



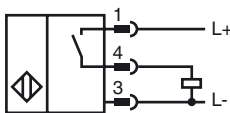
**Model Number**

NEB12-18GM50-E2-V1

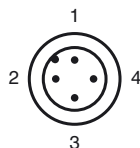
**Features**

- 12 mm quasi-embeddable
- Increased operating distance

**Connection**



**Pinout**



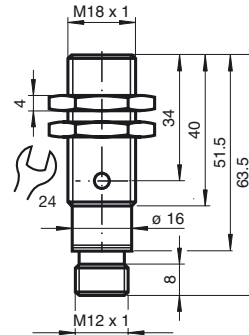
Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)

**Accessories**

- BF 18**  
Mounting flange, 18 mm
- V1-G**  
4-pin, M12 female field-attachable connector
- V1-W**  
4-pin, M12 female field-attachable connector
- V1-G-2M-PUR**  
Cable socket, M12, 4-pin, PUR cable
- V1-W-2M-PUR**  
Cable socket, M12, 4-pin, PUR cable

**Dimensions**



**Technical Data**

**General specifications**

Switching element function	PNP	NO
Rated operating distance	$s_n$	12 mm
Installation		quasi embedd.
Output polarity		DC
Assured operating distance	$s_a$	0 ... 9.72 mm
Reduction factor $r_{AI}$		0.26
Reduction factor $r_{Cu}$		0.2
Reduction factor $r_{304}$		0.63

**Nominal ratings**

<b>Installation conditions</b>		
A		4 mm
B		18 mm
C		36 mm
F		44 mm
Operating voltage	$U_B$	10 ... 30 V
Switching frequency	f	0 ... 500 Hz
Hysteresis	H	typ. 5%
Reverse polarity protected		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 ... 0.1 mA typ. 0.1 $\mu$ A at 25 °C
No-load supply current	$I_0$	$\leq 10$ mA
Indication of the switching state		LED yellow

**Functional safety related parameters**

MTTF <sub>d</sub>	283 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	Device connector M12 x 1, 4-pin
Housing material	chromium plated brass
Sensing face	PBT
Protection degree	IP67

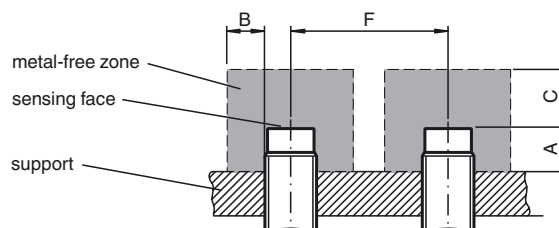
**Compliance with standards and directives**

<b>Standard conformity</b>	
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.

**Installation conditions**



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