

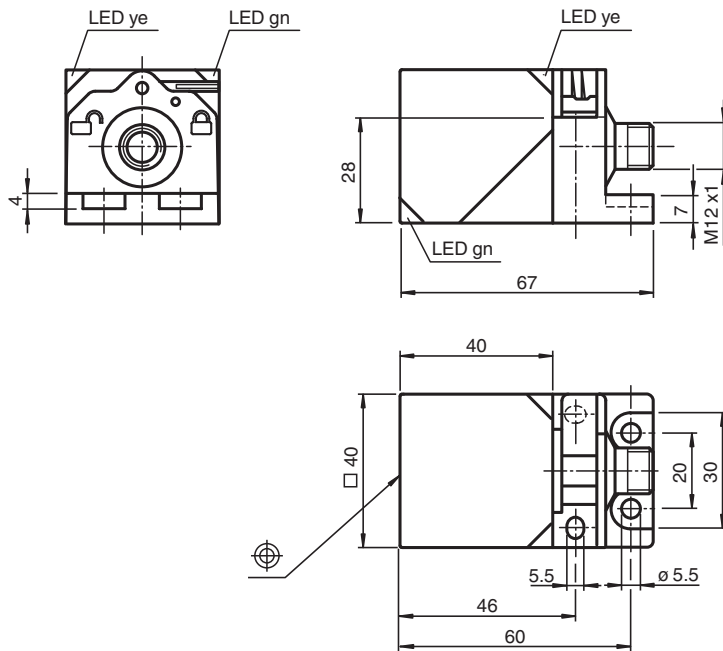


## Inductive sensor NBN40-L2-E2-V1-3G-3D

- 40 mm non-flush
- Sensor head bidirectional and rotatable
- 3-wire DC
- Quick mounting bracket
- 4-way LED indicator
- ATEX-/IECEX-approvals for zone 2/22 (Ex ec/tc)
- Polarity reversal protected



### Dimensions



### Technical Data

#### General specifications

Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	$s_n$	40 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 32.4 mm
Actual operating distance	$s_r$	36 ... 44 mm typ. 40 mm
Reduction factor $r_{AI}$		0.33
Reduction factor $r_{Cu}$		0.31

Release date: 2025-09-15 Date of issue: 2025-09-15 Filename: 70126066\_eng.pdf

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

PEPPERL+FUCHS

## Technical Data

Reduction factor $r_{304}$		0.74
Reduction factor $r_{Brass}$		0.38
Output type		3-wire
<b>Nominal ratings</b>		
Operating voltage	$U_B$	10 ... 30 V DC
Switching frequency	$f$	0 ... 180 Hz
Hysteresis	$H$	typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 2$ V
Operating current	$I_L$	0 ... 200 mA
Off-state current	$I_r$	0 ... 0.5 mA
No-load supply current	$I_o$	$\leq 20$ mA
Time delay before availability	$t_v$	80 ms
Operating voltage indicator		LED, green
Switching state indicator		LED, yellow
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		1057 a
Mission Time ( $T_M$ )		20 a
Diagnostic Coverage (DC)		0 %
<b>Compliance with standards and directives</b>		
Standard conformity		
Standards		EN IEC 60947-5-2
<b>Approvals and certificates</b>		
IECEx approval		
Equipment protection level Gc (ec)		IECEx TUR 21.0019X
Equipment protection level Dc (tc)		IECEx TUR 21.0020X
ATEX approval		
Equipment protection level Gc (ec)		TÜV 20 ATEX 8525 X
Equipment protection level Dc (tc)		TÜV 20 ATEX 8526 X
UL approval		
		cULus Listed Load Type: General Purpose Circuitry: Class 2 Power Source Enclosure Type Rating: Type 1 Supply/Switching Voltage: 30 V DC Output Switching Current: 200 mA
CCC approval		
Hazardous Location		2024322315005948 2024322315005983
Marine approval		DNVGL TAA0000160
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 85 °C (-13 ... 185 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
<b>Mechanical specifications</b>		
Connection type		Connector plug
Housing material		PA
Sensing face		PA
Degree of protection		IP69K
Connector		
Threading		M12 x 1
Number of pins		4
Mass		155 g
Dimensions		
Height		40 mm
Width		40 mm

Release date: 2025-09-15 Date of issue: 2025-09-15 Filename: 70126066\_eng.pdf

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

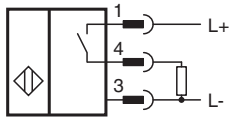
Pepperl+Fuchs Group  
www.pepperl-fuchs.comUSA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.comGermany: +49 621 776 1111  
fa-info@de.pepperl-fuchs.comSingapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

**PEPPERL+FUCHS**

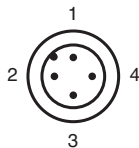
## Technical Data

Length	67 mm
<b>General information</b>	
Use in the hazardous area	see instruction manuals

## Connection Assignment



## Connection Assignment

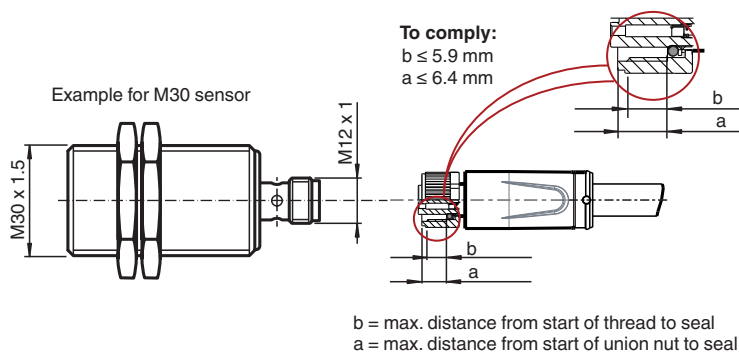


Wire colors in accordance with EN 60947-5-2

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

## Installation

### Requirement for cable socket to achieve IP degree of protection



Release date: 2025-09-15 Date of issue: 2025-09-15 Filename: 70126066\_eng.pdf