

## OZDM 16P1901/S14

Diffuse contrast sensors

Article number: 10119432

### Overview

- diffuse contrast sensor
- < 250 mm
- pulsed red laser diode
- PNP / analog 4 ... 20 mA
- potentiometer, 14 turn
- connector M12 4 pin
- -10 ... 50 °C
- IP 67



Picture similar



### Technical data

#### General data

|                                           |                         |
|-------------------------------------------|-------------------------|
| Type                                      | Diffuse contrast sensor |
| Light source                              | Pulsed red laser diode  |
| Sensing distance Tw                       | < 250 mm                |
| Optimum operating distance                | 40 ... 80 mm            |
| Detectable remission difference (on grey) | > 8 %                   |
| Repeat accuracy                           | < 0.1 mm at laser focus |
| Output indicator                          | LED yellow              |
| Sensitivity adjustment                    | Potentiometer, 14 turn  |
| Laser class                               | 1                       |
| Distance to focus                         | 80 mm                   |
| Wave length                               | 650 nm                  |

#### Electrical data

|                                    |               |
|------------------------------------|---------------|
| Response time / release time       | < 0.1 ms      |
| Voltage supply range +Vs           | 12 ... 30 VDC |
| Current consumption max. (no load) | 65 mA         |

#### Electrical data

|                             |                          |
|-----------------------------|--------------------------|
| Current consumption typ.    | 60 mA                    |
| Voltage drop Vd             | < 2 VDC                  |
| Output function             | Light operate            |
| Output circuit              | PNP / analog 4 ... 20 mA |
| Output current              | < 200 mA                 |
| Short circuit protection    | Yes                      |
| Reverse polarity protection | Yes                      |

#### Mechanical data

|                  |                     |
|------------------|---------------------|
| Width / diameter | 15.4 mm             |
| Height / length  | 50 mm               |
| Depth            | 50 mm               |
| Type             | Rectangular         |
| Housing material | Die-cast zinc       |
| Front (optics)   | Glass               |
| Connection types | Connector M12 4 pin |

#### Ambient conditions

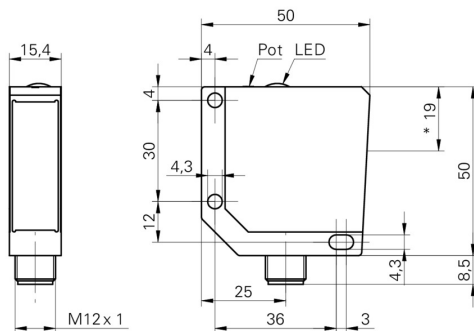
|                       |                |
|-----------------------|----------------|
| Protection class      | IP 67          |
| Operating temperature | -10 ... +50 °C |

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### Dimension drawing



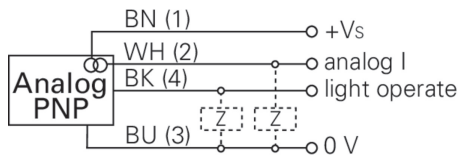
\* emitter axis

### Laser warning

**CLASS 1 LASER  
PRODUCT**

IEC 60825-1/2014  
Complies with 21 CFR 1040.10 and  
1040.11 except for conformance with  
IEC 60825-1 Ed. 3., as described in  
Laser Notice No. 56, dated May 8, 2019

### Connection diagram



### Beam characteristic (typically)

