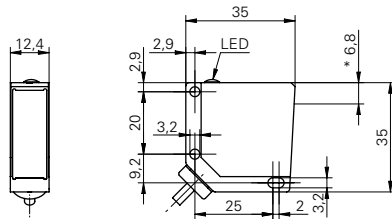


## Retro-reflective sensors

## OPDM 12P5101

## dimension drawing



\* emitter and receiver axis

## general data

|                                   |                               |
|-----------------------------------|-------------------------------|
| type                              | retro-reflective laser sensor |
| version                           | single lens optics            |
| light source                      | pulsed red laser diode        |
| actual range $S_b$                | 7 m                           |
| nominal range $S_n$               | 8 m                           |
| repeat accuracy                   | < 0,1 mm at laser focus       |
| polarization filter               | yes                           |
| alignment / soiled lens indicator | flashing light indicator      |
| light indicator                   | LED yellow                    |
| power on indication               | LED green                     |
| sensitivity adjustment            | no                            |
| laser class                       | 2                             |
| distance to focus                 | 400 mm                        |
| wave length                       | 650 nm                        |

## electrical data

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

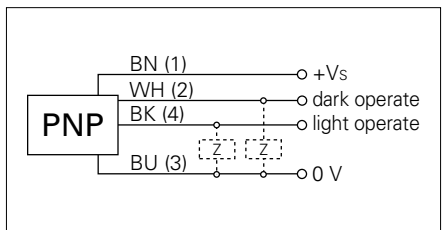
## mechanical data

|                  |                  |
|------------------|------------------|
| width / diameter | 12,4 mm          |
| height / length  | 35 mm            |
| depth            | 35 mm            |
| type             | rectangular      |
| housing material | die-cast zinc    |
| front (optics)   | glass            |
| connection types | cable 4 pin, 2 m |

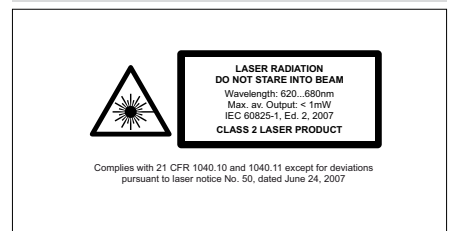
## photo



## connection diagram



## laser warning



**Retro-reflective sensors****OPDM 12P5101****ambient conditions**

|                       |                |
|-----------------------|----------------|
| operating temperature | -10 ... +50 °C |
| protection class      | IP 67          |