

Overview

- 100 ... 500 mm
- pulsed red laser diode
- analog and RS 485
- Touch Display, RS485
- connector M12 8 pin
- -10 ... 50 °C
- IP 67



Picture similar



Technical data

General data

Type	Distance measuring
Version	OM70 multi-spot
Measuring distance Sd	100 ... 500 mm
Measuring range (width)	13 ... 66 mm
Adjustment	Touch Display, RS485
Power on indication	LED green
Resolution	4 ... 25 µm
Repeat accuracy	4 ... 20 µm 1) 2) 4) 5)
Linearity error	± 100 µm 1) 2) 4) 6)
Beam type	Multi-spot
Temperature drift	± 0,04 % Sde/K 1) 2) 4)

Light Source

Light source	Pulsed red laser diode
Wave length	660 nm
Laser class	2

Electrical data

Response time / release time	1,3 ms 2) 3)
Measuring frequency	1540 Hz 2) 3)
Voltage supply range +Vs	15 ... 28 VDC
Current consumption max. (no load)	120 mA
Output circuit	Analog and RS 485
Output signal	4 ... 20 mA / 0 ... 10 VDC

Electrical data

Output current	< 100 mA
Short circuit protection	Yes
Reverse polarity protection	Yes, Vs to GND

Communication interface

Interface	RS485
Baud rate	115200, adjustable

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

Ambient conditions

Ambient light immunity	< 35 kLux
Operating temperature	-10 ... +50 °C
Protection class	IP 67
Storage temperature	-25 ... +75 °C
Vibration (sinusoidal)	IEC 60068-2-6:2008 1.5 mm p-p at f = 10 - 57 Hz, 10 cycles per axis 10 g at f = 58 - 2000 Hz, 10 cycles per axis

Technical data

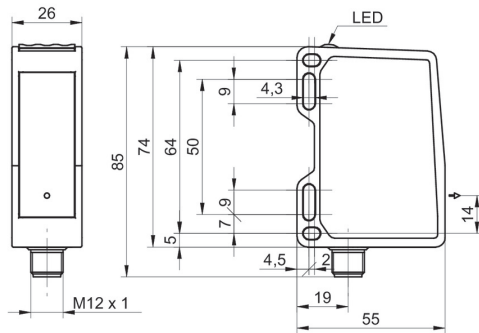
Ambient conditions

Shock (semi-sinusoidal)	IEC 60068-2-27:2009
	50 g / 11 ms resp. 100 g / 6 ms, 10 jolts per axis and direction
	100 g / 2 ms, 5000 jolts per axis and direction

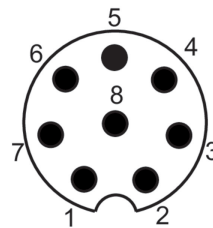
Remarks

- 1) Measurement with Baumer standardized measuring equipment and targets depending on measuring distance Sd
- 2) Measurement on 90% remission (white)
- 3) Measurement with reduced Field of View (distance 400 ... 500 mm, width 5 mm)
- 4) Measurement with measuring type average
- 5) Measurement with filtering
- 6) Measuring range (distance) 100 ... 200 mm

Dimension drawing



Pin assignment



- * emitter axis

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

