



## Model Number

NRN6-8GS40-E2-V1

## Features

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

## Accessories

### BF 8

Mounting flange, 8 mm

### V1-G

Female connector, M12, 4-pin, field attachable

### V1-W

Female connector, M12, 4-pin, field attachable

### V1-G-2M-PUR

Female cordset, M12, 4-pin, PUR cable

### V1-W-2M-PUR

Female cordset, M12, 4-pin, PUR cable

## Technical Data

### General specifications

Switching function	Normally open (NO)
Output type	PNP
Rated operating distance	$s_n$ 6 mm
Installation	non-flush
Output polarity	DC
Assured operating distance	$s_a$ 0 ... 4.86 mm
Reduction factor $r_{AI}$	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 ... 2500 Hz
Hysteresis	$H$	typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	$U_d$	≤ 2.5 V
Operating current	$I_L$	0 ... 200 mA
Off-state current	$I_r$	0 ... 0.5 mA typ. 0.1 μA at 25 °C
No-load supply current	$I_0$	≤ 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	-40 ... 85 °C (-40 ... 185 °F)

### Mechanical specifications

Connection type	Connector M12 x 1, 3-pin
Housing material	Stainless steel 1.4305 / AISI 303
Sensing face	LCP, green
Degree of protection	IP67

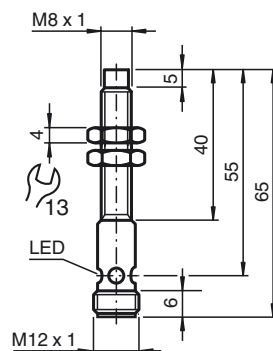
### Compliance with standards and directives

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

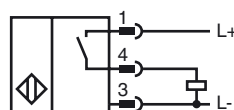
### Approvals and certificates

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

## Dimensions

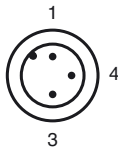


## Electrical Connection





Pinout



Wire colors in accordance with EN 60947-5-2

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