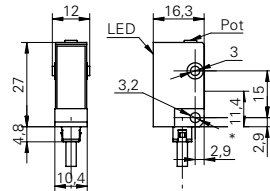


# Diffuse sensors with intensity difference

OZDK 10N5101

**dimension drawing**



\* emitter axis

**general data**

|                                           |                         |
|-------------------------------------------|-------------------------|
| type                                      | intensity difference    |
| light source                              | pulsed red laser diode  |
| sensing distance Tw                       | 3 ... 150 mm            |
| optimum operating distance                | 20 ... 40 mm            |
| detectable remission difference (on grey) | > 8 %                   |
| repeat accuracy                           | < 0,2 mm at laser focus |
| power on indication                       | LED green               |
| light indicator                           | LED yellow              |
| sensitivity adjustment                    | potentiometer, 5 turn   |
| laser class                               | 2                       |
| distance to focus                         | 40 mm                   |
| wave length                               | 650 nm                  |

**electrical data**

|                                    |                      |
|------------------------------------|----------------------|
| response time / release time       | < 0,05 ms            |
| voltage supply range +Vs           | 10 ... 30 VDC        |
| current consumption max. (no load) | 50 mA                |
| current consumption typ.           | 40 mA                |
| voltage drop Vd                    | < 1,8 VDC            |
| output function                    | light / dark operate |
| output circuit                     | NPN                  |
| output current                     | < 100 mA             |
| short circuit protection           | yes                  |
| reverse polarity protection        | yes                  |

**mechanical data**

|                  |                  |
|------------------|------------------|
| width / diameter | 10,4 mm          |
| height / length  | 27 mm            |
| depth            | 16,3 mm          |
| type             | rectangular      |
| housing material | plastic (ASA)    |
| front (optics)   | PMMA             |
| connection types | cable 4 pin, 2 m |

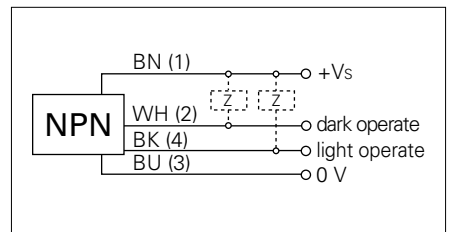
**ambient conditions**

|                       |                |
|-----------------------|----------------|
| operating temperature | -10 ... +50 °C |
| protection class      | IP 65          |


**photo**



**connection diagram**



**laser warning**



**LASER RADIATION**  
**DO NOT STARE INTO BEAM**  
Wavelength: 640...670nm  
IEC 60825-1, Ed. 3, 2014  
**CLASS 2 LASER PRODUCT**

Complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to laser notice No. 50, dated June 24, 2007

