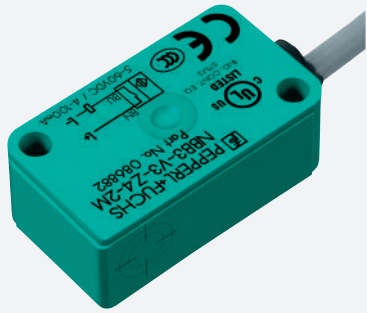


Inductive sensor

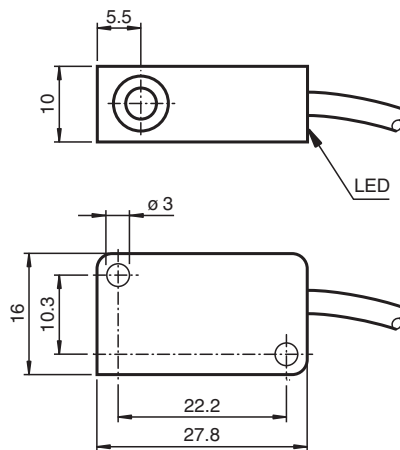
NBB3-V3-Z4



- 3 mm flush
- 2-wire DC



Dimensions



Technical Data

General specifications

Switching function		Normally open (NO)
Output type		Two-wire
Rated operating distance	s_n	3 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 2.4 mm
Actual operating distance	s_r	2.7 ... 3.3 mm typ.
Reduction factor r_{Al}		0.45
Reduction factor r_{Cu}		0.35
Reduction factor r_{304}		0.8
Reduction factor r_{Brass}		0.5
Output type		2-wire

Nominal ratings

Operating voltage	U_B	5 ... 60 V DC
Switching frequency	f	0 ... 2000 Hz
Hysteresis	H	typ. 0.2 mm

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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PEPPERL+FUCHS

Technical Data

Reverse polarity protection		reverse polarity protected
Short-circuit protection		no
Inductive overvoltage protection		yes
Voltage drop	U_d	$\leq 4 \text{ V}$
Voltage drop at I_L		
Voltage drop $I_L = 10 \text{ mA}$, switching element on	U_d	3.4 ... 3.9 V typ. 3.6 V
Operating current	I_L	4 ... 100 mA
Lowest operating current	I_m	4 mA
Off-state current	I_r	0.4 ... 0.55 mA typ. 0.46 mA
Time delay before availability	t_v	$\leq 1 \text{ ms}$
Switching state indicator		LED, yellow

Limit data

Tightening torque, fastening screws	0.4 Nm
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Functional safety related parameters

MTTF _d	1552 a
Mission Time (T_M)	20 a
Diagnostic Coverage (DC)	0 %

Compliance with standards and directives

Standard conformity	
Standards	EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012

Approvals and certificates

UL approval	cULus Listed, General Purpose
CSA approval	cCSAus Listed, General Purpose
CCC approval	Certified by China Compulsory Certification (CCC)

Ambient conditions

Ambient temperature	-25 ... 85 °C (-13 ... 185 °F)
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Mechanical specifications

Connection type	cable PVC , 130 mm
Core cross-section	0.14 mm ²
Housing material	PBT
Sensing face	PBT
Degree of protection	IP67
Cable	
Cable diameter	3 mm $\pm$ 0.2 mm
Bending radius	> 10 x cable diameter
Mass	7.5 g

Connection

