

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
- Adjustable filters for particularly stable measurement results



Picture similar



Technical data

General data

Type	Distance measuring
Measuring distance Sd	50 ... 550 mm
Measuring range Mr	500 mm
Adjustment	Teach-in: button / RS485
Power on indication	LED green
Output indicator	LED yellow
Repeat accuracy	2 ... 86 µm
Linearity error	± 0.23 % Mr
Beam type	Line
Temperature drift	0,08 % 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)	50 mA
Output circuit	RS485
Short circuit protection	Yes

Electrical data

Reverse polarity protection	Yes, Vs to GND
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Communication interface

Interface	RS485
Baud rate	57600, adjustable
Protocol	Modbus RTU

Mechanical data

Width / diameter	13.6 mm
Height / length	49 mm
Depth	40.3 mm
Type	Rectangular, front view
Housing material	Die-cast zinc
Front (optics)	Glass
Connection types	Connector M8 4 pin
Weight	67 g

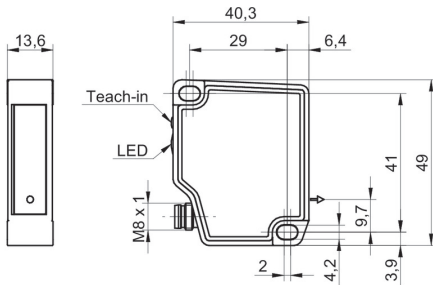
Ambient conditions

Ambient light immunity	< 100 kLux
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

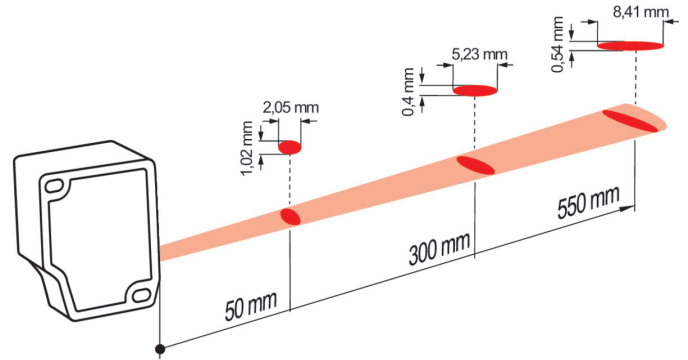
Remarks

- 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



Beam characteristic (typically)



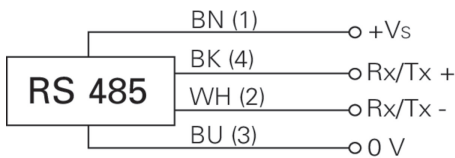
Laser warning



LASER RADIATION
DO NOT STARE INTO BEAM
 Wavelength: 640...670nm
 IEC 60825-1, Ed. 3, 2014
CLASS 2 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

