



## Model Number

NBB3-V3-Z4-2M

## Features

- Basic series
- 3 mm flush
- 2-wire DC

## Technical Data

### General specifications

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 $r_{Al}$		0.4
Reduction factor $r_{Cu}$		0.3
Reduction factor $r_{304}$		0.8
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
Voltage drop	$U_d$	$\leq 5$ V

### Voltage drop at $I_L$

Voltage drop  $I_L = 10$  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	$t_v$	$\leq 1$ ms
Switching state indicator		LED, yellow

### Limit data

Tightening torque, fastening screws	0.4 Nm
-------------------------------------	--------

### Ambient conditions

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

### Mechanical specifications

Connection type	cable PVC, 2 m
Core cross-section	0.14 mm <sup>2</sup>
Housing material	PBT
Sensing face	PBT
Degree of protection	IP67

### Compliance with standards and directives

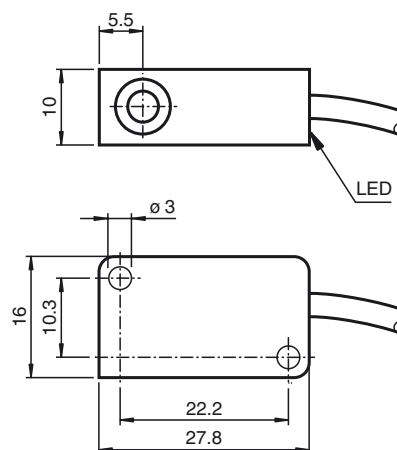
#### Standard conformity

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

