

Overview

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



Picture similar



Technical data

General data

Type	Distance measuring
Measuring distance Sd	40 ... 60 mm
Measuring range Mr	20 mm
Adjustment	RS485 Display External
Power on indication	LED green
Output indicator	LED yellow
Repeat accuracy	0.27 µm
Linearity error	± 0.03 % Mr
Linearity	± 6 µm
Beam type	Line
Temperature drift	± 0.004 % Sde/K

Light Source

Light source	Pulsed red laser diode
Wave length	660 nm
Laser class	1
Maximum pulse power	0.1 mW
Pulse duration	0.02 ... 1 ms
Pulse period	0.31 ... 2 ms

Electrical data

Response delay	0.65 ms
Measuring frequency	3300 Hz
Voltage supply range +Vs	18 ... 30 VDC
Current consumption max. (no load)	100 mA

Electrical data

Output circuit	RS485
Short circuit protection	Yes
Reverse polarity protection	Yes

Communication interface

Interface	RS485
Baud rate	115200, adjustable
Protocol	Modbus RTU

Mechanical data

Width / diameter	27.2 mm
Height / length	66 mm
Depth	57 mm
Design	Rectangular, front view
Housing material	Plastic (PBT-ASA)
Front (optics)	PMMA
Connection types	Flylead connector M12 5 pin, L=300 mm
Weight	130 g

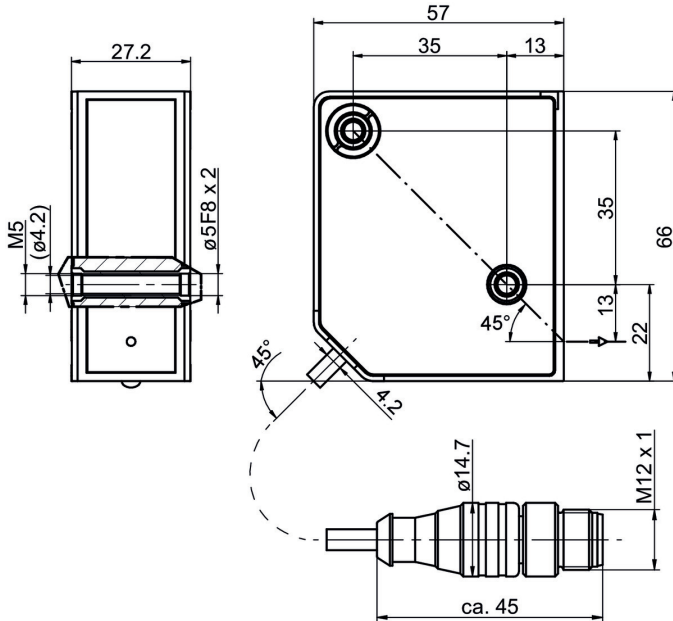
Ambient conditions

Ambient light immunity	< 15 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

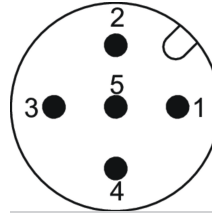
Remarks

- Measurement with Baumer standardized measuring equipment and targets (Measurement on 90% remission (white)). Values of repeat accuracy apply to a measurement with filter setting (Median: 21, Average: 512).

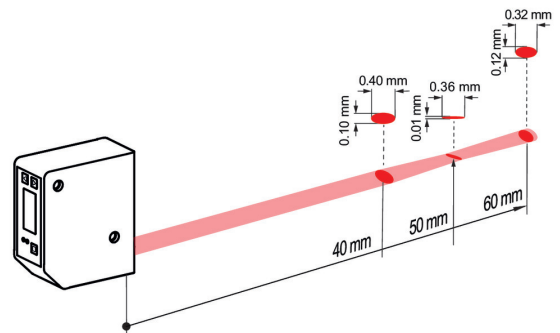
Dimension drawing



Pin assignment



Beam characteristic (typically)



Laser warning



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

