



### Model Number

NBB10-F17-E3

### Features

- 10 mm flush
- 3-wire DC

## Technical Data

### General specifications

Switching function		Normally closed (NC)
Output type		PNP
Rated operating distance	$s_n$	10 mm
Installation		flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 8.1 mm
Actual operating distance	$s_r$	9 ... 11 mm typ. 10 mm
Reduction factor $r_{Al}$		0.36
Reduction factor $r_{Cu}$		0.31
Reduction factor $r_{304}$		0.67
Output type		3-wire

### Nominal ratings

Operating voltage	$U_B$	10 ... 30 V DC
Switching frequency	$f$	0 ... 1000 Hz
Hysteresis	$H$	1 ... 10 typ. 6 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 2.8$ V
Operating current	$I_L$	0 ... 100 mA
No-load supply current	$I_0$	10 mA
Time delay before availability	$t_v$	$\leq 1$ ms
Switching state indicator		LED, yellow

### Functional safety related parameters

MTTF <sub>d</sub>		1935 a
Mission Time (T <sub>M</sub> )		20 a
Diagnostic Coverage (DC)		0 %

### Ambient conditions

Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)

### Mechanical specifications

Connection type		cable PUR , 2 m
Core cross-section		0.14 mm <sup>2</sup>
Housing material		PMMA
Sensing face		PMMA
Degree of protection		IP67
Tightening torque		0.5 Nm ... 0.6 Nm

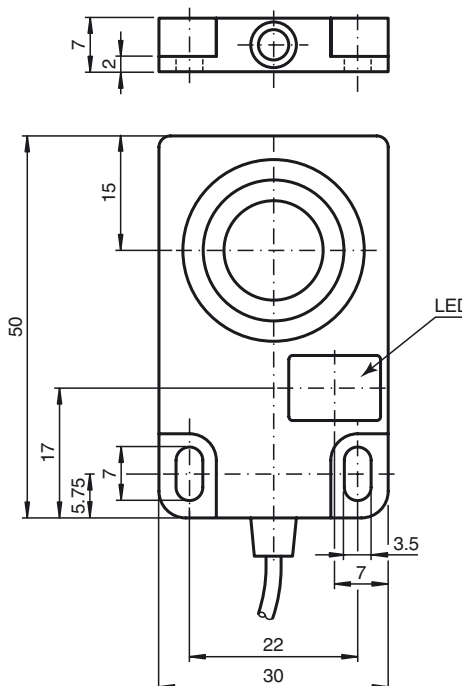
### Compliance with standards and directives

Standard conformity		
Standards		EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012

### Approvals and certificates

UL approval		cULus Listed, General Purpose
CCC approval		CCC approval / marking not required for products rated $\leq 36$ V

## Dimensions



Electrical Connection

