

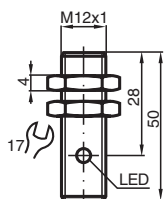


Inductive sensor NJ2-12GM40-E3-V1

■ 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

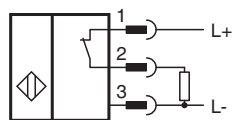
Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

Technical Data

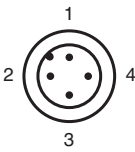
Short-circuit protection		pulsing
Voltage drop	U_d	$\leq 3\text{ V}$
Voltage drop at I_L		
Voltage drop $I_L = 100\text{ mA}$, switching element on	U_d	$1.2 \dots 2.5\text{ V}$
Operating current	I_L	$0 \dots 200\text{ mA}$
No-load supply current	I_0	$\leq 9\text{ mA}$
Time delay before availability	t_v	$\leq 20\text{ ms}$
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		750 a
Mission Time (T_M)		20 a
Diagnostic Coverage (DC)		0 %
Compliance with standards and directives		
Standard conformity		
Standards		EN IEC 60947-5-2
Approvals and certificates		
UL approval		cULus Listed, General Purpose
CCC approval		Certified by China Compulsory Certification (CCC)
Ambient conditions		
Ambient temperature		$-25 \dots 70\text{ °C}$ ($-13 \dots 158\text{ °F}$)
Storage temperature		$-40 \dots 85\text{ °C}$ ($-40 \dots 185\text{ °F}$)
Mechanical specifications		
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
General information		
Scope of delivery		2 self locking nuts in scope of delivery

Connection



Release date: 2024-12-10 Date of issue: 2024-12-11 Filename: 282946_eng.pdf

Connection Assignment



Wire colors in accordance with EN 60947-5-2

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

Release date: 2024-12-10 Date of issue: 2024-12-11 Filename: 282946_eng.pdf