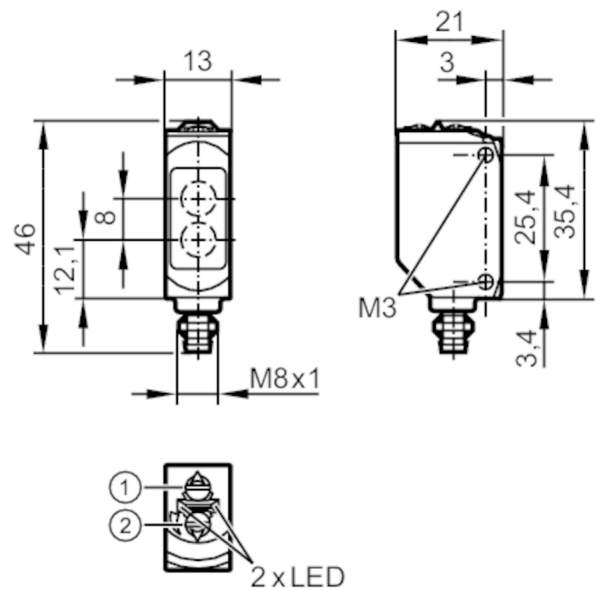




Diffuse reflection sensor

O6T-FNKG/AS/3P



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



| Product characteristics                         |      |                                                   |
|-------------------------------------------------|------|---------------------------------------------------|
| Type of light                                   |      | red light                                         |
| Housing                                         |      | rectangular                                       |
| Application                                     |      |                                                   |
| Function principle                              |      | Diffuse reflection sensor                         |
| Electrical data                                 |      |                                                   |
| Operating voltage                               | [V]  | 10...30 DC                                        |
| Current consumption                             | [mA] | 16; ((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                                               |
| Type of short-circuit protection                |      | pulsed                                            |
| Detection zone                                  |      |                                                   |
| Range                                           | [mm] | 5...500; (white paper 200 x 200 mm 90% remission) |



## Diffuse reflection sensor

O6T-FNKG/AS/3P

|                                |      |                  |
|--------------------------------|------|------------------|
| Setting range                  | [mm] | 100...500        |
| Range adjustable               |      | yes              |
| Max. light spot diameter       | [mm] | 15               |
| Light spot dimensions refer to |      | at maximum range |

## Operating conditions

|                     |      |              |
|---------------------|------|--------------|
| Ambient temperature | [°C] | -25...60     |
| Protection          |      | IP 65; IP 67 |

## Tests / approvals

|             |                 |              |
|-------------|-----------------|--------------|
| EMC         |                 | EN 60947-5-2 |
| MTTF        | [ANN]           | 897          |
| UL approval | UL Approval no. | E001         |

## Mechanical data

|                   |      |                    |
|-------------------|------|--------------------|
| Weight            | [g]  | 18.1               |
| Housing           |      | rectangular        |
| Dimensions        | [mm] | 46 x 13 x 21       |
| Materials         |      | housing: ABS; PPSU |
| Lens material     |      | PMMA               |
| Lens alignment    |      | side lens          |
| Sealing material  |      | EPDM               |
| Tightening torque | [Nm] | 0.5                |

## 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.                                                |

## Electrical connection

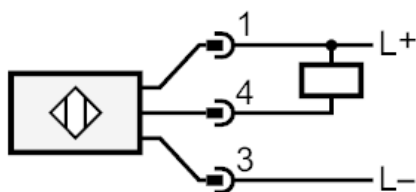
Connector: 1 x M8; coding: A; Locking: brass, coated; Sealing: EPDM



## Diffuse reflection sensor

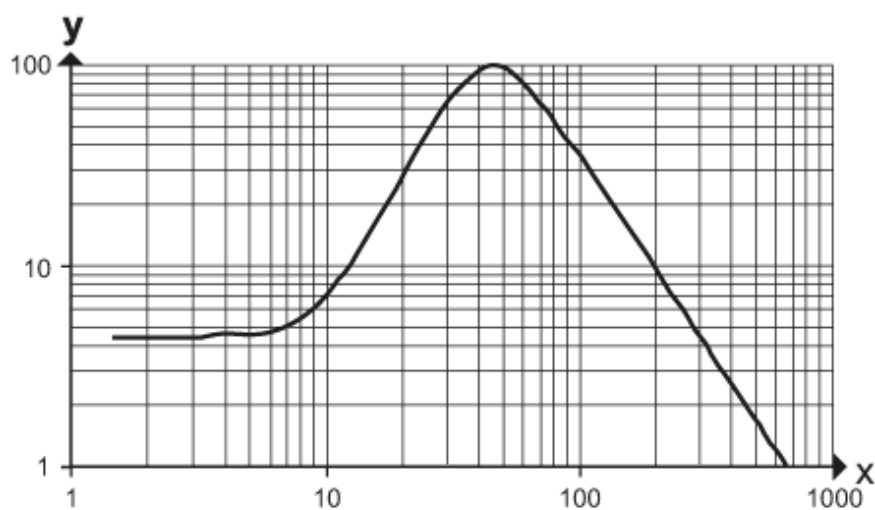
O6T-FNKG/AS/3P

### Connection



### Diagrams and graphs

excess gain graph



x: distance [mm]

y: excess gain factor