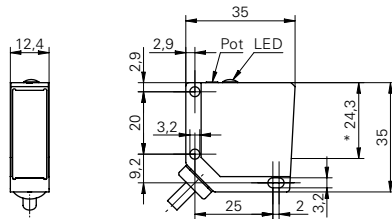


## Diffuse sensors with background suppression

## FHDM 12N5001

### dimension drawing



\* emitter axis

### general data

|                                     |                        |
|-------------------------------------|------------------------|
| type                                | background suppression |
| light source                        | pulsed red LED         |
| sensing distance $T_w$              | 15 ... 300 mm          |
| sensing range $T_b$ (at $T_w$ max.) | 15 ... 300 mm          |
| sensing range $T_b$ (at $T_w$ min.) | 5 ... 15 mm            |
| light indicator                     | LED yellow             |
| sensing distance adjustment         | mechanical, 5 turn     |
| wave length                         | 660 nm                 |
| suppression of reciprocal influence | yes                    |

### electrical data

|                                    |                      |
|------------------------------------|----------------------|
| response time / release time       | < 1 ms               |
| voltage supply range +Vs           | 10 ... 30 VDC        |
| current consumption max. (no load) | 35 mA                |
| current consumption typ.           | 25 mA                |
| voltage drop $V_d$                 | < 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 | 12,4 mm          |
| height / length  | 35 mm            |
| depth            | 35 mm            |
| type             | rectangular      |
| housing material | die-cast zinc    |
| front (optics)   | PMMA             |
| connection types | cable 4 pin, 2 m |

### ambient conditions

|                       |                |
|-----------------------|----------------|
| operating temperature | -25 ... +65 °C |
| protection class      | IP 67          |

### photo



### connection diagram

