

### Overview

- measuring mode: edges, center, width, gap
- 150 ... 250 mm
- pulsed red laser diode
- analog and RS 485
- Touch Display, RS485
- connector M12 8 pin
- -20 ... 50 °C
- IP 67



Picture similar



### Technical data

#### General data

|                                  |   |
|----------------------------------|---|
| Type                             | Measuring mode: edges, center, width, gap |
| Version                          | PosCon OXE7                               |
| Measuring range (width)          | 75 ... 125 mm                             |
| Measuring range (distance)       | 150 ... 250 mm                            |
| Measuring frequency              | 125 ... 500 Hz                            |
| Resolution                       | 30 ... 50 µm                              |
| Repeat accuracy                  | ± 10 µm                                   |
| Smallest detectable object width | 1,5 mm                                    |
| Smallest detectable gap          | 2 mm                                      |
| Smallest detectable step         | 2 mm                                      |
| Linearity error                  | ± 80 ... 120 µm                           |
| Temperature drift                | < 0,05 % measured value/K                 |
| Power on indication              | LED green                                 |
| Output indicator                 | LED yellow / LED red                      |
| Light source                     | Pulsed red laser diode                    |
| Wave length                      | 656 nm                                    |
| Laser class                      | 1   |
| Optical peak power max.          | 3 mW                                      |
| Adjustment                       | Touch Display, RS485                      |

#### Electrical data

|                              |               |
|------------------------------|---------------|
| Response time / release time | 4 ... 16 ms   |
| Voltage supply range +Vs     | 15 ... 28 VDC |

#### Electrical data

|                                    |                            |
|------------------------------------|----------------------------|
| Current consumption max. (no load) | 150 mA                     |
| Output circuit                     | Analog and RS 485          |
| Output signal                      | 4 ... 20 mA / 0 ... 10 VDC |
| Switching output                   | Push-pull                  |
| Output function                    | Out 1 / Alarm              |
| Output current                     | < 100 mA                   |
| Baud rate                          | 115200, adjustable         |
| Reverse polarity protection        | Yes, Vs to GND             |
| Short circuit protection           | Yes                        |

#### Mechanical data

|                  |                         |
|------------------|-------------------------|
| Width / diameter | 26 mm                   |
| Height / length  | 74 mm                   |
| Depth            | 55 mm                   |
| Type             | Rectangular, front view |
| Housing material | Aluminum                |
| Front (optics)   | Glass                   |
| Connection types | Connector M12 8 pin     |
| Weight           | 130 g                   |

#### Ambient conditions

|                        |                |
|------------------------|----------------|
| Ambient light immunity | < 25 kLux      |
| Operating temperature  | -20 ... +50 °C |
| Protection class       | IP 67          |
| Storage temperature    | -25 ... +75 °C |

#### Technical data

##### Ambient conditions

|                        |  |
|------------------------|--|
| Vibration (sinusoidal) | IEC 60068-2-6:2008<br>1.5 mm p-p at f = 10 - 57 Hz, 10 cycles per axis<br>10 g at f = 58 - 2000 Hz, 10 cycles per axis |
|------------------------|--|

##### Ambient conditions

|                         |  |
|-------------------------|--|
| Shock (semi-sinusoidal) | IEC 60068-2-27:2009<br>50 g / 11 ms resp. 100 g / 6 ms, 10 jolts per axis and direction<br>100 g / 2 ms, 5000 jolts per axis and direction |
|-------------------------|--|

#### Remarks

- Conditions for the following characteristics:
- Measuring frequency 1) 2)
- Resolution 1) 3)
- Repeat accuracy 1) 3)
- Linearity error 1) 4)
- Response time / release time 1) 2) 3)
- 1) Measurement with Baumer standardized measuring equipment and targets. Measuring on 90% reflectivity (white)
- 2) Depending on the size of the measuring field and OBJECT light/dark mode
- 3) Without filtering / no averaging
- 4) Measured symmetrically around the reference point with 50% of the measuring field

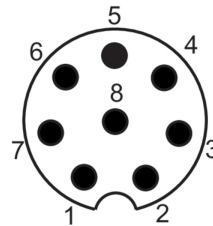
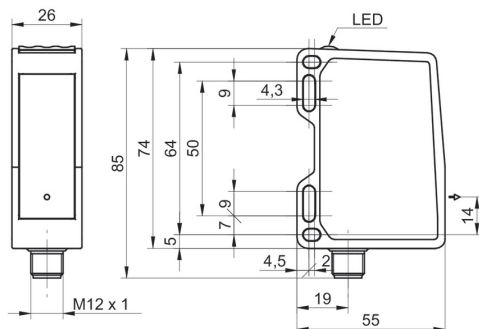
#### Laser warning

**CLASS 1 LASER  
PRODUCT**

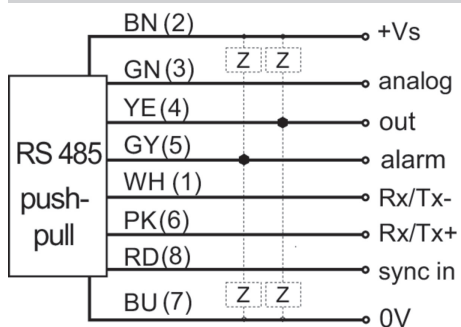
IEC 60825-1/2014  
Complies with 21 CFR 1040.10 and 1040.11  
except for deviations pursuant to laser  
notice No. 50, dated June 24, 2007

#### Pin assignment

#### Dimension drawing



#### Connection diagram



#### Alignment of the laserline

