



**Model Number**

**NBB1-3M22-E2-0,3M-V3**

**Features**

- 1 mm flush
- Miniature design
- Cable with M8 plug

**Technical Data**

**General specifications**

Switching element function		PNP	NO
Rated operating distance	$s_n$	1 mm	
Installation		flush	
Output polarity		DC	
Assured operating distance	$s_a$	0 ... 0.81 mm	
Reduction factor $r_{Al}$		0.4	
Reduction factor $r_{Cu}$		0.29	
Reduction factor $r_{304}$		0.76	
Reduction factor $r_{Brass}$		0.46	

**Nominal ratings**

Operating voltage	$U_B$	10 ... 30 V
Switching frequency	$f$	0 ... 700 Hz
Hysteresis	$H$	typ. 5%
Reverse polarity protection		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 ... 0.1 mA typ. at 25 °C
No-load supply current	$I_0$	$\leq 10$ mA
Switching state indicator		LED, yellow

**Functional safety related parameters**

MTTF <sub>d</sub>	1340 a
Mission Time (T <sub>M</sub> )	20 a
Diagnostic Coverage (DC)	0 %

**Ambient conditions**

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

**Mechanical specifications**

Connection type	Cable connector M8 x 1 , 3-pin with PVC cable 300 mm
Core cross-section	0.055 mm <sup>2</sup>
Housing material	Stainless steel 1.4305 / AISI 303
Sensing face	PC
Degree of protection	IP67

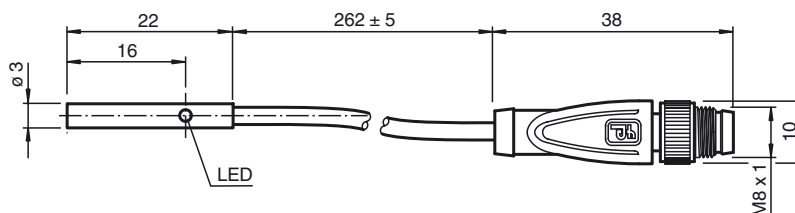
**Compliance with standards and directives**

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

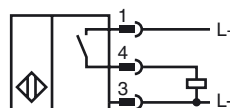
**Approvals and certificates**

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

**Dimensions**

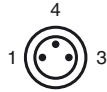


**Electrical Connection**



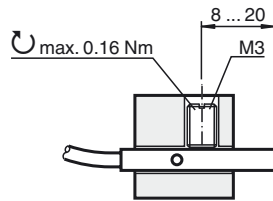
Release date: 2015-02-18 13:52 Date of issue: 2015-02-18 224128\_eng.xml

Pinout



Wire colors in accordance with EN 60947-5-2

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



## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Proximity Sensors](#) category:*

*Click to view products by [Pepperl & Fuchs](#) manufacturer:*

Other Similar products are found below :

[01.001.5653.1](#) [70.340.1028.0](#) [70.360.2428.0](#) [70.364.4828.0](#) [70.810.1053.0](#) [72.360.1628.0](#) [73.363.6428.0](#) [9221350022](#) [980659-1](#) [QT-12](#)  
[E2EX10D1NN](#) [E2E-X14MD1-G](#) [E2E-X2D1-G](#) [E2EX2ME2N](#) [E2E-X3D1-N](#) [10M](#) [E2E-X4MD1-G](#) [E2FMX1R5D12M](#) [E2K-F10MC1](#) [5M](#)  
[EI1204TBOSL-6](#) [EI5515NPAP](#) [BSA-08-25-08](#) [IC08ANC15PO-K](#) [IMM2582C](#) [25.161.3253.0](#) [25.332.0653.1](#) [25.352.0653.0](#) [25.352.0753.0](#)  
[25.523.3253.0](#) [9151710023](#) [922FS1.5C-A4P-Z774](#) [SC606ABV0S30](#) [SM952A126100LE](#) [SM956A132600](#) [A1220EUA-T](#) [F3S-A162-U](#) [CL18](#)  
[QT-08L](#) [34.110.0010.0](#) [TL-C2MF1-M3-E4](#) [IA08BLF15NOM5](#) [IA08BSF15NOM5](#) [IA12ASF04DOM1](#) [IMM32188C](#) [IS2](#) [IS31SE5000-](#)  
[UTLS2-TR](#) [34.110.0021.0](#) [34.110.0022.0](#) [CA150-120VACDC](#) [VM18VA3000Q](#) [XS508BSCBL2](#)