

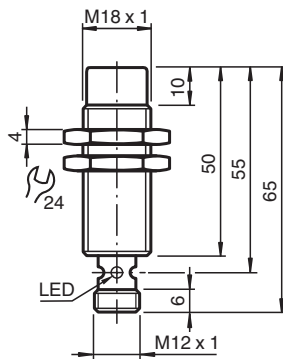
# Inductive sensor

## NBN12-18GM50-A0-V1

■ 12 mm non-flush



### Dimensions



### Technical Data

General specifications		
Switching function		complementary
Output type		NPN
Rated operating distance	$s_n$	12 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 9.72 mm
Reduction factor $r_{Al}$		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 ... 1000 Hz
Hysteresis	$H$	typ. 5%
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111  
fa-info@de.pepperl-fuchs.com

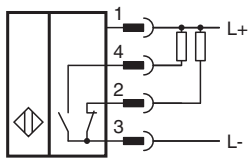
Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

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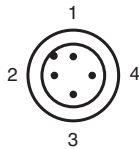
## Technical Data

Voltage drop	$U_d$	$\leq 3 \text{ V}$
Operating current	$I_L$	0 ... 200 mA
Off-state current	$I_r$	0 ... 0.5 mA typ. 0.1 $\mu\text{A}$ at 25 °C
No-load supply current	$I_0$	$\leq 20 \text{ mA}$
Switching state indicator		Multihole-LED, yellow
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		1500 a
Mission Time (T <sub>M</sub> )		20 a
Diagnostic Coverage (DC)		0 %
<b>Compliance with standards and directives</b>		
Standard conformity		
Standards		EN 60947-5-2:2007 IEC 60947-5-2:2007
<b>Approvals and certificates</b>		
UL approval		cULus Listed, General Purpose
CSA approval		cCSAus Listed, General Purpose
CCC approval		CCC approval / marking not required for products rated $\leq 36 \text{ V}$
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
<b>Mechanical specifications</b>		
Connection type		Connector M12 x 1 , 4-pin
Housing material		brass, nickel-plated
Sensing face		PBT
Degree of protection		IP67

## Connection






## Connection Assignment



Wire colors in accordance with EN 60947-5-2

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

**Accessories**

	<b>BF 18</b>	Mounting flange, 18 mm
	<b>V1-G-2M-PUR</b>	Female cordset, M12, 4-pin, PUR cable
	<b>V1-W-2M-PUR</b>	Female cordset, M12, 4-pin, PUR cable