

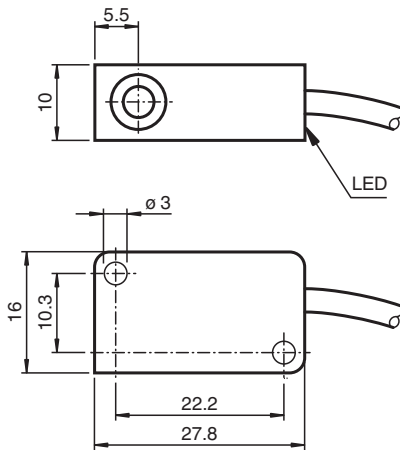
## Inductive sensor

### NBB3-V3-E1

- 3 mm flush
- 3-wire DC



## Dimensions



## Technical Data

General specifications		
Switching function		Normally closed (NC)
Output type		NPN
Rated operating distance	$s_n$	3 mm
Installation		flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 2.43 mm
Reduction factor $r_{Al}$		0.35
Reduction factor $r_{Cu}$		0.33
Reduction factor $r_{304}$		0.82
Reduction factor $r_{Brass}$		0.5
Output type		3-wire
Nominal ratings		
Operating voltage	$U_B$	10 ... 30 V DC
Switching frequency	$f$	0 ... 1000 Hz
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing

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## Technical Data

Voltage drop	$U_d$	$\leq 3 \text{ V}$
Operating current	$I_L$	0 ... 100 mA
Off-state current	$I_r$	0 ... 0.5 mA typ. 0.1 $\mu\text{A}$ at 25 °C
No-load supply current	$I_0$	$\leq 15 \text{ mA}$
Switching state indicator		LED, yellow
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		2300 a
Mission Time (T <sub>M</sub> )		20 a
Diagnostic Coverage (DC)		0 %
<b>Compliance with standards and directives</b>		
Standard conformity		
Standards		EN IEC 60947-5-2
<b>Approvals and certificates</b>		
CCC approval		CCC approval / marking not required for products rated $\leq 36 \text{ V}$
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
<b>Mechanical specifications</b>		
Connection type		cable
Housing material		PBT
Sensing face		PBT
Degree of protection		IP67
Cable		
Wire end ferrules		yes
Cable diameter		3 mm + 0.3 mm
Bending radius		> 10 x cable diameter
Material		PVC
Color		grey
Number of cores		3
Core cross section		0.14 mm <sup>2</sup>
Length	L	130 mm
Tightening torque, fastening screws		$\leq 0.4 \text{ Nm}$
Dimensions		
Height		10.2 mm
Width		27.8 mm
Length		16 mm

## Connection

