC 62061 SIL 3                                |  |
| Mission time TM [h]                              | 175200                                         |  |
| PFH [1/h]                                        | 4,9E-09                                        |  |

# OY902S



## Safety light grids

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| Mechanical data |      |                                    |
|-----------------|------|------------------------------------|
| Weight          | [g]  | 7290                               |
| Dimensions      | [mm] | 1036 x 50 x 60                     |
| Materials       |      | housing: aluminium; front pane: PC |
| Length L        | [mm] | 1036                               |

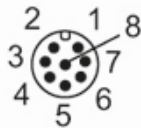
| Displays / operating elements |             |            |
|-------------------------------|-------------|------------|
| Display                       | transmitter | 4 x LED    |
|                               | transmitter | LC display |

| Accessories    |  |                     |
|----------------|--|---------------------|
| Items supplied |  | mounting bracket: 6 |
|                |  | slot nuts: 6        |

| Remarks       |  |        |
|---------------|--|--------|
| Pack quantity |  | 1 pcs. |

### Electrical connection

Connector: 1 x M12; coding: A; Maximum cable length: 100 m; for wire cross-section 1 mm²



### Connection

