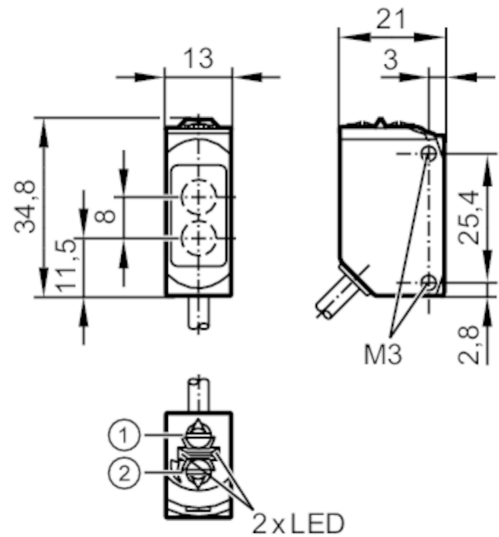


# O6T405



## Diffuse reflection sensor

O6T-FNKG/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                                     |      | suited for use in the machine tool industry |
| 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                                      |

# O6T405



## Diffuse reflection sensor

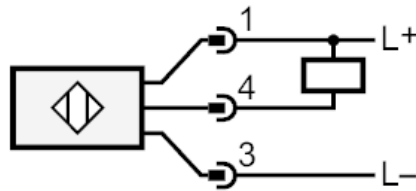
O6T-FNKG/0,30m/US

| Detection zone                                                                      |                  |                                                                      |
|-------------------------------------------------------------------------------------|------------------|----------------------------------------------------------------------|
| Range                                                                               | [mm]             | 5...500; (white paper 200 x 200 mm 90% remission)                    |
| 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; IP 68                                                  |
| Tests / approvals                                                                   |                  |                                                                      |
| EMC                                                                                 |                  | EN 60947-5-2                                                         |
| MTTF                                                                                | [years]          | 896                                                                  |
| UL approval                                                                         |                  | UL Approval no. E020                                                 |
| Mechanical data                                                                     |                  |                                                                      |
| Weight                                                                              | [g]              | 51.4                                                                 |
| Housing                                                                             |                  | rectangular                                                          |
| Dimensions                                                                          | [mm]             | 34.8 x 13 x 21                                                       |
| Materials                                                                           |                  | housing: stainless steel (316L/1.4404); plastics: PPSU; Sealing: FKM |
| Lens material                                                                       |                  | PMMA                                                                 |
| Lens alignment                                                                      |                  | side lens                                                            |
| Tightening torque                                                                   | [Nm]             | 1; (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.                                                               |
| Electrical connection                                                               |                  |                                                                      |
| Cable: 0.3 m, PUR; 3 x 0.25 mm <sup>2</sup>                                         |                  |                                                                      |
| Connector: 1 x M12; coding: A                                                       |                  |                                                                      |
|  |                  |                                                                      |

## Diffuse reflection sensor

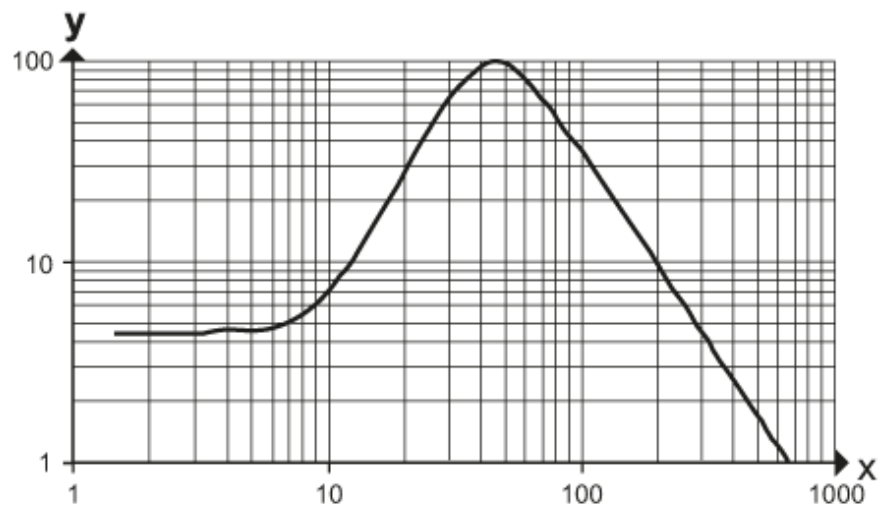
O6T-FNKG/0,30m/US

### Connection



### Diagrams and graphs

excess gain graph



x: distance [mm]

y: excess gain factor