

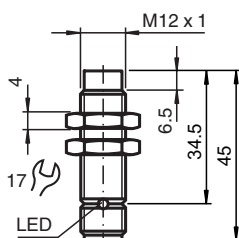


Inductive sensor NBN4-12GM40-E2-T-V1

- 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

Nominal ratings

Installation conditions		
A		8 mm

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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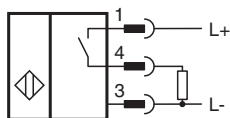
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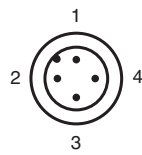
Technical Data

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
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	≤ 2.5 V
Repeat accuracy	R	0.2 mm
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	≤ 0.01 mA
No-load supply current	I_0	≤ 7 mA
Time delay before availability	t_v	≤ 40 ms
Switching state indicator		all direction LED, yellow
Functional safety related parameters		
Mission Time (T_M)		20 a
Diagnostic Coverage (DC)		0 %
Compliance with standards and directives		
Standard conformity		
Standards		EN 60947-5-2:2007 IEC 60947-5-2:2007
Approvals and certificates		
CCC approval		CCC approval / marking not required for products rated ≤ 36 V
Ambient conditions		
Ambient temperature		-25 ... 100 °C (-13 ... 212 °F)
Storage temperature		-40 ... 100 °C (-40 ... 212 °F)
Mechanical specifications		
Connection type		4-pin, M12 x 1 connector
Housing material		brass, nickel-plated
Sensing face		PBT
Degree of protection		IP67
Mass		12 g

Connection



Connection Assignment



Wire colors in accordance with EN 60947-5-2

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

Accessories

	BF 12	Mounting flange, 12 mm
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