

# Inductive sensor

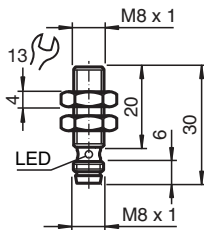
## NBB2-8GH20-E2-V3



- Increased operating distance
- Short version
- Materials used compliant with FDA
- Housing with stainless steel (V4A; 1.4435)



### Dimensions



### Technical Data

#### General specifications

Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	$s_n$	2 mm
Installation		flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 1.62 mm
Reduction factor $r_{Al}$		0.25
Reduction factor $r_{Cu}$		0.2
Reduction factor $r_{304}$		0.63

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

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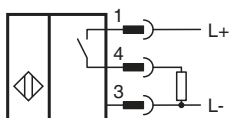
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## Technical Data

Reduction factor $r_{\text{Brass}}$		0.31
Output type		3-wire
<b>Nominal ratings</b>		
Operating voltage	$U_B$	10 ... 30 V
Switching frequency	$f$	0 ... 1500 Hz
Hysteresis	$H$	typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 3$ V
Operating current	$I_L$	0 ... 100 mA
Off-state current	$I_r$	0 ... 0.5 mA typ. 10 $\mu$ A at 25 °C
No-load supply current	$I_o$	$\leq 15$ mA
Switching state indicator		Multihole-LED, yellow
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		2750 a
Mission Time ( $T_M$ )		20 a
Diagnostic Coverage (DC)		0 %
<b>Compliance with standards and directives</b>		
Standard conformity		
Standards		EN 60947-5-2:2007 IEC 60947-5-2:2007
<b>Approvals and certificates</b>		
UL approval		cULus Listed, General Purpose
CCC approval		CCC approval / marking not required for products rated $\leq 36$ V
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
<b>Mechanical specifications</b>		
Connection type		M8 x 1 connector, 3-pin
Housing material		Stainless steel 1.4435 / AISI 316L
Sensing face		LCP, (conforms with FDA)
Degree of protection		IP67
Mass		10 g

## Connection



## Connection Assignment







## Connection Assignment

Wire colors in accordance with EN 60947-5-2

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

## Accessories

	<b>BF 8</b>	Mounting flange, 8 mm
	<b>V3-GMV4A-5M-PUR</b>	Female cordset single-ended M8 straight stainless steel 1.4404, A-coded, 3-pin, PUR cable grey
	<b>V3-WMV4A-5M-PUR</b>	Female cordset single-ended M8 angled stainless steel 1.4404, A-coded, 3-pin, PUR cable grey
	<b>V3-WM-2M-PUR</b>	Female cordset single-ended M8 angled A-coded, 3-pin, PUR cable grey

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