

Inductive sensor

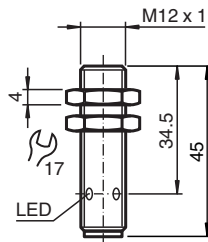
NBB4-12GM30-E0-V1



- 4 mm flush
- Increased operating distance



Dimensions



Technical Data

General specifications

Switching function		Normally open (NO)
Output type		NPN
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}		0.5
Reduction factor r_{Cu}		0.4
Reduction factor r_{304}		0.8
Reduction factor r_{Brass}		0.6
Output type		3-wire

Nominal ratings

Operating voltage	U_B	10 ... 30 V
Switching frequency	f	0 ... 500 Hz

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

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Technical Data

Hysteresis	H	typ. 5%
Reverse polarity protection		yes
Short-circuit protection		yes
Inductive overvoltage protection		yes
Surge suppression		yes
Voltage drop	U_d	$\leq 2.5\text{ V}$
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	0.01 mA
No-load supply current	I_0	$\leq 7\text{ mA}$
Time delay before availability	t_v	40 ms
Switching state indicator		LED, yellow

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

UL approval		cULus Listed, General Purpose
CCC approval		CCC approval / marking not required for products rated $\leq 36\text{ V}$

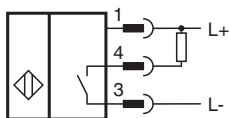
Ambient conditions

Ambient temperature		-25 ... 85 °C (-13 ... 185 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)

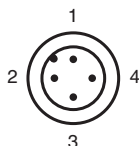
Mechanical specifications

Connection type		Connector M12 x 1 , 4-pin
Housing material		brass, nickel-plated
Sensing face		PBT
Degree of protection		IP67
Mass		13 g

Connection



Connection Assignment



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Wire colors in accordance with EN 60947-5-2

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

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