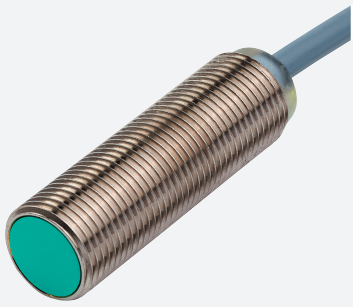


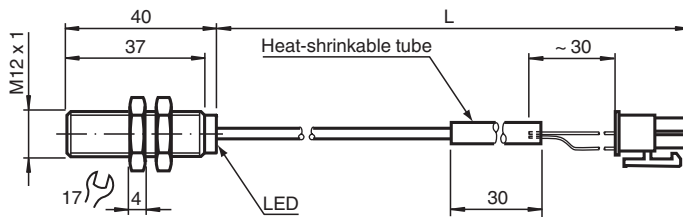
# Inductive sensor

## NCB4-12GM40-Z12-Y299271

■ 4 mm flush



### Dimensions



### Technical Data

General specifications		
Switching function		Normally closed (NC)
Output type		Two-wire
Rated operating distance	$s_n$	4 mm
Installation		flush
Assured operating distance	$s_a$	0 ... 3.24 mm
Actual operating distance	$s_r$	3.6 ... 4.4 mm typ.
Reduction factor $r_{Al}$		0.41
Reduction factor $r_{Cu}$		0.39
Reduction factor $r_{304}$		0.78
Output type		2-wire
Nominal ratings		
Nominal voltage	$U_o$	8.2 V ( $R_i$ approx. 1 k $\Omega$ )
Switching frequency	f	0 ... 1500 Hz
Hysteresis	H	1 ... 15 typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		yes

Release date: 2022-05-18 Date of issue: 2022-05-18 Filename: 299271\_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

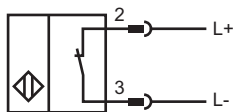
Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

## Technical Data

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	all direction LED, yellow
<b>Functional safety related parameters</b>	
MTTF <sub>d</sub>	3010 a
Mission Time (T <sub>M</sub> )	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>	
UL approval	UL Recognized . Class 2 power source
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	cable PVC , L = 2.5 m Molex plug; 39-01-2040 Molex contact; 39-00-0046
Core cross section	0.34 mm <sup>2</sup>
Housing material	Stainless steel 1.4305 / AISI 303
Sensing face	PBT
Degree of protection	IP66 / IP67
Cable	
Bending radius	> 10 x cable diameter
<b>General information</b>	
Scope of delivery	Supplied with 2 nuts Supplied with 2 toothed lock washers

## Connection



## Accessories

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