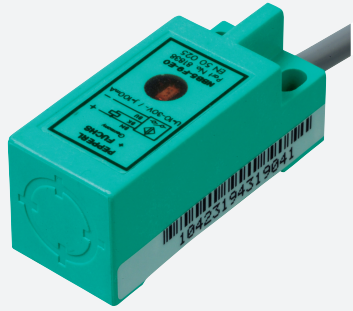


Inductive sensor

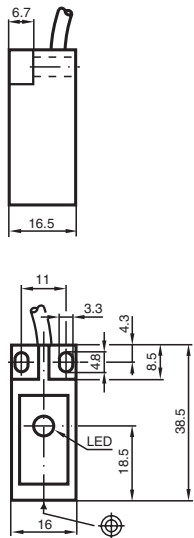
NBB5-F9-E0



- 5 mm flush
- 3-wire DC



Dimensions



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_{Al}		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 DC
Switching frequency	f	0 ... 500 Hz

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Technical Data

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 ... 150 mA
Off-state current	I_r	0 ... 0.5 mA typ. 0.1 μ A at 25 °C
No-load supply current	I_o	≤ 15 mA
Switching state indicator		LED, yellow

Functional safety related parameters

MTTF _d	3170 a
Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	0 %

Compliance with standards and directives

Standard conformity	
Standards	EN IEC 60947-5-2

Approvals and certificates

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

Ambient conditions

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

Connection type	cable
Housing material	PBT
Sensing face	PBT
Degree of protection	IP67
Cable	
Wire end ferrules	yes
Cable diameter	3.5 mm \pm 0.2 mm
Bending radius	> 10 x cable diameter
Material	PVC
Color	grey
Number of cores	3
Core cross section	0.14 mm ²
Length	L
Dimensions	
Height	16.5 mm
Width	16 mm
Length	38.5 mm

Connection

