



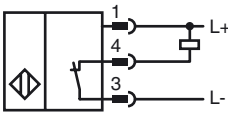
## Model Number

NBB2-8GS40-E1-V3

## Features

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

## Connection



## Pinout



Wire colors in accordance with EN 60947-5-2

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

## Accessories

### BF 8

Mounting flange, 8 mm

### EXG-08

Quick mounting bracket with dead stop

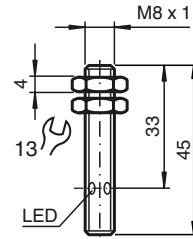
### V3-GM

Female connector, M8, 3-pin, field attachable

### V3-WM

Female connector, M8, 3-pin, field attachable

## Dimensions



## Technical Data

### General specifications

Switching element function		NPN	NC
Rated operating distance	$s_n$	2 mm	
Installation		flush	
Output polarity		DC	
Assured operating distance	$s_a$	0 ... 1.62 mm	
Actuating element		structural 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	

### Nominal ratings

Operating voltage	$U_B$	10 ... 30 V
Switching frequency	$f$	0 ... 600 Hz
Hysteresis	$H$	0.06 ... 0.44 mm
Reverse polarity protected		yes
Short-circuit protection		yes
Overload resistance		yes
Wire breakage protection		yes
Inductive overvoltage protection		yes
Surge suppression		yes
Ripple		10 %
Voltage drop	$U_d$	$\leq 2.5$ V
Repeat accuracy		0.1 mm
Operating current	$I_L$	0 ... 200 mA
Off-state current	$I_r$	0.01 mA
No-load supply current	$I_0$	$\leq 1$ mA
Indication of the switching state		LED, yellow

### Functional safety related parameters

MTTF <sub>d</sub>	2480 a
Mission Time ( $T_M$ )	20 a
Diagnostic Coverage (DC)	0 %

### Ambient conditions

Ambient temperature	-25 ... 85 °C (-13 ... 185 °F)
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)

### Mechanical specifications

Connection type	connector (M8 x 1), 3-pin
Housing material	Stainless steel 1.4305 / AISI 303
Sensing face	PBT
Protection degree	IP67
Mass	7 g

### Compliance with standards and directives

Standard conformity	
Standards	EN 60947-5-2:2007 IEC 60947-5-2:2007

### Approvals and certificates

CCC approval	Products with a maximum operating voltage of $\leq 36$ V do not bear a CCC marking because they do not require approval.
--------------	--