



Model Number

NBB8-F33-E2

Features

- 8 mm flush
- 3-wire DC

Technical Data

General specifications

Switching function	Normally open (NO)
Output type	PNP
Rated operating distance	s_n 8 mm
Installation	flush
Output polarity	DC
Assured operating distance	s_a 0 ... 6.48 mm
Reduction factor r_{AI}	0.3
Reduction factor r_{CU}	0.2
Reduction factor r_{304}	0.6
Output type	3-wire

Nominal ratings

Installation conditions	
B	0 mm
C	1.5 mm
F	38 mm
Operating voltage	U_B 10 ... 60 V DC
Switching frequency	f 0 ... 350 Hz
Hysteresis	H typ. 5 %
Reverse polarity protection	reverse polarity protected
Short-circuit protection	pulsing
Voltage drop	U_d ≤ 3 V
Operating current	I_L 0 ... 200 mA
Off-state current	I_r 0 ... 0.1 mA
No-load supply current	I_0 ≤ 10 mA
Time delay before availability	t_v ≤ 50 ms
Switching state indicator	LED yellow

Functional safety related parameters

MTTF _d	1140 a
Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	0 %

Ambient conditions

Ambient temperature	-35 ... 70 °C (-31 ... 158 °F)
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)

Mechanical specifications

Connection type	cable PVC, 2 m
Core cross-section	0.34 mm ²
Housing material	PBT
Sensing face	PBT
Degree of protection	IP67
Note	Tightening torque: 5 Nm

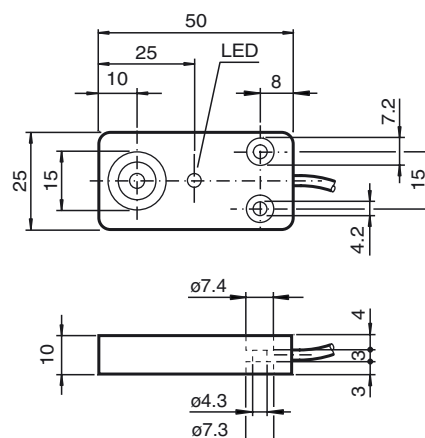
Compliance with standards and directives

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

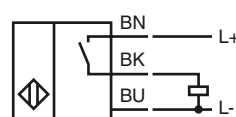
Approvals and certificates

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

Dimensions



Electrical Connection



Installation Conditions

