

## Overview

- Touch display with Live Monitor function
- Configurable switching output
- Selectable filters and trigger modes



Picture similar



## Technical data

### General data

|                           |                        |
|---------------------------|------------------------|
| Type                      | Tolerance measuring    |
| Version                   | OM70 laser point basic |
| Measuring distance Sd     | 30 ... 70 mm           |
| Measuring range Mr        | 40 mm                  |
| Sweet spot                | 65 mm                  |
| Adjustment                | Touch Display, RS485   |
| Power on indication       | LED green              |
| Output indicator          | LED yellow / LED red   |
| Resolution                | 0,7 ... 1 µm           |
| Repeat accuracy           | 0,1 ... 0,3 µm         |
| Linearity error           | ± 0,06 % Mr            |
| Beam type                 | Point                  |
| Temperature drift         | 0,01 % Sde/K           |
| Hysteresis digital output | Adjustable             |

### Light Source

|              |                        |
|--------------|------------------------|
| Light source | Pulsed red laser diode |
| Wave length  | 660 nm                 |
| Laser class  | 1                      |

### Electrical data

|                                    |                            |
|------------------------------------|----------------------------|
| Response delay                     | 0,8 ms                     |
| Measuring frequency                | 2500 Hz                    |
| Voltage supply range +Vs           | 15 ... 28 VDC              |
| Current consumption max. (no load) | 75 mA                      |
| Output circuit                     | Analog and RS 485          |
| Output signal                      | 4 ... 20 mA / 0 ... 10 VDC |

### Electrical data

|                             |                |
|-----------------------------|----------------|
| Output current              | < 100 mA       |
| Switching output            | Push-pull      |
| Short circuit protection    | Yes            |
| Reverse polarity protection | Yes, Vs to GND |

### Communication interface

|           |                    |
|-----------|--------------------|
| Interface | RS485              |
| Baud rate | 115200, adjustable |

### 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                   |

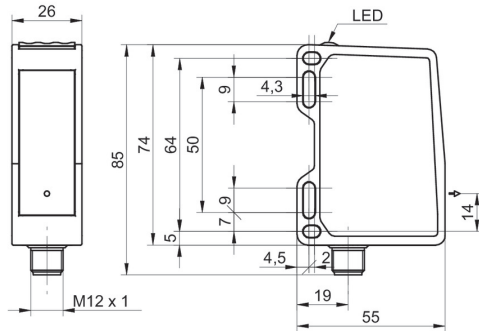
### Ambient conditions

|                         |                                                                                                                     |
|-------------------------|---------------------------------------------------------------------------------------------------------------------|
| Ambient light immunity  | < 28 kLux                                                                                                           |
| Operating temperature   | -10 ... +50 °C                                                                                                      |
| Protection class        | IP 67                                                                                                               |
| Vibration (sinusoidal)  | IEC 60068-2-6:2008<br>1 mm p-p at f = 10 - 55 Hz, duration 5 min per axis<br>30 min endurance at f = 55 Hz per axis |
| Shock (semi-sinusoidal) | IEC 60068-2-27:2009<br>30 g / 11 ms, 6 jolts per axis and direction                                                 |

#### Remarks

- Measurement with Baumer standardized measuring equipment and targets (Measurement on 90% remission (white)). Values of Resolution, linearity error and repeat accuracy apply to a measurement with filter setting (Median: 9, Average: 128).

#### Dimension drawing



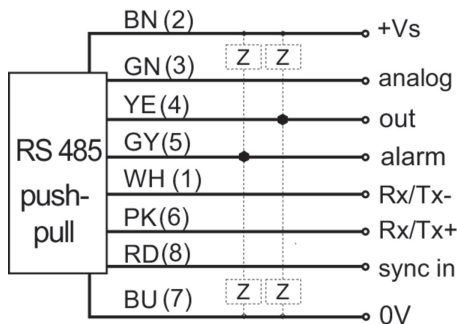
- \* emitter axis

#### Laser warning

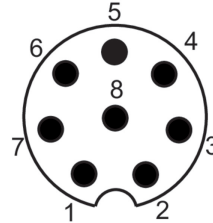
### CLASS 1 LASER PRODUCT

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



#### Pin assignment



#### Beam characteristic (typically)

