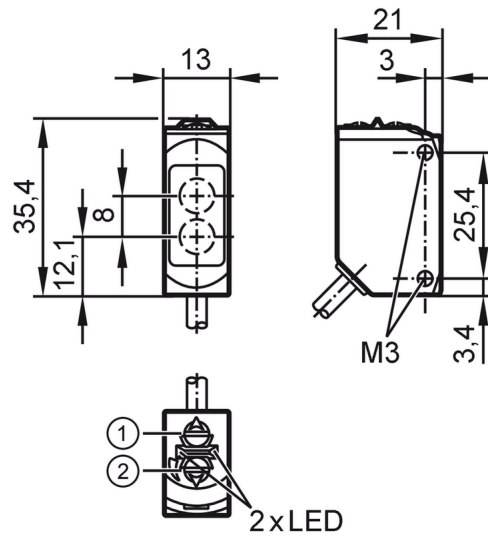


# O6T201



## Diffuse reflection sensor

O6T-FPKG/0,30m/US



- 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                          |
| Application  | Industrial applications                            |
| 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                                    | PNP  |
| 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                     | yes (non-latching)                                 |
| Monitoring range                                     |  |
| Range [mm]   | 5...500; (white paper 200 x 200 mm 90 % remission) |

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|                                |      |                  |
|--------------------------------|------|------------------|
| 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        | [years] | 897  |
| UL approval |         | Ta -25...50 °C<br>Enclosure type Type 1<br>voltage supply Class 2<br>UL approval number E012 |

### Mechanical data

|                   |      |   |
|-------------------|------|---|
| Weight            | [g]  | 33.1  |
| Housing           |      | rectangular   |
| Dimensions        | [mm] | 35.4 x 13 x 21  |
| Material          |      | housing: ABS orange; upper part of the housing: PPSU black; sealing: EPDM |
| Lens material     |      | front lens:PMMA   |
| Lens alignment    |      | Side sensing  |
| Tightening torque | [Nm] | 0.5   |

### Displays / operating elements

|         |                  |                 |
|---------|------------------|-----------------|
| Display | Switching status | 1 x LED, yellow |
|         | Power            | 1 x LED, green  |

### Remarks

|               |                                 |
|---------------|---------------------------------|
| Remarks       | cULus - Class 2 source required |
| Pack quantity | 1 pcs.                          |

### Electrical connection

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

Connector: 1 x M12; coding: A; Contacts: 4



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## Diffuse reflection sensor

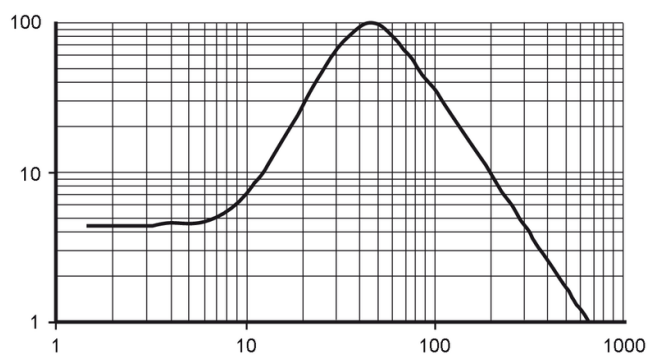
O6T-FPKG/0,30m/US

### Connection



### Diagrams and graphs

excess gain graph



x: distance [mm]

y: excess gain factor