



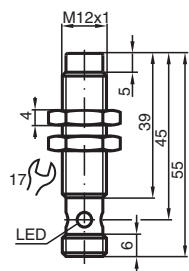
Inductive sensor

NCN4-12GM40-Z0-V1

- 4 mm non-flush
- 2-wire DC



Dimensions



Technical Data

General specifications

Switching function		Normally open (NO)
Output type		Two-wire
Rated operating distance	s_n	4 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	s_a	0 ... 3.24 mm
Actual operating distance	s_r	3.6 ... 4.4 mm typ.
Reduction factor r_{AI}		0.42
Reduction factor r_{Cu}		0.4
Reduction factor r_{304}		0.75
Output type		2-wire

Nominal ratings

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

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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

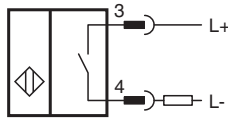
Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

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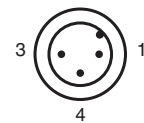
Technical Data

Short-circuit protection		pulsing
Voltage drop	U_d	$\leq 5\text{ V}$
Voltage drop at I_L		
Voltage drop $I_L = 10\text{ mA}$, switching element on	U_d	3.5 ... 4.7 V typ. 4.3 V
Operating current	I_L	2 ... 100 mA
Off-state current	I_r	0 ... 0.5 mA typ.
Time delay before availability	t_v	$\leq 15\text{ ms}$
Switching state indicator		Multihole-LED, yellow
Functional safety related parameters		
MTTF _d		2020 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 ... 70 °C (-13 ... 158 °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		3
Mass		26 g
Dimensions		
Length		40 mm
Diameter		12 mm

Connection



Connection Assignment



Connection Assignment

Wire colors in accordance with EN 60947-5-2

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

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