

# Inductive sensor

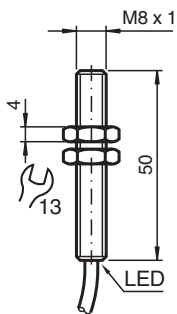
## NBB1-8GS50-Z0-T



- 1 mm flush
- Extended temperature range
- Stainless steel version



### Dimensions



### Technical Data

General specifications		
Switching function		Normally open (NO)
Output type		Two-wire
Rated operating distance	$s_n$	1 mm
Installation		flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 0.81 mm
Actuating element		mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 8 mm x 8 mm x 1 mm
Reduction factor $r_{Al}$		0.38
Reduction factor $r_{Cu}$		0.2
Reduction factor $r_{304}$		0.8
Reduction factor $r_{Brass}$		0.45
Output type		2-wire
Nominal ratings		
Installation conditions		
B		4 mm

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## Technical Data

C		3 mm
F		12 mm
Operating voltage	$U_B$	15 ... 34 V
Switching frequency	f	0 ... 1500 Hz
Hysteresis	H	0.01 ... 0.28 mm
Reverse polarity protection		reverse polarity-conductive
Short-circuit protection		no
Overload resistance		no
Wire breakage protection		yes
Inductive overvoltage protection		yes
Surge suppression		yes
Ripple		10 %
Voltage drop	$U_d$	$\leq 8$ V
Repeat accuracy	R	0.1 mm
Operating current	$I_L$	0 ... 25 mA
No-load supply current	$I_0$	$\leq 1.5$ mA
Time delay before availability	$t_v$	$\leq 40$ ms
Switching state indicator		LED, yellow
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		2390 a
Mission Time (T <sub>M</sub> )		20 a
Diagnostic Coverage (DC)		0 %
<b>Compliance with standards and directives</b>		
Standard conformity		
Standards		EN IEC 60947-5-2
<b>Approvals and certificates</b>		
CCC approval		CCC approval / marking not required for products rated $\leq 36$ V
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 100 °C (-13 ... 212 °F)
Storage temperature		-40 ... 100 °C (-40 ... 212 °F)
<b>Mechanical specifications</b>		
Connection type		cable
Housing material		Stainless steel 1.4305 / AISI 303
Sensing face		PBT
Degree of protection		IP67
Cable		
Wire end ferrules		yes
Cable diameter		4.5 mm $\pm$ 0.15 mm
Bending radius		> 10 x cable diameter
Material		PUR
Color		black
Number of cores		3
Core cross section		0.25 mm <sup>2</sup>
Length	L	2 m
Mass		70 g
Dimensions		
Length		50 mm
Diameter		8 mm

## Connection

