



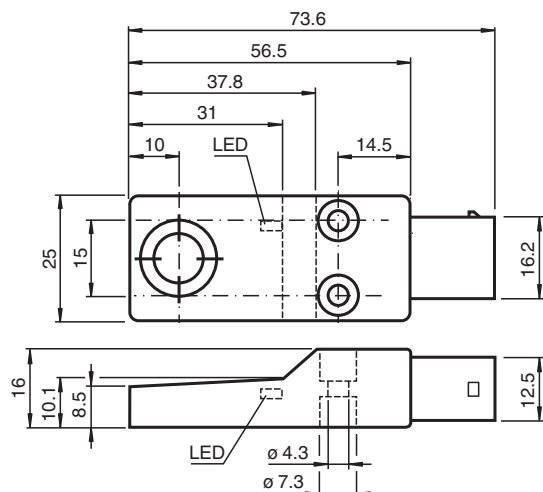
# Inductive sensor

## NBB5-F33X-E2-AMP

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



### Dimensions



### Technical Data

General specifications		
Switching function		Normally open (NO)
Output type		PNP
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
Output type		3-wire
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

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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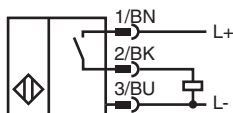
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## Technical Data

Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 2.5 \text{ V}$
Operating current	$I_L$	0 ... 200 mA
Off-state current	$I_r$	0 ... 0.1 mA
No-load supply current	$I_0$	$\leq 10 \text{ mA}$
Time delay before availability	$t_v$	$\leq 50 \text{ ms}$
Switching state indicator		LED yellow
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		1891 a
Mission Time (T <sub>M</sub> )		20 a
Diagnostic Coverage (DC)		0 %
<b>Compliance with standards and directives</b>		
Standard conformity		
Standards		EN IEC 60947-5-2
<b>Ambient conditions</b>		
Ambient temperature		-35 ... 70 °C (-31 ... 158 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
<b>Mechanical specifications</b>		
Connection type		Connector plug , AMP connector Tyco socket housing 1-0967642-1 (A coding) Tyco crimp contacts 0-963726-1
Housing material		PBT , black
Degree of protection		IP67
Dimensions		
Height		10 mm
Width		25 mm
Length		73 mm
Note		Tightening torque: 5 Nm

## Connection



## Connection Assignment

