

## 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 point basic
Measuring distance Sd	40 ... 140 mm
Measuring range Mr	100 mm
Sweet spot	130 mm
Adjustment	Webserver, Ethernet TCP/IP
Power on indication	LED green
Output indicator	LED yellow / LED red
Ethernet link indication	LED blue
Resolution	1.2 ... 2.5 µm
Repeat accuracy	0.3 ... 0.7 µm
Linearity error	± 0.07 % Mr
Beam type	Point
Temperature drift	0,015 % 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

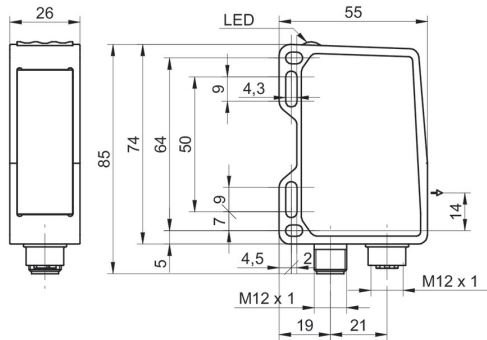
### Ambient conditions

Ambient light immunity	< 38 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**



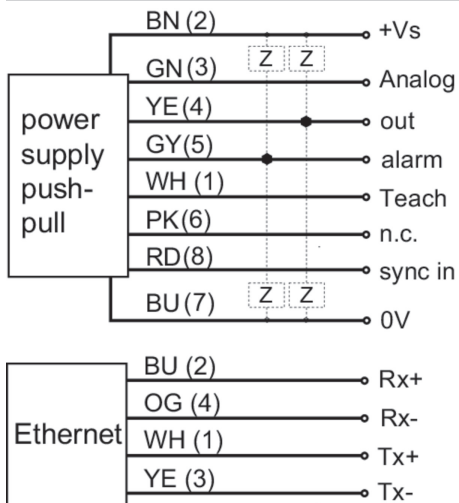
- \* emitter axis

**Laser warning**

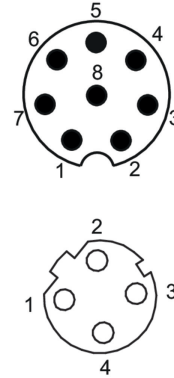
**CLASS 1 LASER  
PRODUCT**

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)**

