



## Model Number

NBN3-8GM40-E0-V1

## Features

- 3 mm non-flush
- Increased operating distance
- Extended temperature range -40 ... +85 °C

## 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	NPN
Rated operating distance	$s_n$ 3 mm
Installation	non-flush
Output polarity	DC
Assured operating distance	$s_a$ 0 ... 2.43 mm
Actuating element	mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 8 mm x 8 mm x 1 mm
Reduction factor $r_{Al}$	0.5
Reduction factor $r_{Cu}$	0.45
Reduction factor $r_{304}$	0.75
Reduction factor $r_{Brass}$	0.55
Output type	3-wire

### Nominal ratings

Operating voltage	$U_B$	5 ... 30 V
Switching frequency	$f$	0 ... 4500 Hz
Hysteresis	$H$	typ. 5%
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	$U_d$	≤ 1.5 V
Operating current	$I_L$	0 ... 100 mA
Off-state current	$I_r$	0 ... 0.2 mA
No-load supply current	$I_0$	≤ 10 mA
Time delay before availability	$t_v$	≤ 100 ms
Switching state indicator		Multihole-LED, yellow

### Functional safety related parameters

MTTF <sub>d</sub>	960 a
Mission Time ( $T_M$ )	20 a
Diagnostic Coverage (DC)	0 %

### Ambient conditions

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

### Mechanical specifications

Connection type	Connector plug M12 x 1, 4-pin
Housing material	brass, nickel-plated
Sensing face	LCP
Degree of protection	IP67

### General information

Scope of delivery	2 hex nuts included
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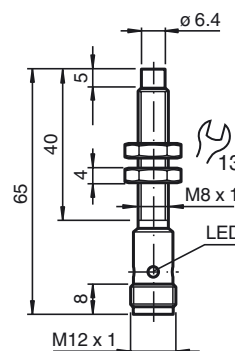
### Compliance with standards and directives

Standard conformity	
Standards	EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012

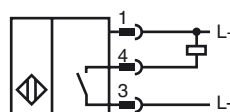
### Approvals and certificates

UL approval	cULus Listed, General Purpose, Class 2 Power Source
CCC approval	CCC approval / marking not required for products rated ≤36 V

## Dimensions

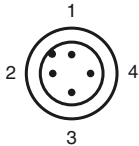


## Electrical Connection





Pinout



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)