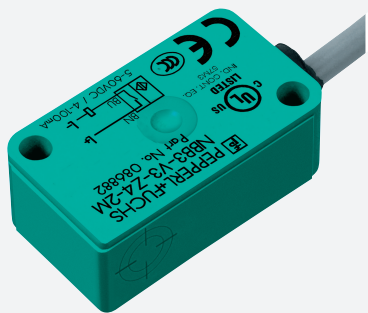


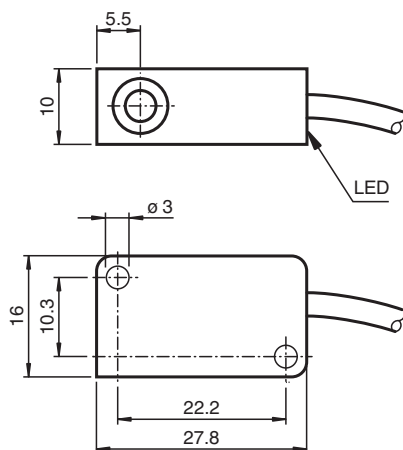


Inductive sensor NBB2-V3-Z4L-3G-3D

- 2 mm flush
- 2-wire DC sensor with minimum off-state current
- Switching status indicator, yellow LED
- ATEX-/IECEx-approvals for zone 2/22 (Ex ec/tc)



Dimensions



Technical Data

General specifications

Switching function		Normally open (NO)
Output type		Two-wire with minimum off-state current
Rated operating distance	s_n	2 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 1.62 mm
Actual operating distance	s_r	1.8 ... 2.2 mm typ.
Reduction factor r_{AI}		0.25
Reduction factor r_{CU}		0.2
Reduction factor r_{304}		0.7
Output type		2-wire

Nominal ratings

Operating voltage	U_B	3.7 ... 30 V DC
Switching frequency	f	0 ... 700 Hz
Hysteresis	H	1 ... 10 % typ. 5 %
Reverse polarity protection		reverse polarity protected

Release date: 2025-06-12 Date of issue: 2025-06-15 Filename: 70133012_eng.pdf

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

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0001
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

Technical Data

Short-circuit protection		pulsing
Voltage drop	U_d	$\leq 3.7 \text{ V}$
Operating current	I_L	2 ... 30 mA
Lowest operating current	I_m	2 mA
Off-state current	I_r	$\leq 190 \mu\text{A}$
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		1879 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		
IECEx approval		
Equipment protection level Gc (ec)		IECEx TUR 21.0019X
Equipment protection level Dc (tc)		IECEx TUR 21.0020X
ATEX approval		
Equipment protection level Gc (ec)		TÜV 20 ATEX 8525 X
Equipment protection level Dc (tc)		TÜV 20 ATEX 8526 X
UL approval		cULus Listed, General Purpose, Class 2 Power Source
CCC approval		
Hazardous Location		2024322315005978 2024322315009581
Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Connection type		cable
Housing material		PBT
Sensing face		PBT
Degree of protection		IP67
Cable		
Wire end ferrules		yes
Cable diameter		3 mm $\pm$ 0.2 mm
Bending radius		> 10 x cable diameter
Material		PVC
Color		grey
Number of cores		2
Core cross section		0.14 mm ²
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
General information		
Use in the hazardous area		see instruction manuals

Connection Assignment

