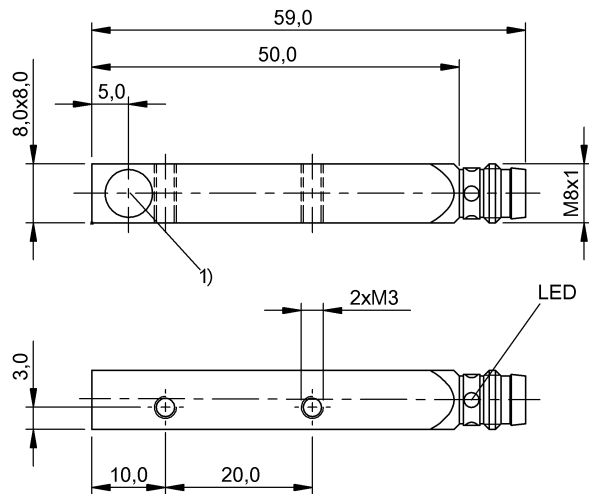




1) Sensing surface



Basic features

Approval/Conformity	CE cULus EAC
Basic standard	IEC 60947-5-2
Principle of operation	Inductive sensor

Display/Operation

Function indicator	yes
Power indicator	no

Electrical connection

Connection	M8x1-Male, 3-pin
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Load capacitance max. at U _e	0.5 µF
Min. operating current I _m	0 mA
No-load current I _o max., damped	4 mA
No-load current I _o max., undamped	15 mA
Operating voltage U _b	10...30 VDC
Output resistance R _a	33.0 kOhm + D
Rated insulation voltage U _i	75 V DC
Rated operating current I _e	200 mA
Rated operating voltage U _e DC	24 V
Rated short circuit current	100 A
Ready delay t _v max.	10 ms
Residual current I _r max.	80 µA
Ripple max. (% of U _e)	15 %
Switching frequency	3000 Hz
Utilization category	DC -13
Voltage drop static max.	2.5 V

Environmental conditions

Ambient temperature	-25...70 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 30 g _n , 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
IP rating	IP67

Interface

Switching output	NPN normally closed (NC)
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Material

Housing material	Zinc, Die casting
Material sensing surface	PBT

Mechanical data

Dimension	59 x 8 x 8 mm
Installation	for flush mounting
Size	8x8
Tightening torque	0.5 Nm

Range/Distance

Assured operating distance Sa	1.6 mm
Hysteresis H max. (% of Sr)	15.0 %
Rated operating distance Sn	2 mm
Real switching distance sr	2 mm
Repeat accuracy max. (% of Sr)	5.0 %
Switching distance marking	■ ■
Temperature drift max. (% of Sr)	10 %
Tolerance Sr	±10 %

Remarks

The sensor is functional again after the overload has been eliminated.

Connector Drawings



Wiring Diagrams (Schematic)

