



Model Number

NBB2-8GM40-E0-V3

Features

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

Accessories

BF 8

Mounting flange, 8 mm

V3-GM

Female connector, M8, 3-pin, field attachable

V3-WM

Female connector, M8, 3-pin, field attachable

V3-WM-2M-PUR

Cable socket, M8, 3-pin, PUR cable

EXG-08

Quick mounting bracket with dead stop

Technical Data

General specifications

Switching function	Normally open (NO)
Output type	NPN
Rated operating distance	s_n 2 mm
Installation	flush
Output polarity	DC
Assured operating distance	s_a 0 ... 1.62 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}	0.3
Reduction factor r_{304}	0.75
Reduction factor r_{Brass}	0.45
Output type	3-wire

Nominal ratings

Operating voltage	U_B	5 ... 30 V
Switching frequency	f	0 ... 6000 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 _d	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 M8 x 1, 3-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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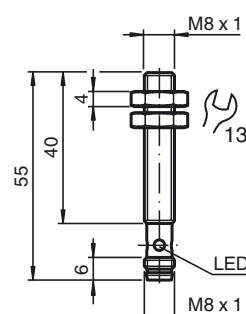
Compliance with standards and directives

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

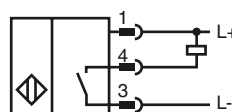
Approvals and certificates

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)
3	BU	(blue)
4	BK	(black)