

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 ... 350 mm
Measuring range Mr	300 mm
Adjustment	Teach-in: button / RS485
Power on indication	LED green
Output indicator	LED yellow
Repeat accuracy	2 ... 30 µm
Linearity error	± 0.1 % Mr , 50 ... 200 mm ± 0.15 % 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)	50 mA
Output circuit	RS485

Electrical data

Short circuit protection	Yes
Reverse polarity protection	Yes, Vs to GND

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

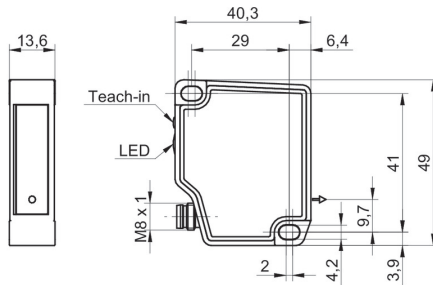
Ambient conditions

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

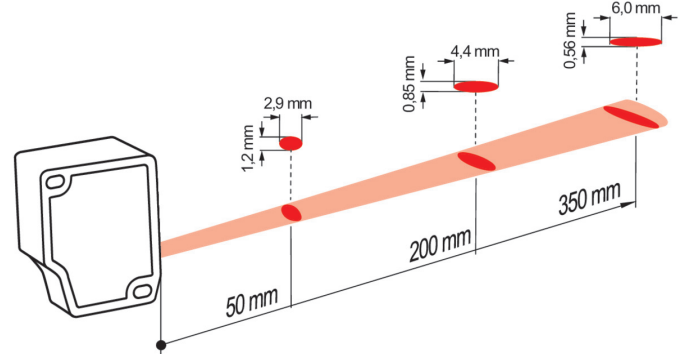
Remarks

- 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)



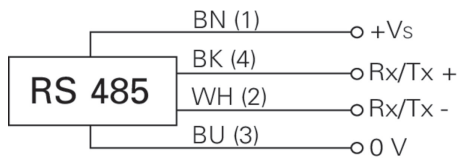
Laser warning



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

