

# Inductive sensor

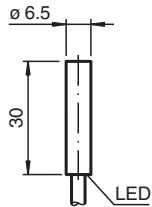
## NBB2-6,5M30-E0-0,15M-PUR-V3



- 2 mm flush
- Increased operating distance
- Extended temperature range  
-40 ... +85 °C
- Fixed cable with quick disconnect plug



### Dimensions



### Technical Data

General specifications			
Switching function			Normally open (NO)
Output type			NPN
Rated operating distance	$s_n$		2 mm
Installation			flush
Output polarity			DC
Assured operating distance	$s_a$		0 ... 1.62 mm
Actuating element			mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 6.5 mm x 6.5 mm x 1 mm
Reduction factor $r_{Al}$			0.4
Reduction factor $r_{Cu}$			0.3
Reduction factor $r_{304}$			0.7
Reduction factor $r_{Brass}$			0.45
Output type			3-wire
Nominal ratings			
Operating voltage	$U_B$		5 ... 30 V
Switching frequency	$f$		0 ... 6000 Hz
Hysteresis	$H$		typ. 5%
Reverse polarity protection			reverse polarity protected
Short-circuit protection			pulsing
Voltage drop	$U_d$		≤ 1.5 V
Operating current	$I_L$		0 ... 100 mA
Off-state current	$I_r$		0 ... 0.2 mA
No-load supply current	$I_0$		≤ 10 mA
Time delay before availability	$t_v$		≤ 100 ms

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

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111  
fa-info@de.pepperl-fuchs.com

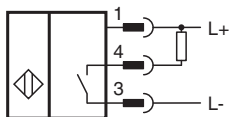
Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

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## Technical Data

Switching state indicator	LED, yellow
<b>Functional safety related parameters</b>	
MTTF <sub>d</sub>	960 a
Mission Time (T <sub>M</sub> )	20 a
Diagnostic Coverage (DC)	0 %
<b>Compliance with standards and directives</b>	
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
<b>Approvals and certificates</b>	
UL approval	cULus Listed, General Purpose
CCC approval	CCC approval / marking not required for products rated ≤36 V
<b>Ambient conditions</b>	
Ambient temperature	-40 ... 85 °C (-40 ... 185 °F)
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)
<b>Mechanical specifications</b>	
Connection type	Cable connector M8 x 1 , 3-pin with PUR cable 150 mm
Core cross section	0.14 mm <sup>2</sup>
Housing material	brass, nickel-plated
Sensing face	LCP
Degree of protection	IP65 / IP66 / IP67
Cable	
Cable diameter	3 mm - 0.2 mm
Bending radius	> 12 x cable diameter
Dimensions	
Length	30 mm
Diameter	6.5 mm

## Connection



## Connection Assignment



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Wire colors in accordance with EN 60947-5-2

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