



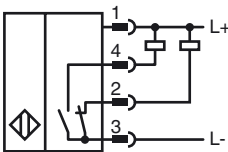
Model Number

NBB8-18GM60-A0-V1

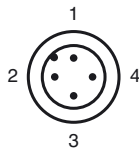
Features

- 8 mm embeddable
- Increased operating distance

Connection



Pinout



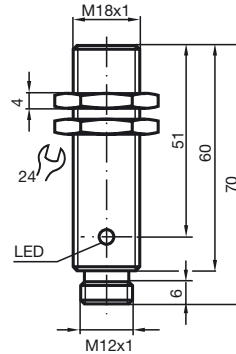
Wire colors in accordance with EN 60947-5-2

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

Accessories

- BF 18**
Mounting flange, 18 mm
- EXG-18**
Quick mounting bracket with dead stop
- 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		NPN	NO/NC
Rated operating distance	s_n	8 mm	
Installation		embeddable	
Output polarity		DC	
Assured operating distance	s_a	0 ... 6.48 mm	
Reduction factor r_{AI}		0.45	
Reduction factor r_{Cu}		0.4	
Reduction factor r_{304}		0.7	

Nominal ratings

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	≤ 3 V	
Operating current	I_L	0 ... 200 mA	
Off-state current	I_r	0 ... 0.5 mA typ. 0.1 μ A at 25 °C	
No-load supply current	I_0	≤ 25 mA	
Indication of the switching state		LED, yellow	

Functional safety related parameters

MTTF _d	950 a
Mission Time (T _M)	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, nickel-plated
Sensing face	PBT
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 ≤ 36 V do not bear a CCC marking because they do not require approval.

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