

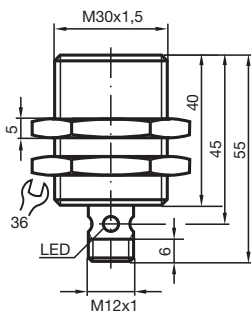
# Inductive sensor

## NCB10-30GM40-Z0-V1-3G-3D

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



### Dimensions



### Technical Data

#### General specifications

Switching function		Normally open (NO)
Output type		Two-wire
Rated operating distance	$s_n$	10 mm
Installation		flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 8.1 mm
Actual operating distance	$s_r$	9 ... 11 mm typ. 10 mm
Reduction factor $r_{Al}$		0.32
Reduction factor $r_{Cu}$		0.28
Reduction factor $r_{304}$		0.7
Output type		2-wire

#### Nominal ratings

Operating voltage	$U_B$	5 ... 60 V DC
Switching frequency	$f$	0 ... 150 Hz
Hysteresis	$H$	1 ... 15 typ. 5 %
Reverse polarity protection		reverse polarity tolerant
Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 5$ V
Voltage drop at $I_L$		

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

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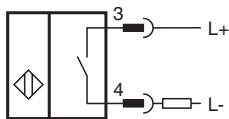
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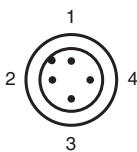
## Technical Data

Voltage drop $I_L = 20 \text{ mA}$ , switching element on	$U_d$	3.4 ... 5 V typ. 4.3 V
Operating current	$I_L$	2 ... 100 mA
Off-state current	$I_r$	0 ... 0.5 mA typ.
Time delay before availability	$t_v$	$\leq 50 \text{ ms}$
Switching state indicator		Multihole-LED, yellow
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		1830 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
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °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		IP67
<b>General information</b>		
Use in the hazardous area		see instruction manuals

## Connection



## Connection Assignment



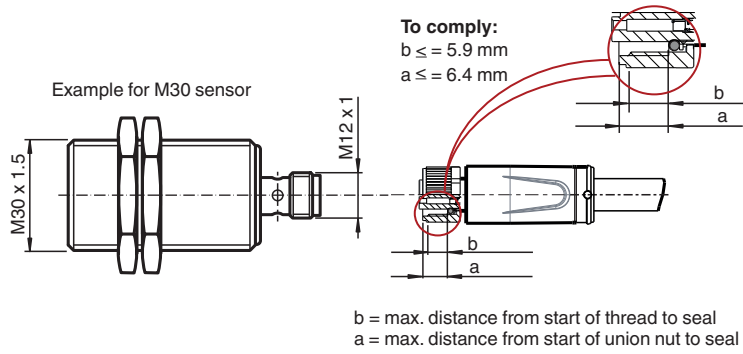
## Connection Assignment

Wire colors in accordance with EN 60947-5-2

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

## Installation

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



## Accessories

	<b>BF 30</b>	Mounting flange, 30 mm
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