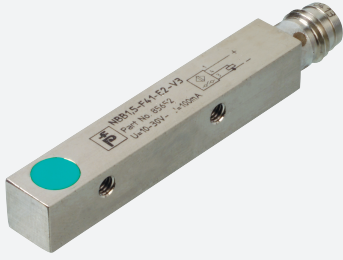


# Inductive sensor

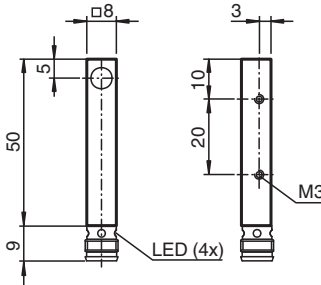
## NEB3-F41-E1-V3



- 3-wire DC
- Metal housing
- 3 mm quasi flush



### Dimensions



### Technical Data

#### General specifications

Switching function		Normally closed (NC)
Output type		NPN
Rated operating distance	$s_n$	3 mm
Installation		quasi flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 2.4 mm
Actuating element		mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 9 mm x 9 mm x 1 mm
Reduction factor $r_{Al}$		0.35
Reduction factor $r_{Cu}$		0.3
Reduction factor $r_{304}$		0.7
Reduction factor $r_{Brass}$		0.45
Output type		3-wire

#### Nominal ratings

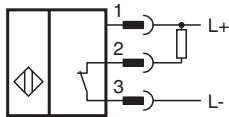
Installation conditions		
B		6 mm
C		9 mm
F		16 mm
G		1 mm
Operating voltage	$U_B$	10 ... 30 V DC
Switching frequency	f	0 ... 1000 Hz
Hysteresis	H	2 ... 20 % typ. 10 %

Release date: 2024-12-10 Date of issue: 2024-12-10 Filename: 242307\_eng.pdf

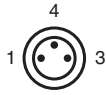
## Technical Data

Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Overload resistance		yes
Wire breakage protection		yes
Inductive overvoltage protection		yes
Surge suppression		yes
Ripple		≤ 10 %
Voltage drop	$U_d$	≤ 2 V
Repeat accuracy	R	0.15 mm
Operating current	$I_L$	0 ... 200 mA , above 50°C max. 150 mA
Off-state current	$I_r$	≤ 10 μA
No-load supply current	$I_0$	≤ 15 mA
Time delay before availability	$t_v$	≤ 50 ms
Switching state indicator		LED, yellow
<b>Compliance with standards and directives</b>		
Standard conformity		
Standards		EN IEC 60947-5-2
<b>Approvals and certificates</b>		
UL approval		cULus Listed, General Purpose, Class 2 Power Source
CCC approval		CCC approval / marking not required for products rated ≤36 V
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 85 °C (-13 ... 185 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
<b>Mechanical specifications</b>		
Connection type		Connector plug
Housing material		brass, nickel-plated
Sensing face		PBT
Degree of protection		IP67
Connector		
Threading		M8 x 1
Number of pins		3
Mass		20 g
Dimensions		
Height		8 mm
Width		8 mm
Length		50 mm

## Connection



## Connection Assignment



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
3	BU	(blue)
4	BK	(black)

## Installation

