



### Model Number

NBB5-F33M-E0-Y217757

### Features

- Basic series
- Metal housing

## Technical Data

### General specifications

Switching function		Normally open (NO)
Output type		NPN
Rated operating distance	$s_n$	5 mm
Installation		flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 4.05 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

Operating voltage	$U_B$	10 ... 30 V
Switching frequency	$f$	0 ... 500 Hz
Hysteresis	$H$	typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 3$ V
Operating current	$I_L$	0 ... 200 mA
Off-state current	$I_r$	0 ... 0.5 mA typ. 0.1 $\mu$ A at 25 °C
No-load supply current	$I_0$	$\leq 15$ mA
Time delay before availability	$t_v$	$\leq 10$ ms
Switching state indicator		LED

### Functional safety related parameters

MTTF <sub>d</sub>	1617 a
Mission Time (T <sub>M</sub> )	20 a
Diagnostic Coverage (DC)	0 %

### Ambient conditions

Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
---------------------	--------------------------------

### Mechanical specifications

Connection type	0.24 m, PVC cable with socket AMP-CT/RM200, 4 pin
Core cross-section	AWG 26
Housing material	metal
Sensing face	PBT
Degree of protection	IP67

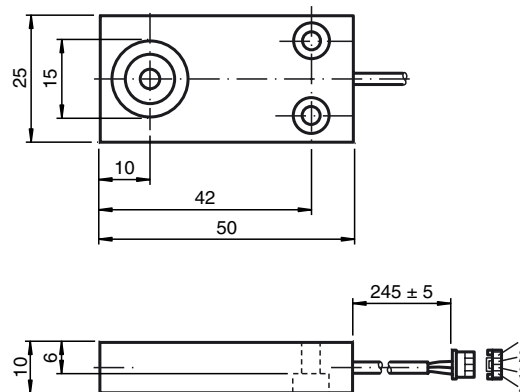
### Compliance with standards and directives

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
CSA approval	cCSAus Listed, General Purpose

## Dimensions



## Electrical Connection

