



### Model Number

**NBB1,5-6,5S40-E0-V3**

### Features

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

### Accessories

#### BF 6,5

Mounting flange, 6.5 mm

#### V3-GM

Female connector, M8, 3-pin, field attachable

#### V3-WM

Female connector, M8, 3-pin, field attachable

#### V3-GM-2M-PUR

Cable socket, M8, 3-pin, PUR cable

#### V3-WM-2M-PUR

Cable socket, M8, 3-pin, PUR cable

## Technical Data

### General specifications

Switching element function		NPN	NO
Rated operating distance	$s_n$	1.5 mm	
Installation		flush	
Output polarity		DC	
Assured operating distance	$s_a$	0 ... 1.215 mm	
Actuating element		mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 8 mm x 8 mm x 1 mm	
Reduction factor $r_{Al}$		0.4	
Reduction factor $r_{Cu}$		0.2	
Reduction factor $r_{304}$		0.8	
Reduction factor $r_{Brass}$		0.4	

### Nominal ratings

Operating voltage	$U_B$	10 ... 30 V	
Switching frequency	$f$	0 ... 1500 Hz	
Hysteresis	$H$	0.01 ... 0.33 mm	
Reverse polarity protection		reverse polarity protected	
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	$R$	0.08 mm	
Operating current	$I_L$	0 ... 200 mA	
Off-state current	$I_r$	0.01 mA	
No-load supply current	$I_0$	$\leq 7$ mA	
Switching state indicator		LED, yellow	

### Functional safety related parameters

MTTF <sub>d</sub>	2090 a
Mission Time (T <sub>M</sub> )	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
Degree of protection	IP67
Mass	6 g

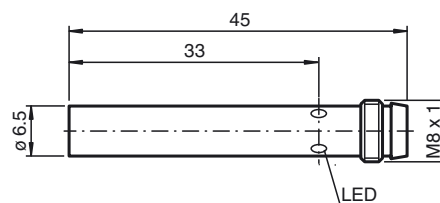
### Compliance with standards and directives

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

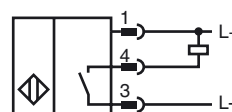
### Approvals and certificates

CCC approval	CCC approval / marking not required for products rated $\leq 36$ V
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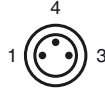
## Dimensions



## Electrical Connection



## Pinout



Wire colors in accordance with EN 60947-5-2

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