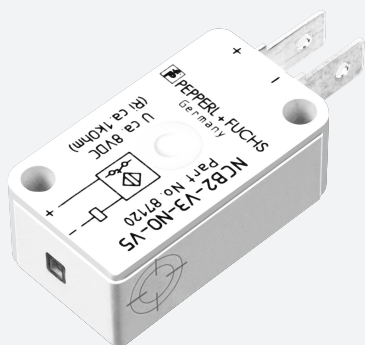


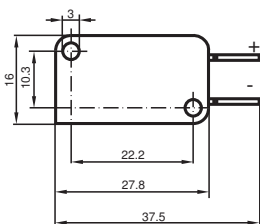
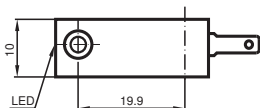


Inductive sensor NBB3-V3-Z4-V5

- 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	

Technical Data

Nominal ratings

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	≤ 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	≤ 1 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 %

Standard conformity

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
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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 ... 70 °C (-13 ... 158 °F)
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Mechanical specifications

Connection type	4.8 mm Faston
Housing material	PBT
Sensing face	PBT
Degree of protection	IP67

Connection

Z4

