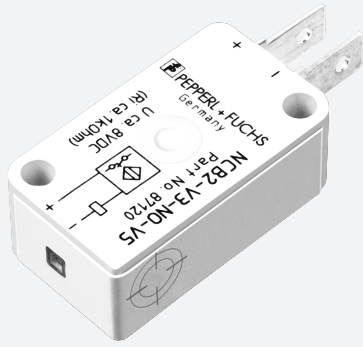


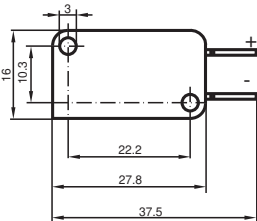
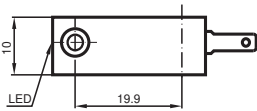
# Inductive sensor NBB3-V3-Z5-V5



- 3 mm flush
- 2-wire DC



## Dimensions



## Technical Data

### General specifications

Switching function		Normally closed (NC)
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

Release date: 2022-05-25 Date of issue: 2022-05-25 Filename: 301164\_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 voltage	$U_B$	5 ... 60 V DC
Switching frequency	$f$	0 ... 2000 Hz
Hysteresis	$H$	typ. 0.2 mm
Reverse polarity protection		reverse polarity protected
Short-circuit protection		no
Inductive overvoltage protection		yes
Voltage drop	$U_d$	$\leq 4$ V
Voltage drop at $I_L$		
Voltage drop $I_L = 10$ 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	$t_v$	$\leq 1$ ms
Switching state indicator		LED, yellow
<b>Limit data</b>		
Tightening torque, fastening screws		0.4 Nm
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		1552 a
Mission Time ( $T_M$ )		20 a
Diagnostic Coverage (DC)		0 %
<b>Standard conformity</b>		
EMC in accordance with		EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012
<b>Approvals and certificates</b>		
UL approval		cULus Listed, General Purpose
CSA approval		cCSAus Listed, General Purpose
CCC approval		Certified by China Compulsory Certification (CCC)
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
<b>Mechanical specifications</b>		
Connection type		4.8 mm Faston
Housing material		PBT
Sensing face		PBT
Degree of protection		IP67

## Connection

