

# Inductive sensor

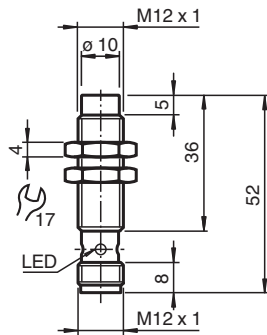
## NCN4-12GM40-E2-V1-3G-3D



- 4 mm non-flush
- ATEX-/IECEX-approvals for zone 2/22 (Ex ec/tc)



### Dimensions



### Technical Data

#### General specifications

Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	$s_n$	4 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 3.24 mm
Actual operating distance	$s_r$	3.6 ... 4.4 mm typ. 4 mm
Reduction factor $r_{Al}$		0.4
Reduction factor $r_{Cu}$		0.36
Reduction factor $r_{304}$		0.74
Reduction factor $r_{Brass}$		0.45
Output type		3-wire

#### Nominal ratings

Operating voltage	$U_B$	10 ... 30 V DC
Switching frequency	$f$	0 ... 2200 Hz
Hysteresis	$H$	3 ... 15 typ. 7 %

Release date: 2022-07-15 Date of issue: 2022-07-15 Filename: 70126073\_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

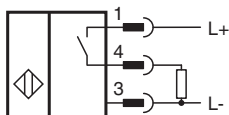
Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

## Technical Data

Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 3 \text{ V}$
Voltage drop at $I_L$		
Voltage drop $I_L = 200 \text{ mA}$ , switching element on	$U_d$	1 ... 2 V typ. 1.5 V
Operating current	$I_L$	$\leq 200 \text{ mA}$
Off-state current	$I_r$	0 ... 0.5 mA typ. 0.01 mA
No-load supply current	$I_0$	$\leq 15 \text{ mA}$
Time delay before availability	$t_v$	$\leq 100 \text{ ms}$
Switching state indicator		LED, yellow
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		1517 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>		
IECEX approval		
Equipment protection level Gc (ec)		IECEX TUR 21.0017X
Equipment protection level Dc (tc)		IECEX TUR 21.0018X
ATEX approval		
Equipment protection level Gc (ec)		TÜV 20 ATEX 8523 X
Equipment protection level Dc (tc)		TÜV 20 ATEX 8524 X
UL approval		cULus Listed, General Purpose, Class 2 Power Source
<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		Stainless steel 1.4305 / AISI 303
Sensing face		PBT
Degree of protection		IP66 / IP67
<b>General information</b>		
Scope of delivery		2 self locking nuts in scope of delivery
Use in the hazardous area		see instruction manuals

## Connection



## Connection Assignment

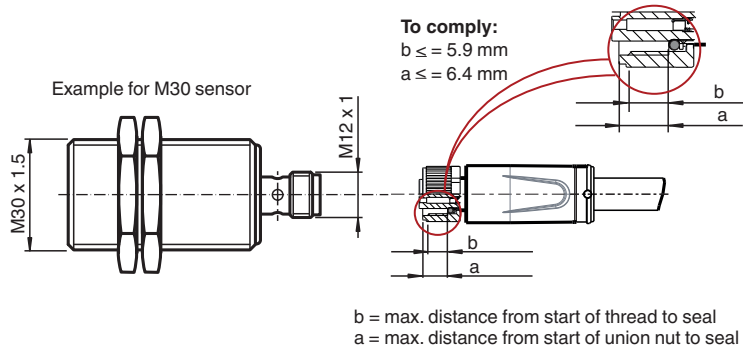


Wire colors in accordance with EN 60947-5-2


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

## Installation

### Requirement for male cordset to achieve IP degree of protection



## Accessories

	<b>BF 12</b>	Mounting flange, 12 mm
---	--------------	------------------------

Release date: 2022-07-15 Date of issue: 2022-07-15 Filename: 70126073\_eng.pdf