Distance sensors

# OM30-L0350.HV.AIN

Performance sensor

Article number: 11232073

## Overview

- Automatic adjustment of exposure time for precise measurements on changing materials
- High immunity to ambient light for reliable measurements regardless of ambient conditions
- Line beam shape for particularly robust measurement results on structured surfaces


*Picture similar*

## Technical data

| General data | |
|---|---|
| Type | Distance measuring |
| Measuring distance Sd | 50 … 350 mm |
| Measuring range Mr | 300 mm |
| Adjustment | Teach-in: button / external |
| Power on indication | LED green |
| Output indicator | LED red |
| Repeat accuracy | 10 … 240 µm |
| Linearity error | ± 0,14 % Mr , 50 ... 200 mm<br>± 0,18 % Mr , 50 ... 350 mm |
| Beam type | Line |
| Temperature drift | 0,05 % Sde/K |
| **Light Source** | |
| Light source | Pulsed red laser diode |
| Wave length | 660 nm |
| Laser class | 2 |
| Maximum pulse power | 2 mW |
| Pulse duration | 0.001 ... 1.2 ms |
| Pulse period | 0.2 ... 3.4 ms |
| **Electrical data** | |
| Response delay | 0,4 ms |
| Measuring frequency | 5000 Hz |
| Voltage supply range +Vs | 12 … 28 VDC |
| Current consumption max. (no load) | 100 mA |

| Electrical data | |
|---|---|
| Output circuit | Analog |
| Output signal | 4 ... 20 mA |
| Load resistance | < (+Vs - 9 V) / 0.02 A |
| Short circuit protection | Yes |
| Reverse polarity protection | Yes, Vs to GND |
| **Mechanical data** | |
| Width / diameter | 40,3 mm |
| Height / length | 49 mm |
| Depth | 13,6 mm |
| Type | Rectangular, front view |
| Housing material | Die-cast zinc |
| Front (optics) | Glass |
| Connection types | Connector M8 4 pin |
| Weight | 67 g |
| **Ambient conditions** | |
| Ambient light immunity | < 100 kLux |
| Operating temperature | -10 … +50 °C |
| Protection class | IP 67 |
| Storage temperature | -20 … +60 °C |
| 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)).

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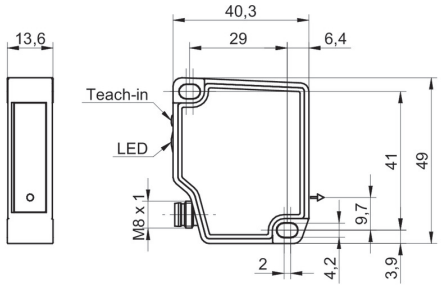
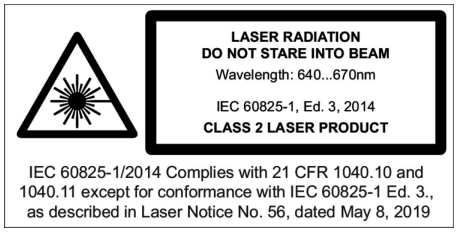
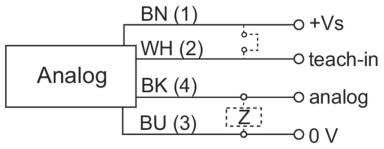
## Dimension drawing



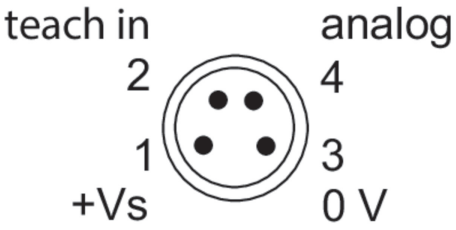

## Laser warning




## Connection diagram




## Pin assignment




## Beam characteristic (typically)