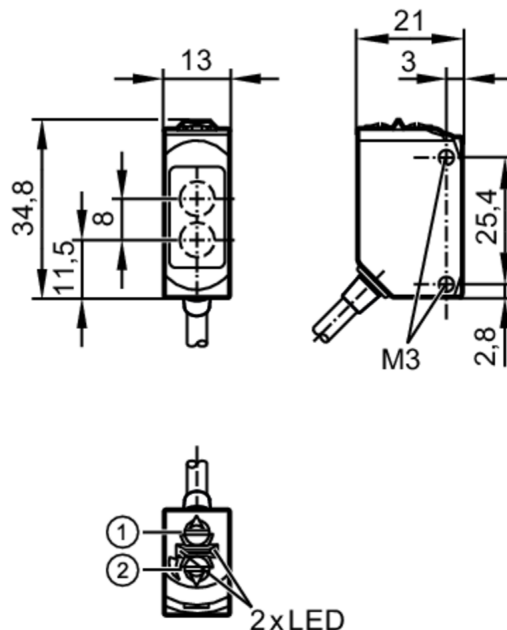


# O6P305



## Retro-reflective sensor

O6P-FNKG/0,30m/US



- 1 output function switch
- 1 potentiometer sensitivity
- receiver in upper lens
- transmitter in lower lens



| Product characteristics                         |      |                                     |
|-------------------------------------------------|------|-------------------------------------|
| Type of light                                   |      | red light                           |
| Housing                                         |      | rectangular                         |
| Application                                     |      |                                     |
| Special feature                                 |      | polarisation filter                 |
| Function principle                              |      | Retro-reflective sensor             |
| Electrical data                                 |      |                                     |
| Operating voltage                               | [V]  | 10...30 DC                          |
| Current consumption                             | [mA] | 12; ((24 V))                        |
| Protection class                                |      | III                                 |
| Reverse polarity protection                     |      | yes                                 |
| Type of light                                   |      | red light                           |
| Wave length                                     | [nm] | 633                                 |
| 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                                |
| Short-circuit protection                        |      | yes                                 |

# O6P305



## Retro-reflective sensor

O6P-FNKG/0,30m/US

|                                  |        |
|----------------------------------|--------|
| Type of short-circuit protection | pulsed |
|----------------------------------|--------|

|                                           |                                             |
|-------------------------------------------|---------------------------------------------|
| <b>Detection zone</b>                     |                                             |
| Range referred to prismatic reflector [m] | 0.05...5; (Prismatic reflector Ø 80 E20005) |
| Range adjustable                          | yes                                         |
| Max. light spot diameter [mm]             | 150                                         |
| Light spot dimensions refer to            | at maximum range                            |
| Polarisation filter available             | yes                                         |

|                             |                             |
|-----------------------------|-----------------------------|
| <b>Operating conditions</b> |                             |
| Ambient temperature [°C]    | -25...80                    |
| Protection                  | IP 65; IP 67; IP 68; IP 69K |

|                          |                 |      |
|--------------------------|-----------------|------|
| <b>Tests / approvals</b> |                 |      |
| EMC                      | EN 60947-5-2    |      |
| MTTF [years]             |                 | 908  |
| UL approval              | UL Approval no. | E006 |

|                        |                                                                       |
|------------------------|-----------------------------------------------------------------------|
| <b>Mechanical data</b> |                                                                       |
| Weight [g]             | 51.2                                                                  |
| Housing                | rectangular                                                           |
| Materials              | housing: stainless steel (316L/1.4404); plastics: PPSU; Sealing: EPDM |
| Lens material          | PMMA                                                                  |
| Lens alignment         | side lens                                                             |
| Tightening torque [Nm] | 1; (screws)                                                           |

|                                      |                  |                 |
|--------------------------------------|------------------|-----------------|
| <b>Displays / operating elements</b> |                  |                 |
| Display                              | switching status | 1 x LED, yellow |
|                                      | operation        | 1 x LED, green  |

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

### Electrical connection

Cable: 0.3 m, PVC; 3 x 0.25 mm<sup>2</sup>

Connector: 1 x M12; coding: A



## Retro-reflective sensor

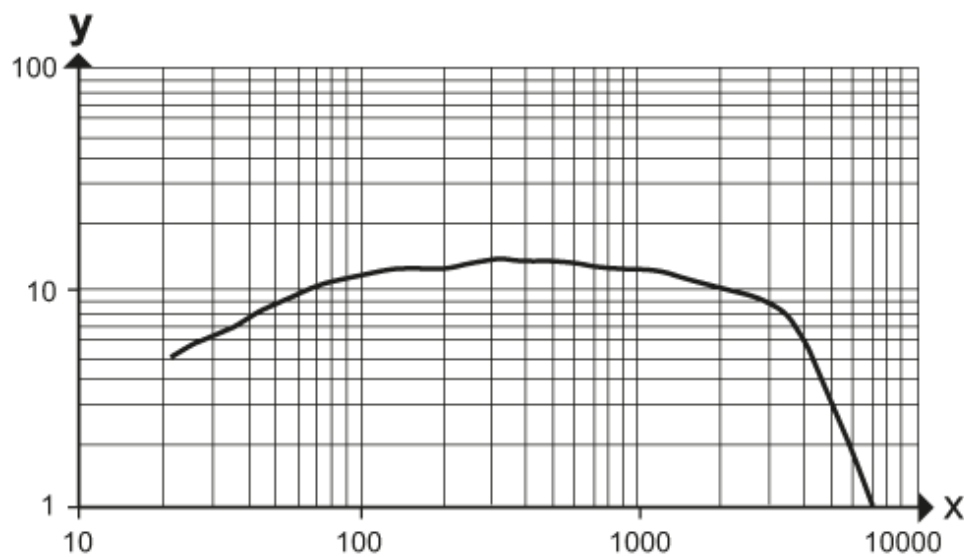
O6P-FNKG/0,30m/US

### Connection



### Diagrams and graphs

excess gain graph



x: distance [mm]

y: excess gain factor