

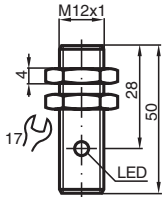
# Inductive sensor NJ2-12GM40-E3-V1



■ 2 mm flush



## Dimensions



## Technical Data

General specifications		
Switching function		Normally closed (NC)
Output type		PNP
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.
Reduction factor $r_{AI}$		0.23
Reduction factor $r_{Cu}$		0.21
Reduction factor $r_{304}$		0.7
Output type		3-wire
Nominal ratings		
Operating voltage	$U_B$	10 ... 60 V
Switching frequency	$f$	0 ... 3000 Hz
Hysteresis	$H$	1 ... 10 % typ. 3 %
Reverse polarity protection		reverse polarity protected

Release date: 2024-12-10 Date of issue: 2024-12-11 Filename: 282946\_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

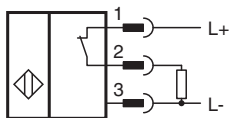
Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

## Technical Data

Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 3 \text{ V}$
Voltage drop at $I_L$		
Voltage drop $I_L = 100 \text{ mA}$ , switching element on	$U_d$	1.2 ... 2.5 V
Operating current	$I_L$	0 ... 200 mA
No-load supply current	$I_0$	$\leq 9 \text{ mA}$
Time delay before availability	$t_v$	$\leq 20 \text{ ms}$
Switching state indicator		LED, yellow
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		750 a
Mission Time ( $T_M$ )		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>		
UL approval		cULus Listed, General Purpose
CCC approval		Certified by China Compulsory Certification (CCC)
<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
Housing material		Stainless steel 1.4305 / AISI 303
Sensing face		PBT
Degree of protection		IP67
Connector		
Threading		M12 x 1
Number of pins		4
Dimensions		
Length		50 mm
Diameter		12 mm
<b>General information</b>		
Scope of delivery		2 self locking nuts in scope of delivery

## Connection



## Connection Assignment



Wire colors in accordance with EN 60947-5-2

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