

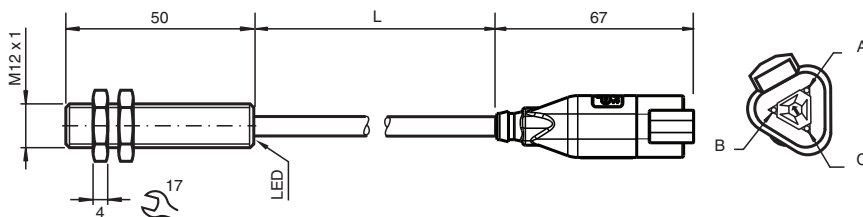
Inductive sensor

NBB4-12GM50-E2-M1-150MM-3DT0-4

- 4 mm flush
- Increased operating distance
- Extended temperature range
-40 ... +85 °C
- With increased sealing, protection class
IP68 / IP69K



Dimensions



Technical Data

General specifications

Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	s_n	4 mm
Installation		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}		0.4
Reduction factor r_{Cu}		0.3
Reduction factor r_{304}		0.75
Reduction factor r_{Brass}		0.45
Output type		3-wire

Nominal ratings

Operating voltage	U_B	7 ... 30 V
Switching frequency	f	0 ... 2200 Hz
Hysteresis	H	typ. 5%

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

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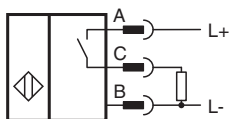
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PEPPERL+FUCHS

Technical Data

Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	$\leq 2 \text{ V}$
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	0 ... 0.5 mA typ. 4 μA at 25 °C
No-load supply current	I_0	$\leq 10 \text{ mA}$
Time delay before availability	t_v	$\leq 100 \text{ ms}$
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		1484 a
Mission Time (T_M)		20 a
Diagnostic Coverage (DC)		0 %
Compliance with standards and directives		
Standard conformity		
Standards		EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012
Approvals and certificates		
CCC approval		CCC approval / marking not required for products rated $\leq 36 \text{ V}$
Ambient conditions		
Ambient temperature		-40 ... 85 °C (-40 ... 185 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Connection type		fixed cable with plug
Housing material		brass, nickel-plated
Sensing face		PBT
Degree of protection		IP68 / IP69K
Connector		
Connection assembly		Deutsch connector DT04-3P-CE02 Deutsch wedge W3P Deutsch contact 1060-16-0622
Cable		
Cable diameter		6 mm $\pm$ 0.2 mm
Bending radius		> 6 x cable diameter
Material		PUR
Color		black
Number of cores		3
Core cross-section		0.75 mm ²
Length	L	120 mm $\pm$ 10 mm
Mass		37 g
General information		
Scope of delivery		2 self locking nuts in scope of delivery

Connection



Wire colors

A	BN
B	BU
C	BK

Accessories

	BF 12	Mounting flange, 12 mm
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