

# Inductive sensor

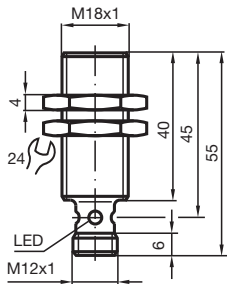
## NCB8-18GM40-N0-V1



- 8 mm flush
- Usable up to SIL 2 acc. to IEC 61508



### Dimensions



### Technical Data

#### General specifications

Switching function		Normally closed (NC)
Output type		NAMUR
Rated operating distance	$s_n$	8 mm
Installation		flush
Assured operating distance	$s_a$	0 ... 6.48 mm
Actual operating distance	$s_r$	7.2 ... 8.8 mm typ. 8 mm
Reduction factor $r_{Al}$		0.39
Reduction factor $r_{Cu}$		0.36
Reduction factor $r_{304}$		0.71
Output type		2-wire

#### Nominal ratings

Nominal voltage	$U_o$	8.2 V ( $R_i$ approx. 1 k $\Omega$ )
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Release date: 2020-05-04 Date of issue: 2020-05-04 Filename: 181089\_eng.pdf

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

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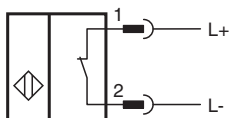
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**PF** PEPPERL+FUCHS

## Technical Data

Switching frequency	f	0 ... 1500 Hz
Hysteresis	H	1 ... 15 typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		yes
Suitable for 2:1 technology		yes , Reverse polarity protection diode not required
Current consumption		
Measuring plate not detected		min. 2.2 mA
Measuring plate detected		≤ 1 mA
Switching state indicator		Multihole-LED, yellow
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		2660 a
Mission Time (T <sub>M</sub> )		20 a
Diagnostic Coverage (DC)		0 %
<b>Compliance with standards and directives</b>		
Standard conformity		
NAMUR		EN 60947-5-6:2000 IEC 60947-5-6:1999
Electromagnetic compatibility		NE 21:2007
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>		
EAC conformity		TR CU 012/2011
FM approval		
Control drawing		116-0165
UL approval		
Ordinary Location		E87056
Hazardous Location		E501628
Control drawing		116-0452
CSA approval		cCSAus Listed, General Purpose
CCC approval		CCC approval / marking not required for products rated ≤36 V
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 100 °C (-13 ... 212 °F)
Storage temperature		-40 ... 100 °C (-40 ... 212 °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>		
Use in the hazardous area		see instruction manuals

## Connection







## Connection Assignment



Wire colors in accordance with EN 60947-5-6

1	BN	(brown)
2	BU	(blue)

## Accessories

	<b>V1-W-N-2M-PUR</b>	Female cordset, M12, 2-pin, NAMUR, PUR cable
	<b>EXG-18</b>	Quick mounting bracket with dead stop
	<b>V1-G-N-2M-PUR</b>	Female cordset, M12, 2-pin, NAMUR, PUR cable
	<b>BF 18</b>	Mounting flange, 18 mm

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