

# Inductive sensor

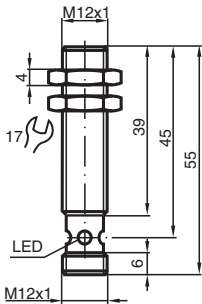
## NCB2-12GM40-Z0-V1-3G-3D



- 2 mm flush
- ATEX-/IECEX-approvals for zone 2/22 (Ex ec/tc)
- Stainless steel housing
- Reverse polarity tolerant



### Dimensions



### Technical Data

#### General specifications

Switching function		Normally open (NO)
Output type		Two-wire
Rated operating distance	$s_n$	2 mm
Installation		flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 1.62 mm
Actual operating distance	$s_r$	1.8 ... 2.2 mm typ. 2 mm
Reduction factor $r_{Al}$		0.28
Reduction factor $r_{Cu}$		0.23
Reduction factor $r_{304}$		0.7
Output type		2-wire

#### Nominal ratings

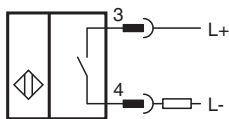
Operating voltage	$U_B$	5 ... 60 V DC
Switching frequency	$f$	0 ... 800 Hz
Hysteresis	$H$	1 ... 10 % typ. 5 %
Reverse polarity protection		reverse polarity tolerant

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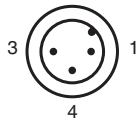
## Technical Data

Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 5$ V
Operating current	$I_L$	2 ... 100 mA
Lowest operating current	$I_m$	2 mA
Off-state current	$I_r$	0 ... 0.5 mA typ.
Switching state indicator		Multihole-LED, yellow
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		2090 a
Mission Time (T <sub>M</sub> )		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 21.0017X
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
CCC approval		
Hazardous Location		2024322315005947 2024322315005860
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
<b>Mechanical specifications</b>		
Connection type		Connector plug
Housing material		Stainless steel 1.4305 / AISI 303
Sensing face		PBT
Degree of protection		IP67
Connector		
Threading		M12 x 1
Number of pins		3
Mass		26 g
Dimensions		
Length		40 mm
Diameter		12 mm
<b>General information</b>		
Scope of delivery		2 self locking nuts in scope of delivery
Use in the hazardous area		see instruction manuals

## Connection Assignment



**Connection Assignment**

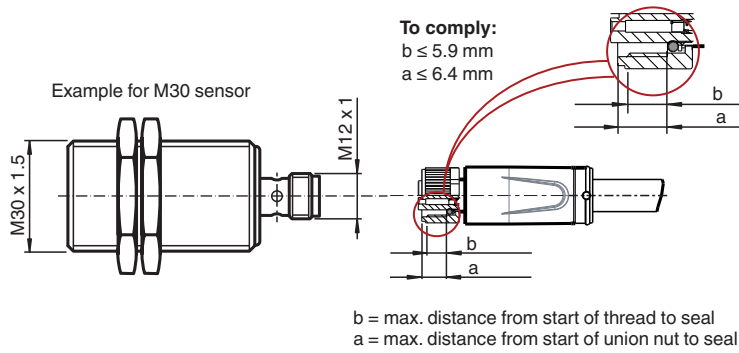


Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
3	BU	(blue)
4	BK	(black)

**Installation**

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



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