

Overview

- Adjustable reference distance (zero point position)
- Intuitive limitation of the measuring range
- Configurable switching output
- Selectable filters and trigger modes
- Additional data such as signal quality on request
- Export and import function for parameter sets



Picture similar



Technical data

General data

| | |
|---------------------------|----------------------------|
| Type | Distance measuring |
| Version | OM70 laser line basic |
| Measuring distance Sd | 50 ... 250 mm |
| Measuring range Mr | 200 mm |
| Sweet spot | 240 mm |
| Adjustment | Webserver, Ethernet TCP/IP |
| Power on indication | LED green |
| Output indicator | LED yellow / LED red |
| Ethernet link indication | LED blue |
| Resolution | 1.4 ... 6.3 µm |
| Repeat accuracy | 0.3 ... 2 µm |
| Linearity error | ± 0.09 % Mr |
| Beam type | Line |
| Temperature drift | 0,025 % 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 | 2000 Hz |
| Voltage supply range +Vs | 15 ... 28 VDC |
| Current consumption max. (no load) | 75 mA |
| Output circuit | Analog and digital |
| Output signal | 4 ... 20 mA / 2 ... 10 mA / 0 ... 10 VDC / 0 ... 5 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 | Ethernet TCP/IP |
| Protocol | Profinet (Class B), Modbus TCP, OPC UA, UDP streaming, EtherNet/IP |
| Webserver | Yes |

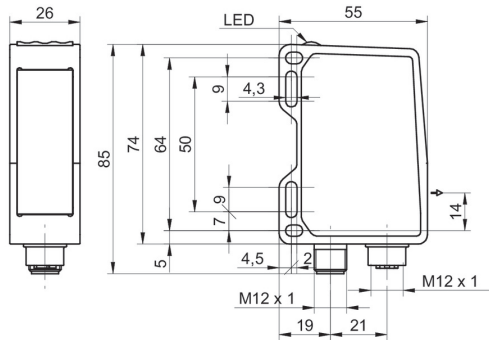
Mechanical data

| | |
|---------------------------|---|
| 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 & M12 4 pin |
| Weight | 135 g |
| Ambient conditions | |
| Ambient light immunity | < 170 kLux |
| Protection class | IP 67 |
| Operating temperature | -10 ... +50 °C |
| Storage temperature | -20 ... +60 °C |
| Vibration (sinusoidal) | IEC 60068-2-6:2008 1 mm p-p at f = 10 - 55 Hz, duration 5 min per axis 30 min endurance at f = 55 Hz per axis |
| Shock (semi-sinusoidal) | IEC 60068-2-27:2009 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



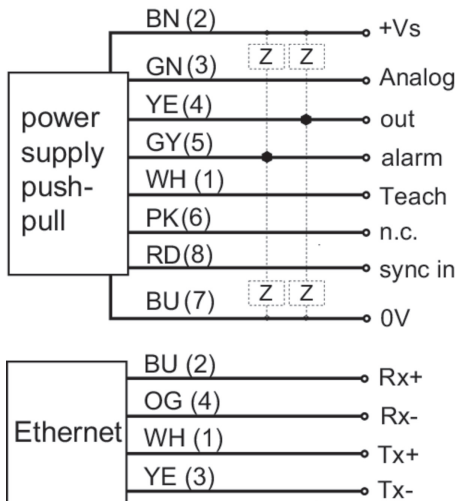
- * emitter axis

Laser warning

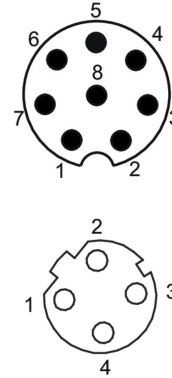
CLASS 1 LASER PRODUCT

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)

