

# Inductive sensor

## NBB15-30GM60-B3B-V1

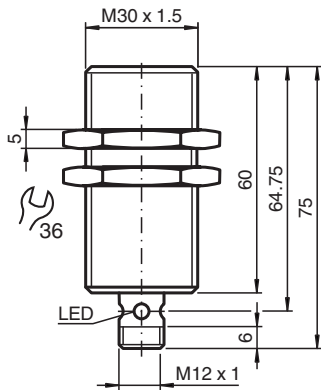


- 15 mm flush
- Cylindrical
- A/B slave with extended addressing possibility for up to 62 slaves
- NO/NC selectable
- On/Off delay (disconnectable)

### AS-Interface



### Dimensions



### Technical Data

#### General specifications

Switching function		Normally open/closed (NO/NC) programmable
Output type		AS-Interface
Rated operating distance	$s_n$	15 mm
Installation		flush
Assured operating distance	$s_a$	0 ... 12.15 mm
Reduction factor $r_{Al}$		0.4
Reduction factor $r_{Cu}$		0.4
Reduction factor $r_{304}$		0.7
Reduction factor $r_{Brass}$		0.5
Slave type		A/B slave
AS-Interface specification		V3.0
Required master specification		$\geq V2.1$
Output type		2-wire

#### Nominal ratings

Release date: 2020-03-23 Date of issue: 2020-03-30 Filename: 226336\_eng.pdf

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

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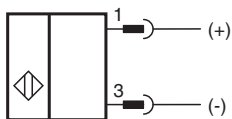
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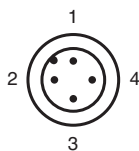
## Technical Data

Operating voltage	$U_B$	26.5 ... 31.9 V via AS-i bus system
Switching frequency	f	0 ... 200 Hz
Hysteresis	H	1 ... 15 typ. 5 %
Reverse polarity protection		reverse polarity protected
No-load supply current	$I_0$	$\leq 25$ mA
Switching state indicator		dual-LED, yellow
Error indicator		dual-LED, red
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		1700 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 EN 50295:1999
<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 $\leq 36$ V
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
<b>Mechanical specifications</b>		
Connection type		Connector plug M12 x 1 , 4-pin
Housing material		brass, nickel-plated
Sensing face		PBT
Degree of protection		IP67

## Connection



## Connection Assignment



## Additional Information

### Programming Instructions

Adress 00    preset, alterable  
                   via Busmaster  
                   or programming units

IO-Code    0  
 ID-Code    A  
 ID1-Code   7  
 ID2-Code   E

### Data bit




Bit	Function
D0	Switching state
D1	-
D2	-
D3	-

### Parameter bit

Bit	Function
P0	ON / Off delay activated* / deactivated
P1	Switching element function NO* / NC
P2	not used
P3	not used

\*Standard setting

## Accessories

	<b>BF 30</b>	Mounting flange, 30 mm
	<b>EXG-30</b>	Quick mounting bracket with dead stop
	<b>V1-G-BK0,3M-PUR-U-V1-G</b>	Connection cable, M12 to M12, PUR cable, 4-pin

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