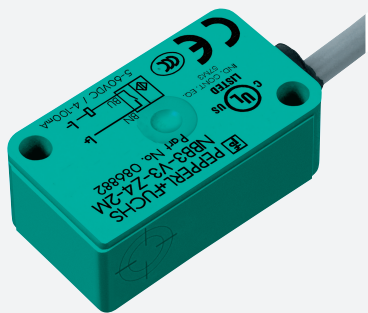




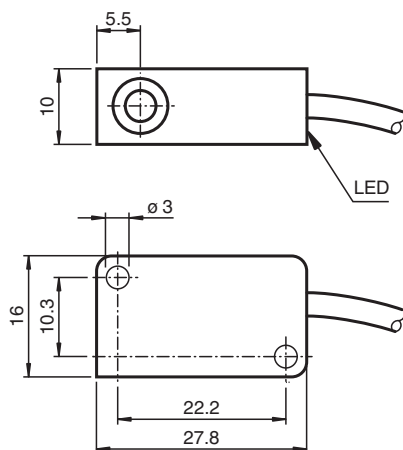
Inductive sensor

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	$3.4 \dots 3.9 \text{ V typ. } 3.6 \text{ V}$
Operating current	I_L	$4 \dots 100 \text{ mA}$
Lowest operating current	I_m	4 mA
Off-state current	I_r	$0.4 \dots 0.55 \text{ mA typ. } 0.46 \text{ mA}$
Time delay before availability	t_v	$\leq 1 \text{ ms}$
Switching state indicator		LED, yellow
Limit data		
Tightening torque, fastening screws		0.4 Nm
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 IEC 60947-5-2
Approvals and certificates		
UL approval		cULus Listed, General Purpose
CCC approval		Certified by China Compulsory Certification (CCC)
Ambient conditions		
Ambient temperature		$-25 \dots 85 \text{ }^\circ\text{C} (-13 \dots 185 \text{ }^\circ\text{F})$
Mechanical specifications		
Connection type		cable
Housing material		PBT
Sensing face		PBT
Degree of protection		IP67
Cable		
Wire end ferrules		yes
Cable diameter		$3 \text{ mm} \pm 0.2 \text{ mm}$
Bending radius		$> 10 \times \text{cable diameter}$
Material		PVC
Color		grey
Number of cores		2
Core cross section		0.14 mm^2
Length	L	130 mm
Mass		7.5 g
Dimensions		
Height		10.2 mm
Width		27.8 mm
Length		16 mm

Connection

