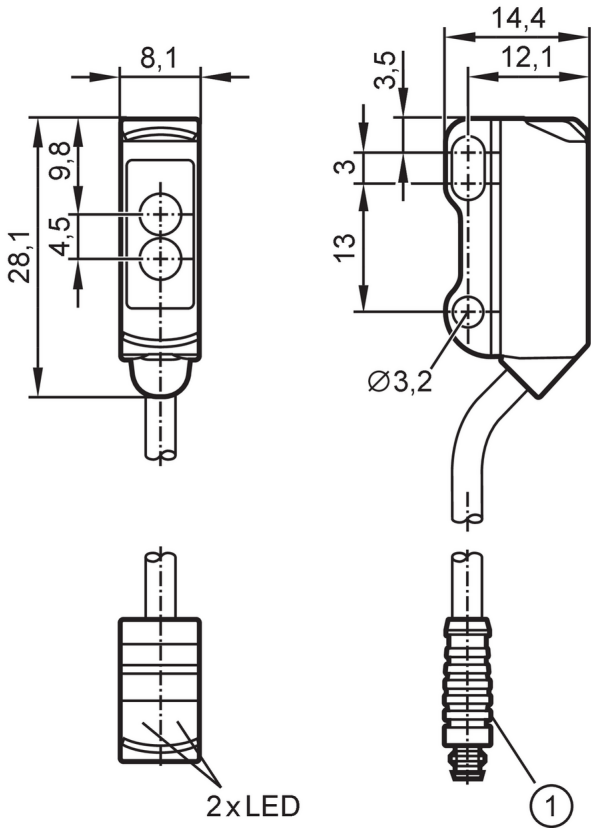
# O8T202

## Diffuse reflection sensor

O8T-FPKG/IO-Link/0,30M/AS/3P




receiver in upper lens
transmitter in lower lens
1 illustration (example)

| | | |
|---|---|---|
| **Product characteristics** | | |
| Type of light | | red light |
| Housing | | rectangular |
| **Application** | | |
| Function principle | | Diffuse reflection sensor |
| Application | | For applications in robotics, assembly and handling technology |
| **Electrical data** | | |
| Operating voltage | [V] | 10...30 DC |
| Current consumption | [mA] | 20;  ((24 V)) |
| Protection class | | III |
| Reverse polarity protection | | yes |
| Type of light | | red light |
| Wave length | [nm] | 633 |
| **Outputs** | | |
| Electrical design | | PNP |
| Output function | | light-on/dark-on mode;  (programmable) |
| Max. voltage drop switching output DC | [V] | 2.5 |

# O8T202

## Diffuse reflection sensor

O8T-FPKG/IO-Link/0,30M/AS/3P

| | | | |
|---|---|---|---|
| Permanent current rating of switching output DC | [mA] | 100 | |
| Switching frequency DC | [Hz] | 1000 | |
| Short-circuit protection | | yes | |
| Type of short-circuit protection | | pulsed | |
| **Detection zone** | | | |
| Range | [mm] | 0...180; (white paper 200 x 200 mm) | |
| Max. light spot diameter | [mm] | 18 | |
| Light spot dimensions refer to | | at maximum range | |
| **Interfaces** | | | |
| Communication interface | | IO-Link | |
| Transmission type | | COM2 (38,4 kBaud) | |
| IO-Link revision | | 1.1 | |
| SDCI standard | | IEC 61131-9 | |
| Profiles | | Smart Sensor - SSP 0 | Generic Profiled Sensor |
| | | Function | Device identification |
| | | Function | Multiple switching signal |
| | | Function | Device diagnosis |
| | | Function | Teach channel |
| SIO mode | | yes | |
| Required master port type | | A | |
| Min. process cycle time | [ms] | 2.5 | |
| IO-Link process data (cyclical) | | **function** | **bit length** |
| | | process value | 8 |
| | | device status | 4 |
| | | binary switching information | 1 |
| IO-Link functions (acyclical) | | application specific tag; operating hours counter; switching cycles counter | |
| Supported DeviceIDs | | **Type of operation** | **DeviceID** |
| | | default | 788 |
| **Operating conditions** | | | |
| Ambient temperature | [°C] | -25...60 | |
| Protection | | IP 65; IP 67 | |
| **Tests / approvals** | | | |
| EMC | | EN 60947-5-2 | |
| MTTF | [years] | 1067 | |
| UL approval | | Ta | -25...60 °C |
| | | Enclosure type | Type 1 |
| | | voltage supply | Limited Voltage/Current |
| | | UL approval no. | E017 |
| | | File number UL | E174191 |
| **Mechanical data** | | | |
| Weight | [g] | 21.2 | |
| Housing | | rectangular | |
| Dimensions | [mm] | 28.1 x 8.1 x 14.4 | |
| Materials | | housing: ABS; rear of the housing: stainless steel (316L/1.4404) | |

# O8T202

## Diffuse reflection sensor

O8T-FPKG/IO-Link/0,30M/AS/3P

| | | |
|---|---|---|
| Lens material | front pane:PMMA | |
| Lens alignment | side lens | |

### Displays / operating elements

| | | |
|---|---|---|
| Display | switching status | 1 x LED, yellow |
| | operation | 1 x LED, green |

### Remarks

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

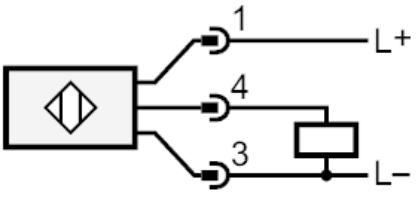
### Electrical connection

Cable: 0.3 m, PVC, black, Ø 2.9 mm; 3 x 0.08 mm²

Connector: 1 x M8; coding: A; Contacts: 3

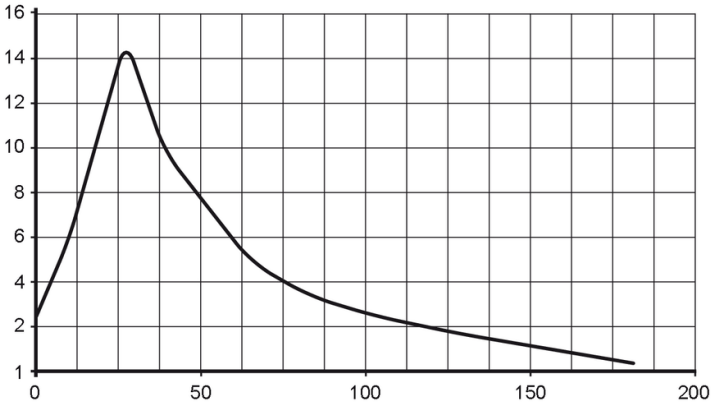



Connection




### Diagrams and graphs

excess gain graph




x: distance [mm]

y: excess gain factor