

# Inductive sensor

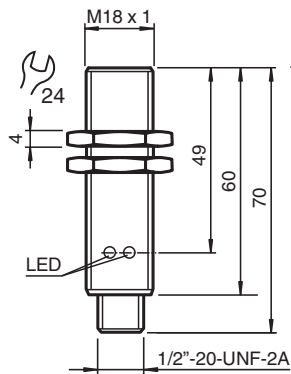
## NBB5-18GM60-WO-V12



- 5 mm flush
- 2-wire AC



### Dimensions



### Technical Data

General specifications		
Switching function		Normally closed (NC)
Output type		Two-wire
Rated operating distance	$s_n$	5 mm
Installation		flush
Output polarity		AC
Assured operating distance	$s_a$	0 ... 4.05 mm
Actual operating distance	$s_r$	4.5 ... 5.5 mm typ. 5 mm
Reduction factor $r_{AI}$		0.2
Reduction factor $r_{Cu}$		0.2
Reduction factor $r_{304}$		0.6
Output type		2-wire
Nominal ratings		
Operating voltage	$U_B$	20 ... 253 V
Switching frequency	$f$	0 ... 20 Hz
Hysteresis	$H$	typ. 6 %
Reverse polarity protection		reverse polarity tolerant

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

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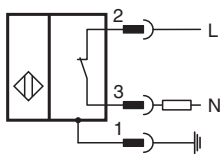
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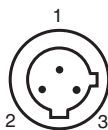
## Technical Data

Voltage drop	$U_d$	< 5 V ( $I_L > 50$ mA); < 8 V ( $I_L < 50$ mA)
Momentary current (20 ms, 0.1 Hz)		0 ... 1600 mA
Operating current	$I_L$	5 ... 200 mA
Off-state current	$I_r$	0 ... 1.7 mA typ.
Time delay before availability	$t_v$	≤ 30 ms
Operating voltage indicator		LED, green
Switching state indicator		LED, yellow
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		1135 a
Mission Time ( $T_M$ )		20 a
Diagnostic Coverage (DC)		0 %
<b>Compliance with standards and directives</b>		
Standard conformity		
Standards		EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012
<b>Approvals and certificates</b>		
UL approval		cULus Listed, General Purpose
CSA approval		cCSAus Listed, General Purpose
CCC approval		Certified by China Compulsory Certification (CCC)
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
<b>Mechanical specifications</b>		
Connection type		Connector plug 1/2"-20 UN , 3-pin
Housing material		brass, nickel-plated
Sensing face		PBT
Degree of protection		IP67
Note		1) In the temperature range below 0 °C, permissible operating voltage $U_b$ 80...253 V Safety fuse ≤ 0.8 A (quick-blow) according to IEC 60127-2 Sheet 1 Recommendation: after a short circuit, check that the device is functioning correctly.

## Connection



## Connection Assignment





## Connection Assignment

Wire colors

- 1 | GN (green)
- 2 | RD/BK (red/black)
- 3 | RD/WH (red/white)

## Accessories

	<p><b>BF 18</b></p>	<p>Mounting flange, 18 mm</p>
	<p><b>V12-G-YE2M-PVC</b></p>	<p>Connecting cable, 1/2" - 20 UNF, 3-pin, PVC cable</p>

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