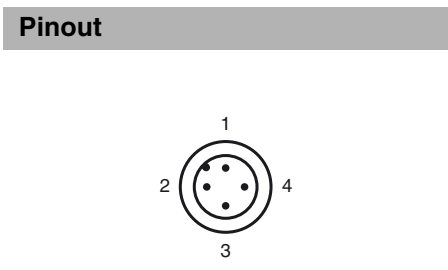
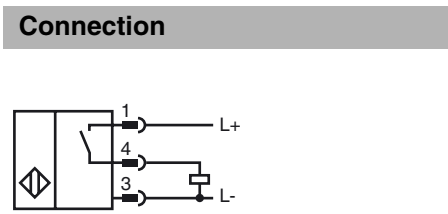




Model Number
NBB5-18GM50-E2-V1

- Features**
- 5 mm embeddable
 - Extended temperature range

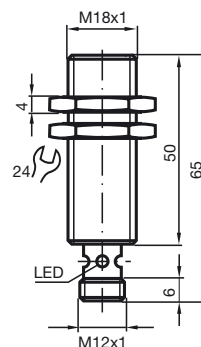


Wire colors in accordance with EN 60947-5-2

- | | |
|---|----|
| 1 | BN |
| 2 | WH |
| 3 | BU |
| 4 | BK |

- Accessories**
- BF 18**
Mounting flange, 18 mm
 - V1-G**
Field attachable female cordset
 - V1-W**
Field attachable female cordset
 - V1-G-2M-PUR**
Cable socket, M12, 4-pin, PUR cable
 - V1-W-2M-PUR**
Cable socket, M12, 4-pin, PUR cable
 - EXG-18**
Quick mounting bracket with dead stop

Dimensions



Technical Data

General specifications

Switching element function	PNP	NO
Rated operating distance	s_n	5 mm
Installation	embeddable	
Output polarity	DC	
Assured operating distance	s_a	0 ... 4.05 mm (-25 ... 70 °C (-13 ... 158 °F)) 0 ... 3.8 mm (-40 ... -25 °C (-40 ... -13 °F))
Reduction factor r_{AI}	0.3	
Reduction factor r_{Cu}	0.3	
Reduction factor r_{V2A}	0.7	

Nominal ratings

Operating voltage	U_B	10 ... 30 V
Switching frequency	f	0 ... 800 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 μA at 25 °C
No-load supply current	I_0	≤ 20 mA
Indication of the switching state	Multihole-LED, yellow	

Functional safety related parameters

MTTF _d	1740 a
Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	0 %

Ambient conditions

Ambient temperature	-40 ... 70 °C (-40 ... 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

Protection class	II
Rated insulation voltage	U_i 60 V
Design-impulse-voltage withstand	U_{imp} 800 V
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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