



### Model Number

NRB2-6,5S40-E2-V3

### Features

- Reduction factor = 1
- 2 mm flush
- Magnetic field resistant
- Stainless steel housing

### Accessories

#### BF 6,5

Mounting flange, 6.5 mm

#### V3-WM

Female connector, M8, 3-pin, field attachable

#### V3-GM

Female connector, M8, 3-pin, field attachable

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

Cable socket, M8, 3-pin, PUR cable

## 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 $r_{Al}$		1
Reduction factor $r_{Cu}$		1
Reduction factor $r_{304}$		1
Reduction factor $r_{Si37}$		1
Output type		3-wire

### Nominal ratings

Operating voltage	$U_B$	10 ... 30 V
Switching frequency	$f$	0 ... 4000 Hz
Hysteresis	$H$	type 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 2.5$ V
Operating current	$I_L$	0 ... 200 mA
Off-state current	$I_r$	0 ... 0.5 mA typ. 0.1 $\mu$ A at 25 °C
No-load supply current	$I_0$	$\leq 15$ mA
Constant magnetic field	$B$	200 mT
Alternating magnetic field	$B$	200 mT
Switching state indicator		Multihole-LED, yellow

### Functional safety related parameters

MTTF <sub>d</sub>	1010.5 a
Mission Time ( $T_M$ )	20 a
Diagnostic Coverage (DC)	0 %

### Ambient conditions

Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
Storage temperature	-45 ... 85 °C (-49 ... 185 °F)

### Mechanical specifications

Connection type	Connector M8 x 1, 3-pin
Housing material	Stainless steel 1.4305 / AISI 303
Sensing face	LCP, green
Degree of protection	IP67

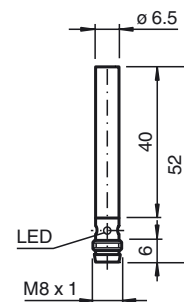
### Compliance with standards and directives

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

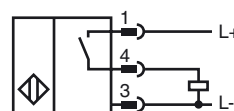
### Approvals and certificates

UL approval	cULus Listed, General Purpose
CCC approval	CCC approval / marking not required for products rated $\leq 36$ V

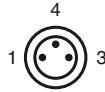
## Dimensions



## Electrical Connection



## Pinout



Wire colors in accordance with EN 60947-5-2

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