



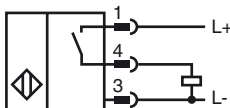
**Model Number**

NRB2-8GM40-E2-C-V1

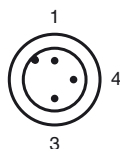
**Features**

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

**Connection**



**Pinout**



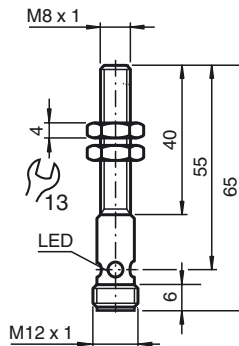
Wire colors in accordance with EN 60947-5-2

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

**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

**Dimensions**



**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 $r_{317}$		1

**Nominal ratings**

Operating voltage	$U_B$	10 ... 30 V DC
Switching frequency	$f$	0 ... 1000 Hz
Hysteresis	$H$	typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 2$ V
Operating current	$I_L$	0 ... 200 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 indication		Multihole-LED, yellow

**Functional safety related parameters**

MTTF <sub>d</sub>	1010.5 a
Mission Time (T <sub>M</sub> )	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
Protection degree	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 $\leq 36$ V

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