



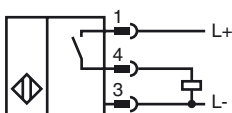
**Model Number**

NBB2-8GM30-E2-0,3M-V3

**Features**

- 2 mm embeddable
- Increased operating distance

**Connection**



**Pinout**



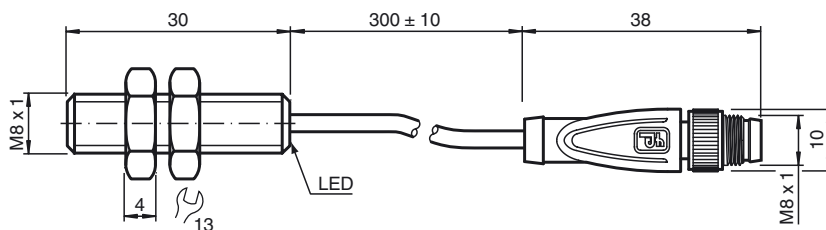
Wire colors in accordance with EN 60947-5-2

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

**Accessories**

- BF 8**  
Mounting flange, 8 mm
- EXG-08**  
Quick mounting bracket with dead stop

**Dimensions**



**Technical Data**

**General specifications**

Switching element function	PNP	NO
Rated operating distance	$s_n$	2 mm
Installation	embeddable	
Output polarity	DC	
Assured operating distance	$s_a$	0 ... 1.62 mm
Reduction factor $r_{Al}$	0.45	
Reduction factor $r_{Cu}$	0.4	
Reduction factor $r_{303}$	0.75	

**Nominal ratings**

Operating voltage	$U_B$	10 ... 30 V
Switching frequency	$f$	0 ... 3000 Hz
Hysteresis	$H$	typ. 5%
Reverse polarity protected	reverse polarity protected	
Short-circuit protection	pulsing	
Voltage drop	$U_d$	$\leq 3$ 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
Indication of the switching state	LED, yellow	

**Functional safety related parameters**

MTTF <sub>d</sub>	2790 a
Mission Time (T <sub>M</sub> )	20 a
Diagnostic Coverage (DC)	0 %

**Ambient conditions**

Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
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**Mechanical specifications**

Connection type	Cable connector M8 x 1, PVC, 300 mm
Core cross-section	0.14 mm <sup>2</sup>
Housing material	brass, nickel-plated
Sensing face	LCP
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	Products with a maximum operating voltage of $\leq 36$ V do not bear a CCC marking because they do not require approval.

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