



Model Number

NRB2-8GS40-E2-V3

Features

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

Accessories

BF 8

Mounting flange, 8 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

V3-GM-2M-PUR

Cable socket, M8, 3-pin, PUR cable

Technical Data

General specifications

Switching element function		PNP	NO
Rated operating distance	s_n	2 mm	
Installation		flush	
Output polarity		switched high	
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_{S37}		1	

Nominal ratings

Operating voltage	U_B	10 ... 30 V
Switching frequency	f	0 ... 4000 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 _d	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 M8 x 1, 3-pin
Housing material	Stainless steel 1.4305 / AISI 303
Sensing face	LCP, green
Degree of protection	IP67

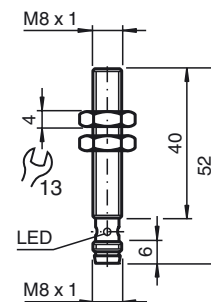
Compliance with standards and directives

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

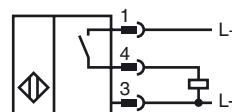
Approvals and certificates

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

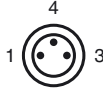
Dimensions



Electrical Connection



Pinout



Wire colors in accordance with EN 60947-5-2

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