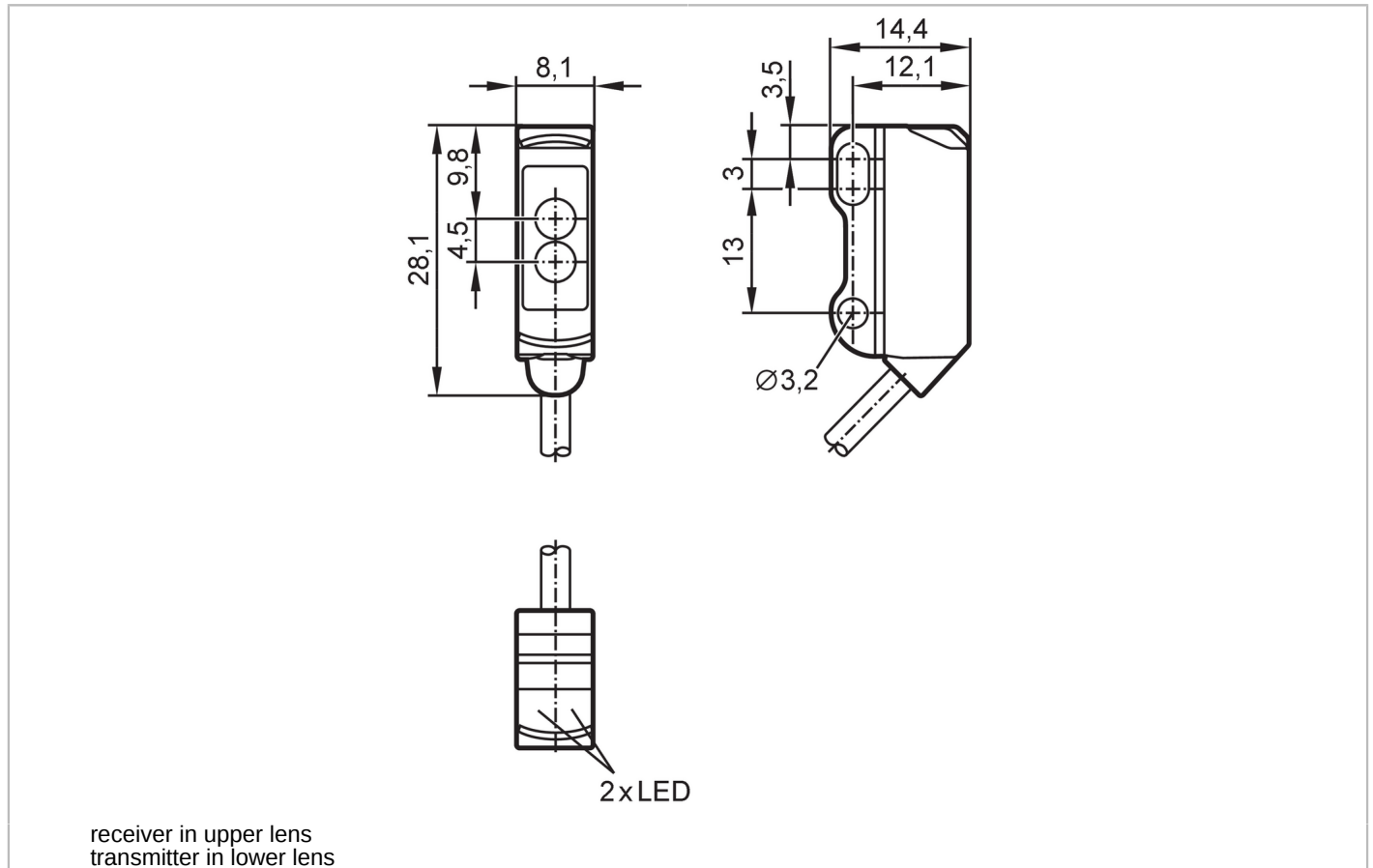


# O8T201



## Diffuse reflection sensor

O8T-HNKG/2,0M



| Product characteristics                              |  |
|--|--|
| Type of light  | red light  |
| Housing  | rectangular  |
| Application  |  |
| Function principle                                   | Diffuse reflection sensor                                      |
| Application  | For applications in robotics, assembly and handling technology |
| Electrical data                                      |  |
| Operating voltage [V]                                | 10...30 DC   |
| Current consumption [mA]                             | 20; ((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 mode  |
| Max. voltage drop switching output DC [V]            | 2.5  |
| Permanent current rating of switching output DC [mA] | 100  |

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## Diffuse reflection sensor

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|                                      |                  |  |
|--------------------------------------|------------------|--|
| Switching frequency DC               | [Hz]             | 1000   |
| Short-circuit protection             |                  | yes  |
| Type of short-circuit protection     |                  | pulsed   |
| <b>Detection zone</b>                |                  |  |
| Range                                | [mm]             | 0...180; (white paper 200 x 200 mm)                              |
| Max. light spot diameter             | [mm]             | 18   |
| Light spot dimensions refer to       |                  | at maximum range   |
| <b>Operating conditions</b>          |                  |  |
| Ambient temperature                  | [°C]             | -25...60   |
| Protection                           |                  | IP 65; IP 67   |
| <b>Tests / approvals</b>             |                  |  |
| EMC                                  |                  | EN 60947-5-2   |
| MTTF                                 | [years]          | 1067   |
| UL approval                          | Ta               | -25...60 °C  |
|                                      | Enclosure type   | Type 1   |
|                                      | voltage supply   | Limited Voltage/Current  |
|                                      | UL approval no.  | E014   |
|                                      | File number UL   | E174191  |
| <b>Mechanical data</b>               |                  |  |
| Weight                               | [g]              | 40   |
| Housing                              |                  | rectangular  |
| Dimensions                           | [mm]             | 28.1 x 8.1 x 14.4  |
| Materials                            |                  | housing: ABS; rear of the housing: stainless steel (316L/1.4404) |
| Lens material                        |                  | front pane:PMMA  |
| Lens alignment                       |                  | side lens  |
| <b>Displays / operating elements</b> |                  |  |
| Display                              | switching status | 1 x LED, yellow  |
|                                      | operation        | 1 x LED, green   |
| <b>Remarks</b>                       |                  |  |
| Pack quantity                        |                  | 1 pcs.   |

# O8T201



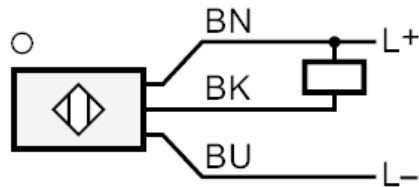
## Diffuse reflection sensor

O8T-HNKG/2,0M

### Electrical connection

Cable: 2 m, PVC, black,  $\varnothing$  2.9 mm; 3 x 0.08 mm<sup>2</sup>

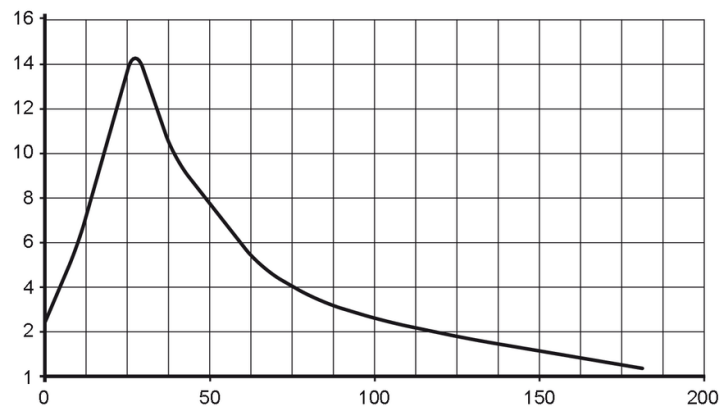
### Connection



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

### Diagrams and graphs

excess gain graph



x: distance [mm]

y: excess gain factor