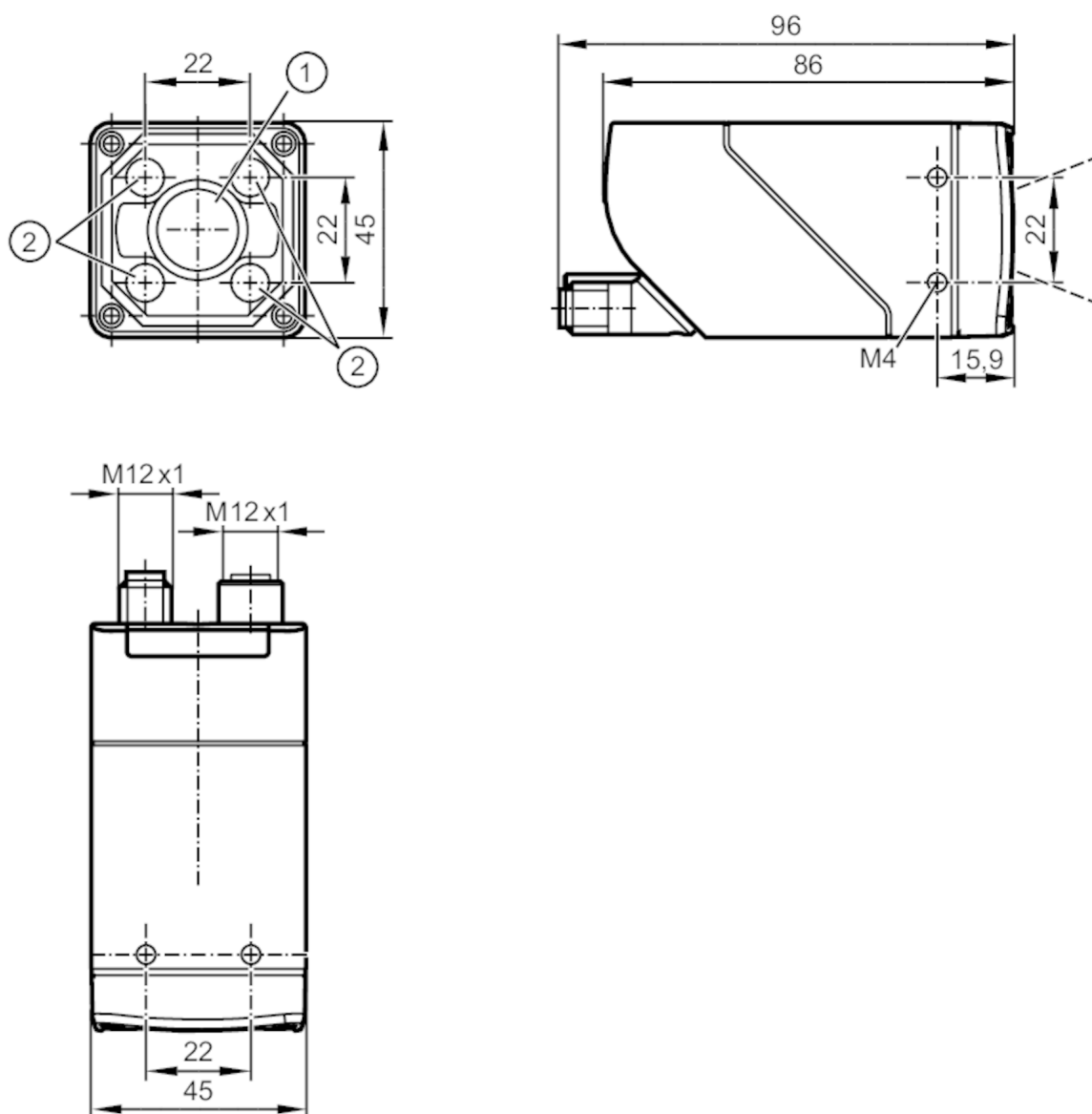


# O2D552



## Object recognition sensor

O2DIRDKG/E1/E4/EF/GM/W/30/5A



- 1 lens
- 2 Illumination unit



### Product characteristics

|                        |                |
|------------------------|----------------|
| Type of light          | infrared light |
| Image resolution [px]  | 1280 x 960     |
| Max. reading rate [Hz] | 40             |

### Electrical data

|                             |                                                  |
|-----------------------------|--------------------------------------------------|
| Operating voltage [V]       | 18...30 DC                                       |
| Current consumption [mA]    | < 300; (24V DC; with switched outputs: < 600 mA) |
| Protection class            | III                                              |
| Reverse polarity protection | yes                                              |
| Type of light               | infrared light                                   |
| Wave length [nm]            | 850                                              |



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|                                           |                                                                        |               |  |  |  |
|-------------------------------------------|------------------------------------------------------------------------|---------------|--|--|--|
| Image sensor                              | CMOS image sensor black/white                                          |               |  |  |  |
| Inputs / outputs                          |                                                                        |               |  |  |  |
| Number of inputs and outputs              | Number of digital inputs: 1; Number of digital outputs: 2              |               |  |  |  |
| Inputs                                    |                                                                        |               |  |  |  |
| Trigger                                   | external; 24 V PNP/NPN (IEC 61131-2 Typ 3); TCP/IP; PROFINET; internal |               |  |  |  |
| Number of digital inputs                  | 1                                                                      |               |  |  |  |
| Outputs                                   |                                                                        |               |  |  |  |
| Electrical design                         | PNP/NPN; (parameterisable)                                             |               |  |  |  |
| Number of digital outputs                 | 2; (configurable)                                                      |               |  |  |  |
| Max. voltage drop switching output DC [V] | 1                                                                      |               |  |  |  |
| Max. current load per output [mA]         | 100                                                                    |               |  |  |  |
| Short-circuit protection                  | yes                                                                    |               |  |  |  |
| Type of short-circuit protection          | pulsed                                                                 |               |  |  |  |
| Overload protection                       | yes                                                                    |               |  |  |  |
| Detection zone                            |                                                                        |               |  |  |  |
| Field of view size [mm]                   | Operating distance                                                     | field of view |  |  |  |
|                                           | 35                                                                     | 25 x 19       |  |  |  |
|                                           | 300                                                                    | 184 x 138     |  |  |  |
|                                           | 500                                                                    | 304 x 228     |  |  |  |
|                                           | 1000                                                                   | 604 x 453     |  |  |  |
|                                           | 1500                                                                   | 904 x 678     |  |  |  |
|                                           | 2000                                                                   | 1204 x 903    |  |  |  |
|                                           | 2500                                                                   | 1504 x 1128   |  |  |  |
| Operating distance [mm]                   | > 35                                                                   |               |  |  |  |
| Image resolution [px]                     | 1280 x 960                                                             |               |  |  |  |
| Lens type                                 | Wide angle                                                             |               |  |  |  |
| Max. reading rate [Hz]                    | 40                                                                     |               |  |  |  |
| Software / programming                    |                                                                        |               |  |  |  |
| Parameter setting options                 | via PC with ifm Vision Assistant                                       |               |  |  |  |
| Interfaces                                |                                                                        |               |  |  |  |
| Communication interface                   | Ethernet                                                               |               |  |  |  |
| Ethernet                                  |                                                                        |               |  |  |  |
| Number of Ethernet interfaces             | 1                                                                      |               |  |  |  |
| Transmission standard                     | 10Base-T; 100Base-TX                                                   |               |  |  |  |
| Transmission rate                         | 10 MBit/s; 100 MBit/s                                                  |               |  |  |  |
| Protocol                                  | TCP/IP; PROFINET                                                       |               |  |  |  |
| Factory settings                          | IP address: 192.168.0.69                                               |               |  |  |  |
|                                           | subnet mask: 255.255.255.0 (Class C)                                   |               |  |  |  |
|                                           | gateway IP address: 192.168.0.201                                      |               |  |  |  |
|                                           | MAC address: see type label                                            |               |  |  |  |
| Usage type                                | parameter setting; data transmission                                   |               |  |  |  |



## Object recognition sensor

O2DIRDKG/E1/E4/EF/GM/W/30/5A

| Operating conditions        |      |                      |
|-----------------------------|------|----------------------|
| Ambient temperature         | [°C] | -10...50             |
| Storage temperature         | [°C] | -40...70             |
| Max. relative air humidity  | [%]  | 90; (non condensing) |
| Max. height above sea level | [m]  | 4000                 |
| Protection                  |      | IP 65                |
| Pollution degree            |      | 2                    |

| Tests / approvals      |                                            |                                          |
|------------------------|--------------------------------------------|------------------------------------------|
| EMC                    | EN IEC 61000-6-4 radiation of interference | industrial environments                  |
|                        | EN IEC 61000-6-2 immunity                  | industrial environments                  |
| Shock resistance       | EN 60068-2-27                              | 50 g 11 ms / not repetitive              |
|                        | EN 60068-2-27                              | 40 g 6 ms / repetitive                   |
| Vibration resistance   | EN 60068-2-6                               | 2 g (10 ... 150 Hz)                      |
| Photobiological safety |                                            | exempt group; (EN 62471)                 |
| Electrical protection  | EN IEC 61010-2-201                         | electrical supply only via PELV circuits |

| Mechanical data  |      |                                                                                               |
|------------------|------|-----------------------------------------------------------------------------------------------|
| Weight           | [g]  | 614.6                                                                                         |
| Dimensions       | [mm] | 45 x 45 x 86                                                                                  |
| Materials        |      | housing: diecast zinc powder-coated; front pane: Gorillaglas; LED window: PC; pushbutton: POM |
| Sealing material |      | FKM                                                                                           |

| Displays / operating elements |                       |                       |
|-------------------------------|-----------------------|-----------------------|
| Display                       | function              | 2 x LED, green        |
|                               | function              | 2 x LED, yellow       |
|                               | Multi-function button | 2 x LED, green/yellow |
| Operating elements            | 1                     | Multi-function button |

| Accessories            |  |                      |
|------------------------|--|----------------------|
| Accessories (optional) |  | Mounting accessories |
|                        |  | Protective panes     |

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

## Electrical connection - Ethernet

Connector: 1 x M12; coding: D; Moulded body: stainless steel; Sealing: FKM



|   |      |
|---|------|
| 1 | TxD+ |
| 2 | RxD+ |
| 3 | TxD- |
| 4 | RxD- |

# O2D552

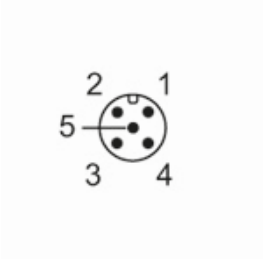


## Object recognition sensor

O2DIRDKG/E1/E4/EF/GM/W/30/5A

### Electrical connection - supply

Connector: 1 x M12; coding: A; Moulded body: stainless steel



|   |                                                                                |
|---|--------------------------------------------------------------------------------|
| 1 | U+                                                                             |
| 2 | trigger input                                                                  |
| 3 | 0 V                                                                            |
| 4 | switching output 1 configurable                                                |
| 5 | switching output 2 configurable /<br>trigger output with external illumination |