Distance sensors

OM60-P0135.HH.YUFV

Article number: 11726787

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
- Spot beam shape for precise measurement
- Display with Live Monitor function

Picture similar

Technical data

General data	
Type	Distance measuring
Measuring distance Sd	65 … 135 mm
Measuring range Mr	70 mm
Adjustment	IO-Link Display External
Power on indication	LED green
Output indicator	LED yellow
Repeat accuracy	0.7 µm
Linearity error	± 0.04 % Mr
Linearity	± 30 µm
Beam type	Point
Temperature drift	± 0.004 % Sde/K
Light Source	
Light source	Pulsed red laser diode
Wave length	660 nm
Laser class	1
Maximum pulse power	0.3 mW
Pulse duration	0.02 ... 1 ms
Pulse period	0.5 ... 2 ms
Electrical data	
Response delay	1 ms
Measuring frequency	2000 Hz
Voltage supply range +Vs	18 … 30 VDC
Current consumption max. (no load)	100 mA
Output circuit	Analog and digital
Output signal	0 … 10 VDC / 0 … 5 VDC
Load resistance	> 100 kOhm
Short circuit protection	Yes

Electrical data	
Reverse polarity protection	Yes
Communication interface	
Interface	IO-Link V1.1.3
IO-Link port type	Class A
Baud rate	230.4 kBaud (COM 3)
Cycle time	≥ 1 ms
Process data length	48 Bit
Process data structure	Smart Sensor Profile - DMS PDI48.INT32_INT8 Bit 0 = SSC1 Bit 1 = SSC2 Bit 2 = quality Bit 3 = alarm Bit 16-47 = 32 Bit measurement
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

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Ambient conditions

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

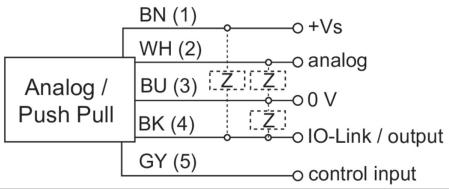
Ambient conditions

Shock (semi-sinusoidal)	IEC 60068-2-27:2009 30 g / 11 ms, 6 jolts per axis and direction

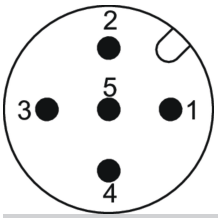
Remarks

- 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).

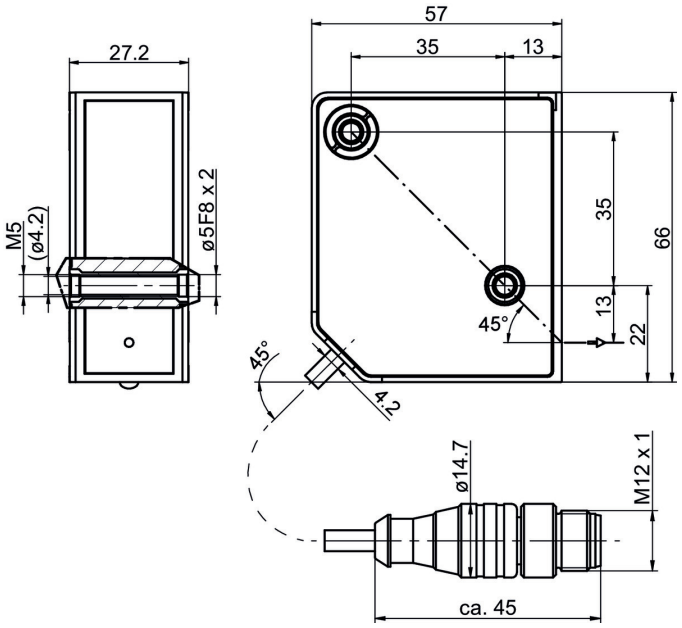
Connection diagram



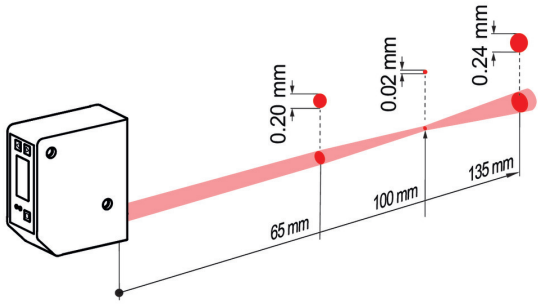
Pin assignment



Dimension drawing



Beam characteristic (typically)



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