



Model Number

NBB5-F33X-E2-AMP

Features

- 5 mm flush
- 3-wire DC
- Amp connector

Technical Data

General specifications

Switching element function	PNP	NO
Rated operating distance	s_n	5 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 4.05 mm
Reduction factor r_{Al}		0.25
Reduction factor r_{Cu}		0.2
Reduction factor r_{304}		0.6
Reduction factor r_{Brass}		0.35

Nominal ratings

Operating voltage	U_B	10 ... 60 V DC
Switching frequency	f	0 ... 500 Hz
Hysteresis	H	typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 2.5 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	1891 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)

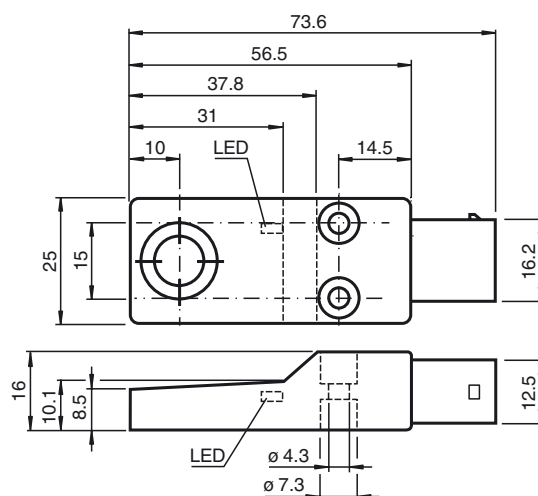
Mechanical specifications

Connection type	Connector, AMP connector
Housing material	PBT, black
Degree of protection	IP67
Note	Tightening torque: 5 Nm

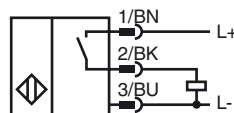
Compliance with standards and directives

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

Dimensions



Electrical Connection





Pinout

