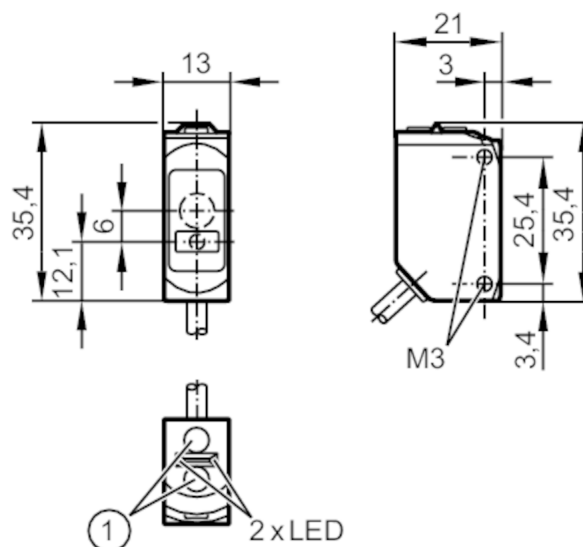




## Retro-reflective sensor

O6PLFNKG/0,30m/US



- 1 programming buttons  
receiver in upper lens , transmitter in lower lens



## Product characteristics

|                        |             |
|------------------------|-------------|
| Type of light          | red light   |
| Laser protection class | 1           |
| Housing                | rectangular |

## Application

|                    |                         |
|--------------------|-------------------------|
| Function principle | Retro-reflective sensor |
|--------------------|-------------------------|

## Electrical data

|                             |      |            |
|-----------------------------|------|------------|
| Operating voltage           | [V]  | 10...30 DC |
| Current consumption         | [mA] | 15; (24 V) |
| Protection class            |      | III        |
| Reverse polarity protection |      | yes        |
| Type of light               |      | red light  |
| Wave length                 | [nm] | 650        |

## Outputs

|                                                 |      |                                     |
|-------------------------------------------------|------|-------------------------------------|
| Electrical design                               |      | NPN                                 |
| Output function                                 |      | light-on/dark-on mode; (selectable) |
| Max. voltage drop switching output DC           | [V]  | 2.5                                 |
| Permanent current rating of switching output DC | [mA] | 100                                 |
| Switching frequency DC                          | [Hz] | 1000                                |
| Type of short-circuit protection                |      | pulsed                              |

## Detection zone

|                          |      |                                                    |
|--------------------------|------|----------------------------------------------------|
| Range                    | [m]  | 0.075...8; (Prismatic reflector 50 x 50 mm E20722) |
| Max. light spot diameter | [mm] | 17                                                 |



## Retro-reflective sensor

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|                                 |  |                                                                                         |                                                                                                   |
|---------------------------------|--|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| 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: Device Identification; Device Diagnosis; Teach Channel; Switching 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                                                                                 | 525                                                                                               |
| Operating conditions            |  |                                                                                         |                                                                                                   |
| Ambient temperature [°C]        |  | -10...60                                                                                |                                                                                                   |
| Protection                      |  | IP 65; IP 67                                                                            |                                                                                                   |
| Tests / approvals               |  |                                                                                         |                                                                                                   |
| EMC                             |  | EN 60947-5-2                                                                            |                                                                                                   |
| Laser protection class          |  | 1                                                                                       |                                                                                                   |
| Notes on laser protection       |  | Caution:                                                                                | laser light                                                                                       |
|                                 |  | laser class:                                                                            | 1                                                                                                 |
|                                 |  |                                                                                         | 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]                    |  | 636                                                                                     |                                                                                                   |
| Mechanical data                 |  |                                                                                         |                                                                                                   |
| Weight [g]                      |  | 34.1                                                                                    |                                                                                                   |
| Housing                         |  | rectangular                                                                             |                                                                                                   |
| Dimensions [mm]                 |  | 35.4 x 13 x 21                                                                          |                                                                                                   |
| Materials                       |  | housing: ABS; PPSU; Sealing: EPDM                                                       |                                                                                                   |
| Lens material                   |  | PMMA                                                                                    |                                                                                                   |
| Lens alignment                  |  | side lens                                                                               |                                                                                                   |
| Tightening torque [Nm]          |  | 0.5; (screws)                                                                           |                                                                                                   |
| Displays / operating elements   |  |                                                                                         |                                                                                                   |
| Display                         |  | switching status                                                                        | 1 x LED, yellow                                                                                   |
|                                 |  | operation                                                                               | 1 x LED, green                                                                                    |
| Remarks                         |  |                                                                                         |                                                                                                   |
| Remarks                         |  | operating voltage "supply class 2" according to cULus                                   |                                                                                                   |
| Pack quantity                   |  | 1 pcs.                                                                                  |                                                                                                   |

# O6P704



## Retro-reflective sensor

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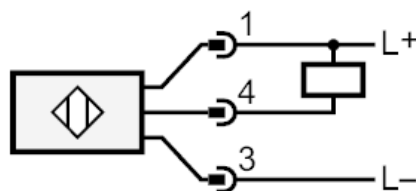
### Electrical connection - plug

Cable: 0.3 m, PUR, black, Ø 3.7 mm; 3 x 0.25 mm<sup>2</sup>

Connector: 1 x M12; coding: A

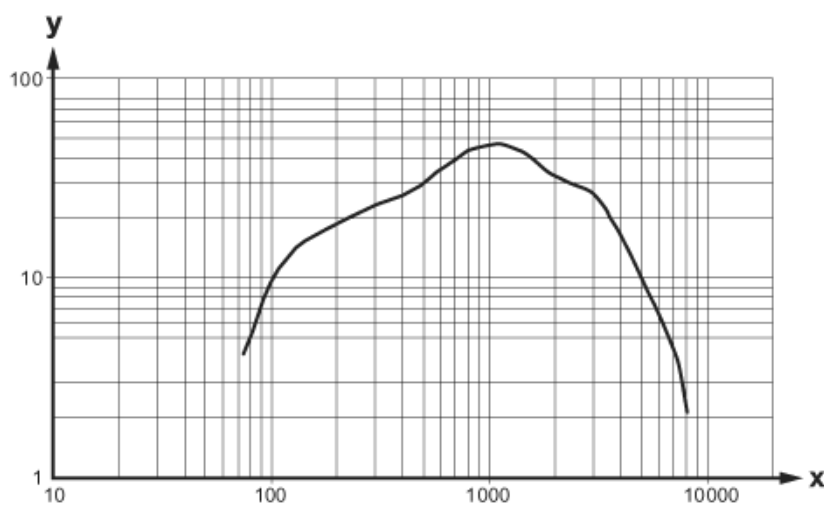


### Connection



4 OUT / IO-Link

### Diagrams and graphs



x: Abstand [mm]

y: Funktionsreservefaktor