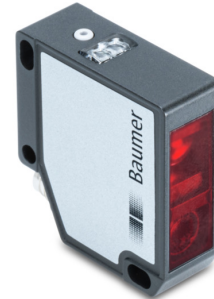


overview

- Automatic adjustment of exposure time for precise measurements on changing materials
- High immunity to ambient light for reliable measurements regardless of ambient conditions
- Point beam shape for a precise measurement
- Adjustable filters for particularly stable measurement results



Picture similar



Technical data

general data

type	distance measuring
measuring distance Sd	16 ... 26 mm
measuring range Mr	10 mm
adjustment	Teach-in: button / IO-Link
power on indication	LED green
output indicator	LED yellow
repeat accuracy	1 µm
linearity error	± 0.08 % Mr
beam type	point
temperature drift	0,01 % Sde/K

light source

light source	pulsed red laser diode
wave length	660 nm
laser class	1
laser maximum total power	2 mW
pulse duration	0.001 ... 3.2 ms
pulse period	0.2 ... 22.9 ms

electrical data

response delay	0,4 ms
measuring frequency	5000 Hz
voltage supply range +Vs	12 ... 28 VDC
current consumption max. (no load)	100 mA
output circuit	analog and digital
output signal	4 ... 20 mA / 2 ... 10 mA
load resistance	< (+Vs - 9 V) / 0.02 A
output current	< 100 mA
short circuit protection	yes
reverse polarity protection	yes, Vs to GND

communication interface

IO-Link	yes
interface	IO-Link V1.1
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 (distance) Bit 2 = quality Bit 3 = alarm Bit 8-15 = scale factor Bit 16-47 = 32 Bit measurement
IO-Link port type	Class A

mechanical data

width / diameter	34,5 mm
height / length	37 mm
depth	13 mm
type	rectangular, front view
housing material	die-cast zinc
front (optics)	glass
connection types	connector M8 4 pin
weight	41 g

ambient conditions

ambient light immunity	< 100 kLux
operating temperature	-10 ... +50 °C
protection class	IP 67
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

Technical data

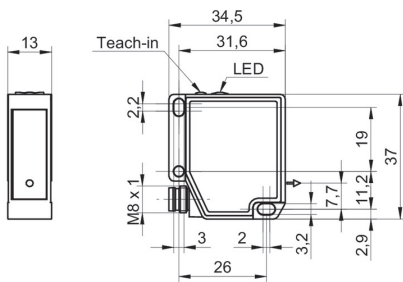
ambient conditions

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

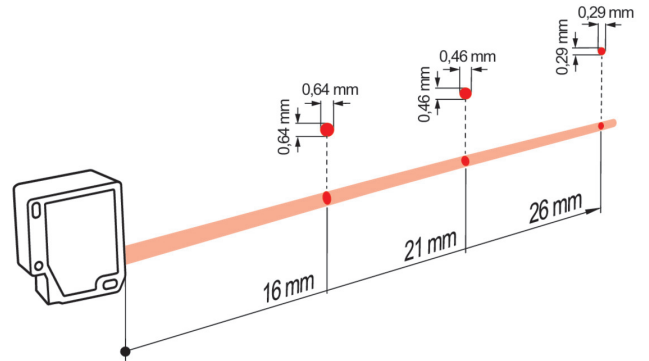
remarks

- Measurement with Baumer standardized measuring equipment and targets (Measurement on 90% remission (white)). Values of Resolution, linearity error and repeat accuracy apply to a measurement with filter setting (Median: 9, Average: 128).

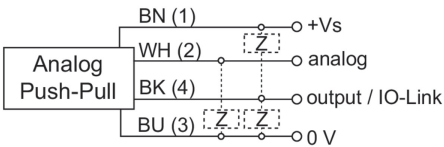
dimension drawing



beam characteristic (typically)



connection diagram



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

pin assignment

