



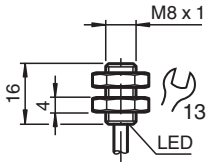
# Inductive sensor

## NBB2-8GS16-E0-Y0234

- 2 mm flush
- Increased operating distance
- Stainless steel version
- Extended temperature range



### 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) 8 mm x 8 mm x 1 mm
Reduction factor $r_{Al}$		0.2
Reduction factor $r_{Cu}$		0.1
Reduction factor $r_{304}$		0.55
Reduction factor $r_{Brass}$		0.25
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	$U_d$	$\leq 1.5$ V
Operating current	$I_L$	0 ... 100 mA
Off-state current	$I_r$	0.01 mA
No-load supply current	$I_0$	$\leq 10$ mA
Time delay before availability	$t_v$	$\leq 100$ ms
Switching state indicator		LED, yellow

Release date: 2024-04-23 Date of issue: 2024-04-24 Filename: 304615-0234\_eng.pdf

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

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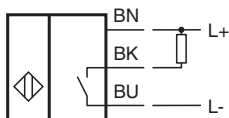
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## Technical Data

Functional safety related parameters		
MTTF <sub>d</sub>		960 a
Mission Time (T <sub>M</sub> )		20 a
Diagnostic Coverage (DC)		0 %
Compliance with standards and directives		
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
Approvals and certificates		
UL approval		cULus Listed, General Purpose, Class 2 Power Source
CCC approval		CCC approval / marking not required for products rated ≤36 V
Ambient conditions		
Ambient temperature		-40 ... 85 °C (-40 ... 185 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Connection type		cable
Housing material		Stainless steel 1.4305 / AISI 303
Sensing face		LCP
Degree of protection		IP65 / IP66 / IP67
Cable		
Cable diameter		2.6 mm ± 0.1 mm
Bending radius		> 10 x cable diameter
Material		PUR
Color		black
Number of cores		3
Core cross section		0.08 mm <sup>2</sup>
Length	L	2 m
Mass		
Dimensions		
Length		16 mm
Diameter		8 mm

## Connection



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