

# OM70T-L0250.HH0240.VI

Distance sensors - high performance

Article number: 11175097

## overview

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



## Technical data

### general data

|                           |                        |
|---------------------------|------------------------|
| type                      | tolerance measuring    |
| version                   | OM70 laser line basic  |
| measuring distance Sd     | 50 ... 250 mm          |
| measuring range Mr        | 200 mm                 |
| sweet spot                | 240 mm                 |
| adjustment                | Touch Display, RS485   |
| power on indication       | LED green              |
| output indicator          | LED yellow / LED red   |
| resolution                | 1,4 ... 6,3 µm         |
| repeat accuracy           | 0,3 ... 2 µm           |
| linearity error           | ± 0,09 % Mr            |
| light source              | pulsed red laser diode |
| wave length               | 660 nm                 |
| laser class               | 1                      |
| beam type                 | line                   |
| temperature drift         | 0,025 % So/K           |
| hysteresis digital output | adjustable             |

### electrical data

|                                       |                   |
|---------------------------------------|-------------------|
| response delay                        | 0,8 ms            |
| measuring frequency                   | 2500 Hz           |
| voltage supply range +Vs              | 15 ... 28 VDC     |
| current consumption max.<br>(no load) | 75 mA             |
| output circuit                        | analog and RS 485 |

### 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).

|                             |                            |
|-----------------------------|----------------------------|
| baud rate                   | 115200, adjustable         |
| output signal               | 4 ... 20 mA / 0 ... 10 VDC |
| output current              | < 100 mA                   |
| switching output            | push-pull                  |
| short circuit protection    | yes                        |
| reverse polarity protection | yes, Vs to GND             |

### 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

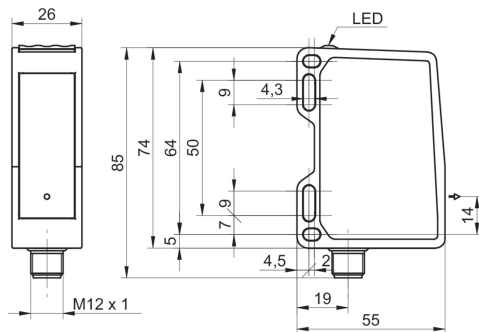
|                         |                                                                                                                     |
|-------------------------|---------------------------------------------------------------------------------------------------------------------|
| ambient light immunity  | < 170 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                                                 |

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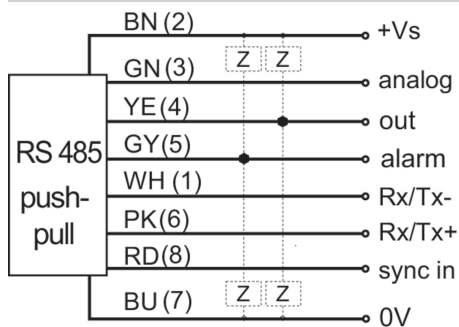
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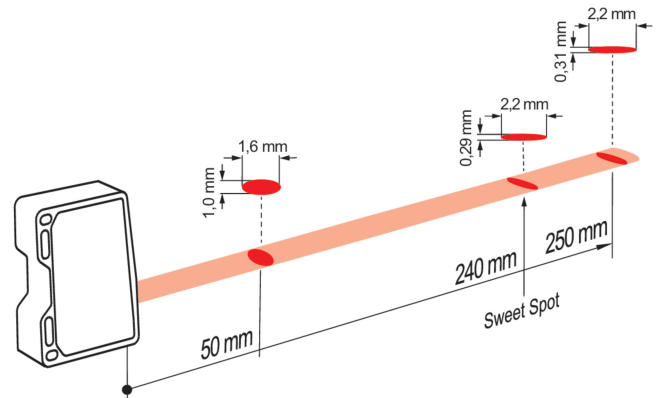
### dimension drawing



### connection diagram



### beam characteristic (typically)



### 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

