



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_{AI}	0.4
Reduction factor r_{Cu}	0.3
Reduction factor r_{304}	0.8

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
Voltage drop	U_d	≤ 5 V
Voltage drop at I_L		Voltage drop $U_L = 10$ mA, switching element 0.8 ... 4.8 V typ. 3.8 V on U_d
Operating current	I_L	4 ... 100 mA
Lowest operating current	I_m	4 mA
Off-state current	I_r	0 ... 1 mA typ. 0.7 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	1780 a
Mission Time (T_M)	20 a
Diagnostic Coverage (DC)	0 %

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

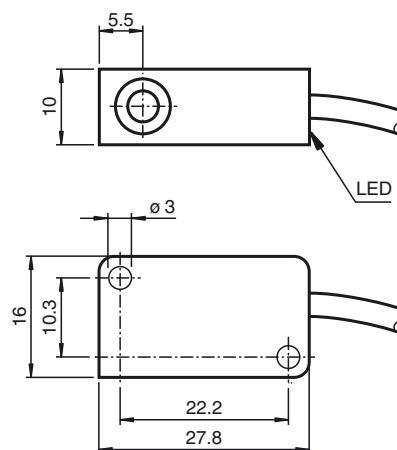
Compliance with standards and directives

Standard conformity	
Standards	EN 60947-5-2:2007 IEC 60947-5-2:2007

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

