



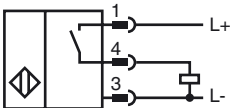
**Model Number**

NBB5-18GM50-E2-C3-V1

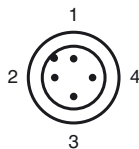
**Features**

- 5 mm flush
- 3-wire DC
- Ceramic coated sensing face
- Slag repellent coatings

**Connection**



**Pinout**



Wire colors in accordance with EN 60947-5-2

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

**Accessories**

**EXG-18**

Quick mounting bracket with dead stop

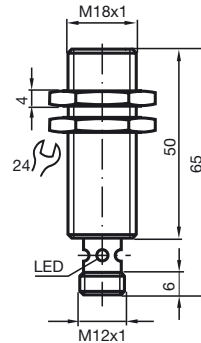
**V1-G-OR2M-POC**

Female cordset, M12, 4-pin, TPE cable, welding-bead resistant

**V1-W-OR2M-POC**

Female cordset, M12, 4-pin, TPE cable, welding-bead resistant

**Dimensions**



**Technical Data**

**General specifications**

Switching element function		PNP	NO
Rated operating distance	$s_n$	5 mm	
Installation		flush	
Output polarity		DC	
Assured operating distance	$s_a$	0 ... 4.05 mm	
Reduction factor $r_{Al}$		0.3	
Reduction factor $r_{Cu}$		0.2	
Reduction factor $r_{304}$		0.6	

**Nominal ratings**

Operating voltage	$U_B$	10 ... 30 V DC	
Switching frequency	$f$	0 ... 800 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 ... 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	
Operating voltage display		LED, green	
Switching state indication		Multihole-LED, yellow	
Mag. Field strength, AC fields		150 mT	
Mag. Field strength, DC fields		150 mT	

**Functional safety related parameters**

MTTF <sub>d</sub>	1560 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	Brass, PTFE coated
Sensing face	Ceramic coated
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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