

# Inductive sensor

## NBB2-V3-E2-3G-3D



- 2 mm flush
- 3-wire DC
- ATEX-/IECEx-approvals for zone 2/22 (Ex ec/tc)



### Dimensions



### Technical Data

General specifications		
Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	$s_n$	2 mm
Installation		flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 1.62 mm
Reduction factor $r_{Al}$		0.35
Reduction factor $r_{Cu}$		0.2
Reduction factor $r_{304}$		0.7
Output type		3-wire
Nominal ratings		
Operating voltage	$U_B$	10 ... 30 V DC
Switching frequency	$f$	0 ... 1000 Hz
Reverse polarity protection		yes
Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 3$ V

Release date: 2024-04-12 Date of issue: 2024-04-12 Filename: 70126056\_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

Operating current	$I_L$	0 ... 100 mA
Off-state current	$I_r$	0 ... 0.5 mA typ. 0.1 $\mu$ A at 25 °C
No-load supply current	$I_0$	$\leq$ 15 mA
Switching state indicator		LED, yellow
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		3353 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>		
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
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
<b>Mechanical specifications</b>		
Connection type		cable PVC , 130 mm
Core cross section		0.14 mm <sup>2</sup>
Housing material		PBT
Sensing face		PBT
Degree of protection		IP67
Cable		
Cable diameter		3 mm + 0.3 mm
Bending radius		> 10 x cable diameter
Tightening torque, fastening screws		$\leq$ 0.4 Nm
Dimensions		
Height		10.2 mm
Width		27.8 mm
Length		16 mm
<b>General information</b>		
Use in the hazardous area		see instruction manuals

## Connection

