



Model Number

NBB3-V3-Z4

Features

- 3 mm flush
- 2-wire DC

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
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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Ambient conditions

Ambient temperature	-25 ... 85 °C (-13 ... 185 °F)
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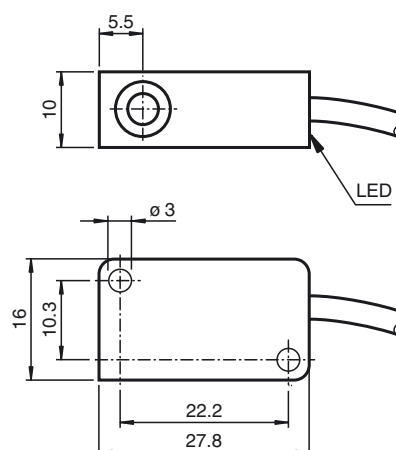
Mechanical specifications

Connection type	cable PVC, 130 mm
Core cross-section	0.14 mm ²
Housing material	PBT
Sensing face	PBT
Degree of protection	IP67
Mass	7.5 g

Approvals and certificates

UL approval	cULus Listed, General Purpose
CSA approval	cCSAus Listed, General Purpose
CCC approval	Certified by China Compulsory Certification (CCC)

Dimensions





Electrical Connection

