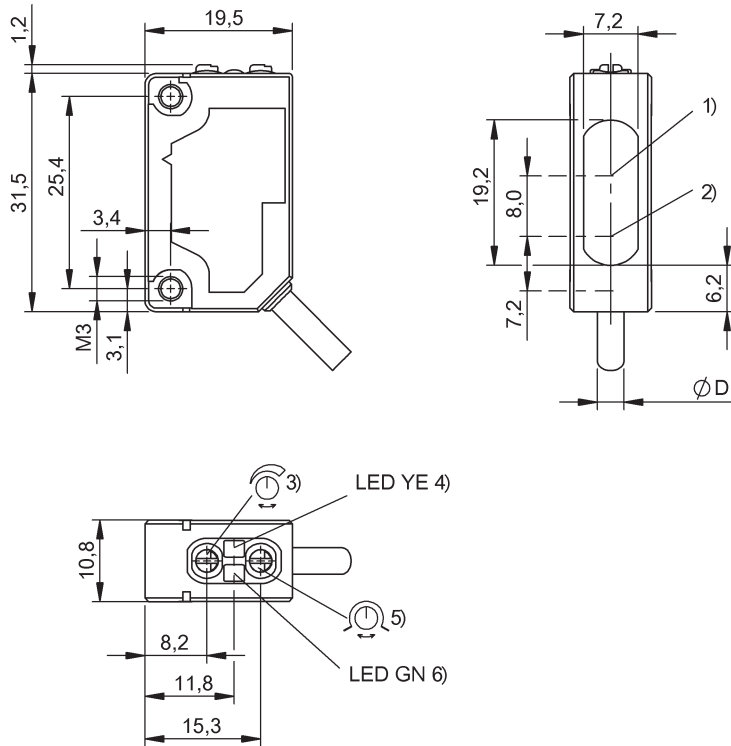


LASER CLASS 1 per IEC 60825-1:
2003-10



1) Optical axis receiver 2) Optical axis emitter 3) Sn 4) Output function 5) Light-on / Dark-on 6) Stability

- Photoelectric sensor
- Series 5K
- Laser red light
- up to 500 mm



General attributes

Adjuster	Potentiometer 6-turn (1x) Potentiometer 270° (1x) CE
Approvals / Conformity	cULus CDRH
Basic standard	IEC 60947-5-2
Enclosure Type per IEC 60529	IP67
Indicator	Output function - LED YE Stability - LED GN
Polarity reversal protected	yes
Series	Series 5K
Setting	Switching distance (Sn) Light-on/dark-on
Short circuit protected	yes
Trademark	GLOBAL

Switching function	NO/NC
Switching output	NPN (1x)
Turn on time ton max.	0.25 ms
Voltage drop Ud max. (at Ie)	1.5 V

Mechanical attributes

Ambient temperature Ta max.	55 °C
Ambient temperature Ta min.	-10 °C
Cable diameter D max.	3.5 mm
Cable jacket material	PVC
Cable length	2.00 m
Conductor cross-section	0.20 mm ²
Detection range Sd	20...300 mm
Dist. dev. 18 % max. (% of Sr)	8 %
Eff. operating distance Sr	300 mm
Housing material	PC, PBT
Length 1	10.8 mm
Length 2	19.5 mm
Length 3	26.8 mm
Minimum operating distance	10 mm
Mounting type	Screw M3
Number of conductors	3
Range Sn	Sn = 300 mm, adjustable
Sensing face material	PMMA
Style	Block, 45° connection
Tightening torque max.	0.5 Nm

Electrical attributes

Connection type	Cable
Eff. operating current Ie	100 mA
Eff. operating voltage Ue DC	24.0 V
Electrical version	DC, direct current
No-load current max. Io at Ue	35 mA
Operating voltage UB max. DC [V]	30.0 V
Operating voltage UB min. DC [V]	10.0 V
Ripple max. (% of Ue)	10 %
Switching freq. f max. (at Ue)	2000 Hz

Optical attributes

Ambient light max.	5,000 Lux
Average power Po max.	< 390 µW (IEC 60825-1)
Laser Class per IEC 60825-1	1
Light spot size, typical	0.2 mm x 0.3 mm at focal point
Light type	Laser red light
Optical special feature	Background suppression
Principle of optical operation	Light scanner, triangulation
Switching function, optical	NO/NC: light-on/dark-on
Wavelength	650 nm

Additional text

Order accessories separately.
For additional information, refer to user's guide.
Reference object (target): Gray card, 100 x 100

90 % remission, axial approach.

The sensor is functional again after the overload has been eliminated.
For use as UL listed product the Ambient temperature Ta max. may not exceed the value of 50°C.

To meet EMC requirements according EN 60947-5-2 the mounting bracket must not be grounded.

