

Inductive sensor

NBB2-12GM30-E2-5M-PUR



- 2 mm flush
- Extended temperature range
-40 ... +85 °C
- Extended operating voltage range
- Flexible use with versatile mounting opportunities



Technical Data

General specifications

Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	s_n	2 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 1.62 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}		0.29
Reduction factor r_{Cu}		0.23
Reduction factor r_{304}		0.78
Reduction factor r_{Brass}		0.42
Output type		3-wire

Nominal ratings

Operating voltage	U_B	5 ... 36 V
Switching frequency	f	0 ... 3500 Hz
Hysteresis	H	typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 1 V
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	max. 20 μ A
No-load supply current	I_0	≤ 10 mA
Time delay before availability	t_v	≤ 10 ms
Switching state indicator		LED, yellow

Functional safety related parameters

MTTF _d		1721 a
Mission Time (T_M)		20 a
Diagnostic Coverage (DC)		0 %

Conformity

PWIS conformity		VDMA 24364-A1/B2/C1/T100°C-W
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Compliance with standards and directives

Standard conformity		
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Release date: 2022-05-23 Date of issue: 2022-05-23 Filename: 326163-0142_eng.pdf

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

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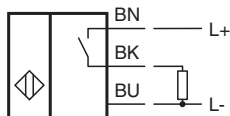
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 **PEPPERL+FUCHS**

Technical Data

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		
EAC conformity		TR CU 020/2011
Protection class		II
Rated insulation voltage	U_i	36 V
Rated impulse withstand voltage	U_{imp}	500 V
UL approval		cULus Listed, General Purpose, Class 2 Power Source
CCC approval		CCC approval / marking not required for products rated ≤ 36 V
Ambient conditions		
Ambient temperature		-40 ... 85 °C (-40 ... 185 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Connection type		cable
Housing material		brass , white bronze coated
Sensing face		PBT , green
Degree of protection		IP68
Cable		
Wire end ferrules		yes
Cable diameter		4.3 mm $\pm$ 0.15 mm
Bending radius		> 10 x cable diameter
Material		PUR
Color		black
Number of cores		3
Core cross section		0.34 mm ²
Length	L	5 m
Mass		158 g
Tightening torque		0 ... 10 Nm
General information		
Scope of delivery		2 self locking nuts in scope of delivery

Connection



Accessories

	BF 12	Mounting flange, 12 mm
	BF 12-F	Plastic mounting adapter, 12 mm