

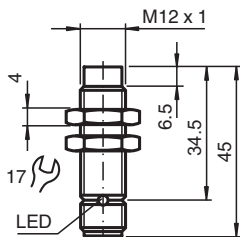


Inductive sensor NBN4-12GM40-E2-T-V1

- 4 mm non-flush
- Short version
- Extended temperature range



Dimensions



Technical Data

General specifications

Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	s_n	4 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	s_a	0 ... 3.24 mm
Actuating element		mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 12 mm x 12 mm x 1 mm
Reduction factor r_{Al}		0.5
Reduction factor r_{Cu}		0.4
Reduction factor r_{304}		0.8
Reduction factor r_{Brass}		0.5
Output type		3-wire

Nominal ratings

Installation conditions		
A		8 mm
B		9 mm
C		8 mm
F		27 mm
Operating voltage	U_B	10 ... 30 V
Switching frequency	f	0 ... 800 Hz
Hysteresis	H	0.03 ... 0.88 mm

Release date: 2026-03-18 Date of issue: 2026-03-18 Filename: 236503_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

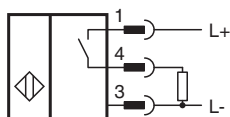
Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

 **PEPPERL+FUCHS**

Technical Data

Reverse polarity protection		yes
Short-circuit protection		yes
Overload resistance		yes
Wire breakage protection		yes
Inductive overvoltage protection		yes
Surge suppression		yes
Ripple		10 %
Voltage drop	U_d	$\leq 2.5 \text{ V}$
Repeat accuracy	R	0.2 mm
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	$\leq 0.01 \text{ mA}$
No-load supply current	I_0	$\leq 7 \text{ mA}$
Time delay before availability	t_v	$\leq 40 \text{ ms}$
Switching state indicator		all direction LED, yellow
Safety-relevant product characteristics		
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 Circuitry: Class 2 Power Source Supply/Switching Voltage: 30 V DC Output Switching Current: 200 mA
CCC approval		CCC approval / marking not required for products rated $\leq 36 \text{ V}$
Ambient conditions		
Ambient temperature		-25 ... 100 °C (-13 ... 212 °F)
Storage temperature		-40 ... 100 °C (-40 ... 212 °F)
Mechanical specifications		
Connection type		Connector plug
Housing material		brass, nickel-plated
Sensing face		PBT
Degree of protection		IP67
Connector		
Threading		M12 x 1
Number of pins		3
Mass		12 g
Dimensions		
Length		37 mm
Diameter		12 mm

Connection Assignment



Connection Assignment



Wire colors in accordance with EN 60947-5-2

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