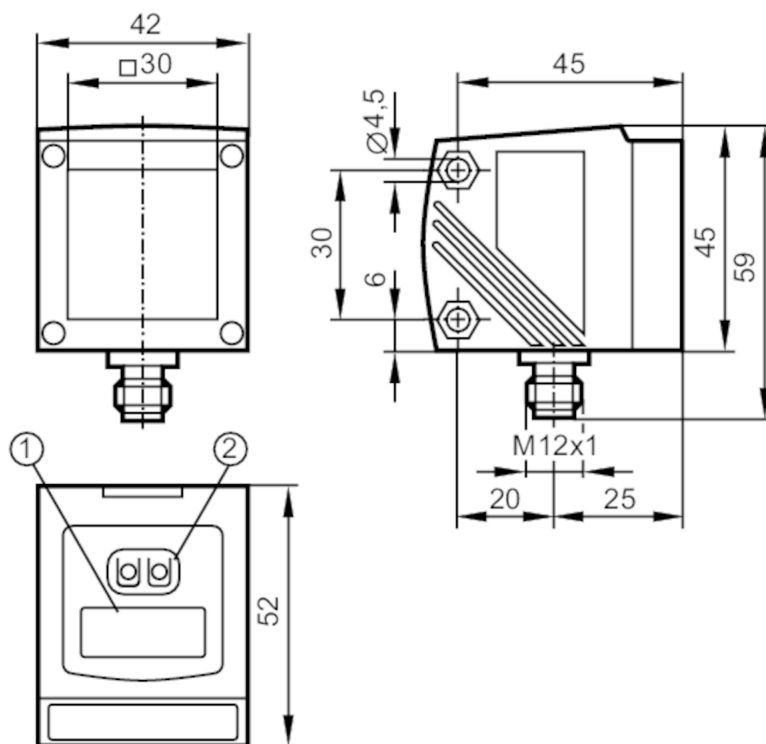




## Photoelectric distance sensor

O1DLFNKG/IO-LINK



- 1 alphanumeric display 4-digit  
2 programming buttons



### Product characteristics

|                        |   |
|------------------------|---|
| Laser protection class | 2 |
|------------------------|---|

### Application

|                 |                        |
|-----------------|------------------------|
| Special feature | Background suppression |
|-----------------|------------------------|

### Electrical data

|                             |            |
|-----------------------------|------------|
| Operating voltage [V]       | 18...30 DC |
| Current consumption [mA]    | < 150      |
| Protection class            | III        |
| Reverse polarity protection | yes        |
| Typ. lifetime [h]           | 50000      |

### Inputs / outputs

|                              |                              |
|------------------------------|------------------------------|
| Number of inputs and outputs | Number of digital outputs: 1 |
|------------------------------|------------------------------|

### Outputs

|                                   |                                                 |
|-----------------------------------|-------------------------------------------------|
| Total number of outputs           | 1                                               |
| Electrical design                 | NPN                                             |
| Number of digital outputs         | 1                                               |
| Output function                   | normally open / normally closed; (programmable) |
| Max. current load per output [mA] | 200                                             |
| Short-circuit protection          | yes                                             |



## Photoelectric distance sensor

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|                                  |                                                                                                   |                                                    |
|----------------------------------|---------------------------------------------------------------------------------------------------|----------------------------------------------------|
| Type of short-circuit protection | pulsed                                                                                            |                                                    |
| Overload protection              | yes                                                                                               |                                                    |
| Detection zone                   |                                                                                                   |                                                    |
| Max. light spot width            | [mm]                                                                                              | 15                                                 |
| Max. light spot height           | [mm]                                                                                              | 15                                                 |
| Light spot dimensions refer to   | 10 m                                                                                              |                                                    |
| Background suppression available | yes                                                                                               |                                                    |
| Background suppression           | [m]                                                                                               | 10...100                                           |
| Measuring/setting range          |                                                                                                   |                                                    |
| Measuring range                  | [m]                                                                                               | 0.2...10; (white paper 200 x 200 mm 90% remission) |
| Sampling rate                    | [Hz]                                                                                              | 5                                                  |
| Interfaces                       |                                                                                                   |                                                    |
| Communication interface          | IO-Link                                                                                           |                                                    |
| Transmission type                | COM2 (38,4 kBaud)                                                                                 |                                                    |
| IO-Link revision                 | 1.1                                                                                               |                                                    |
| Profiles                         | Smart Sensor: Sensor Identification; Binary Data Channel; Process Value; Sensor Diagnosis         |                                                    |
| SIO mode                         | yes                                                                                               |                                                    |
| Required master port type        | A                                                                                                 |                                                    |
| Process data analogue            | 2                                                                                                 |                                                    |
| Process data binary              | 1                                                                                                 |                                                    |
| Min. process cycle time          | [ms]                                                                                              | 6                                                  |
| Operating conditions             |                                                                                                   |                                                    |
| Ambient temperature              | [°C]                                                                                              | -10...60                                           |
| Protection                       | IP 67                                                                                             |                                                    |
| Tests / approvals                |                                                                                                   |                                                    |
| Laser protection class           | 2                                                                                                 |                                                    |
| Notes on laser protection        | Caution:                                                                                          | laser light                                        |
|                                  | Power:                                                                                            | <= 4,0 mW                                          |
|                                  | Wave length:                                                                                      | 650 nm                                             |
|                                  | pulse:                                                                                            | 1,3 ns                                             |
|                                  | Do not stare into beam.                                                                           |                                                    |
|                                  | Avoid exposure to the laser light.                                                                |                                                    |
|                                  | laser class:                                                                                      | 2                                                  |
|                                  |                                                                                                   | EN / IEC60825-1:2007                               |
|                                  |                                                                                                   | EN / IEC60825-1:2014                               |
|                                  | Complies with 21 CFR 1040 except for deviations pursuant to Laser Notice No. 50, dated June 2007. |                                                    |
| MTTF                             | [years]                                                                                           | 106                                                |
| Mechanical data                  |                                                                                                   |                                                    |
| Weight                           | [g]                                                                                               | 285.5                                              |
| Dimensions                       | [mm]                                                                                              | 59 x 42 x 52                                       |
| Materials                        | housing: diecast zinc; front pane: glass; LED window: PC                                          |                                                    |

# O1D104



## Photoelectric distance sensor

O1DLFNKG/IO-LINK

### Displays / operating elements

|         |                             |                               |
|---------|-----------------------------|-------------------------------|
| Display | switching status            | LED, yellow                   |
|         | operation                   | LED, green                    |
|         | distance value, programming | alphanumeric display, 4-digit |

### Accessories

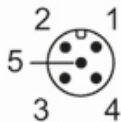
|                        |                          |
|------------------------|--------------------------|
| Accessories (optional) | Protective cover, E21133 |
|------------------------|--------------------------|

### Remarks

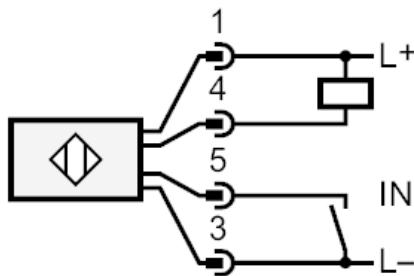
|               |                                                       |
|---------------|-------------------------------------------------------|
| Remarks       | operating voltage "supply class 2" according to cULus |
| Pack quantity | 1 pcs.                                                |

### Electrical connection

Connector: 1 x M12; coding: A



### Connection



|   |                                  |
|---|----------------------------------|
| 4 | OUT1 switching output or IO-Link |
| 5 | Laser On/ Off                    |