

# O6T300



## Diffuse reflection sensor

O6T-FPKG



- 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                                          |                                     |
| 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                                    | 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                     | pulsed                              |

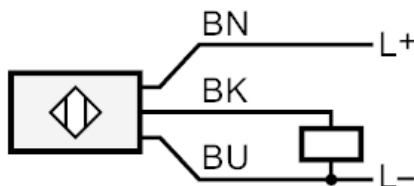
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| Detection zone                            |                  |                                                                       |
|-------------------------------------------|------------------|-----------------------------------------------------------------------|
| 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...80                                                              |
| Protection                                |                  | IP 65; IP 67; IP 68; IP 69K                                           |
| Tests / approvals                         |                  |                                                                       |
| EMC                                       |                  | EN 60947-5-2                                                          |
| MTTF                                      | [years]          | 910                                                                   |
| UL approval                               |                  | UL Approval no. E003                                                  |
| Mechanical data                           |                  |                                                                       |
| Weight                                    | [g]              | 81.8                                                                  |
| 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)                                                           |
| 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: 2 m, PVC; 3 x 0.25 mm <sup>2</sup> |                  |                                                                       |
| Connection                                |                  |                                                                       |



Core colours :  
BN = brown  
BK = black  
BU = blue

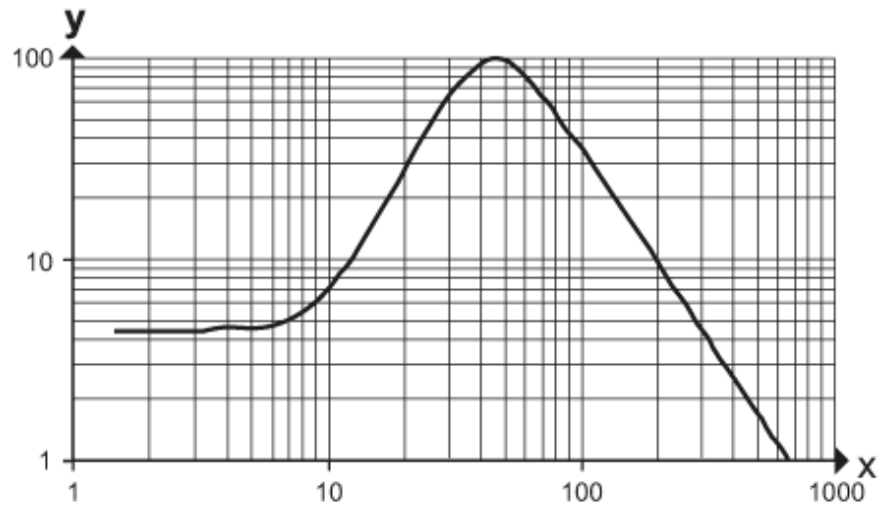


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### Diagrams and graphs

excess gain graph



x: distance [mm]

y: excess gain factor