



### Model Number

NRN6-8GM40-E2-C-V1

### Features

- 6 mm non-flush
- Reduction factor = 1
- Magnetic field resistant
- Weld Immune

### 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 DC
Switching frequency	$f$	0 ... 400 Hz
Hysteresis	$H$	typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 2.5$ V
Operating current	$I_L$	0 ... 100 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	-40 ... 85 °C (-40 ... 185 °F)

### Mechanical specifications

Connection type	Connector M12 x 1, 3-pin
Housing material	Brass, PTFE coated
Sensing face	LCP, black
Degree of protection	IP67

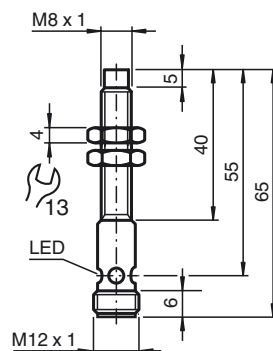
### Compliance with standards and directives

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

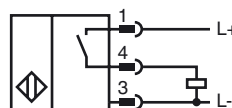
### Approvals and certificates

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

## Dimensions

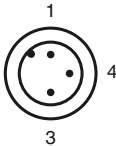


## Electrical Connection





Pinout



Wire colors in accordance with EN 60947-5-2

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