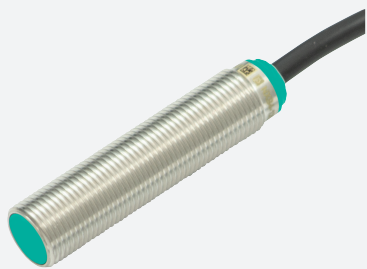


Inductive sensor

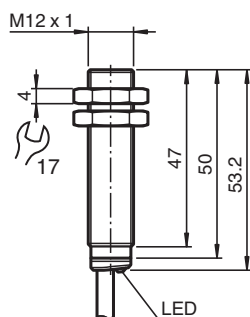
NBB4-12GM50-E3



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



Dimensions



Technical Data

General specifications

Switching function		Normally closed (NC)
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}		0.35
Reduction factor r_{304}		0.79
Reduction factor r_{Brass}		0.49
Output type		3-wire

Nominal ratings

Operating voltage	U_B	5 ... 36 V
Switching frequency	f	0 ... 2550 Hz

Release date: 2023-01-25 Date of issue: 2023-01-25 Filename: 326161-0008_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

Technical Data

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_o	≤ 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-C1/T100°C-W
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		
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		PVC
Color		black
Number of cores		3
Core cross section		0.34 mm ²
Length	L	2 m
Mass		86 g
Tightening torque		0 ... 10 Nm
General information		
Scope of delivery		2 self locking nuts in scope of delivery

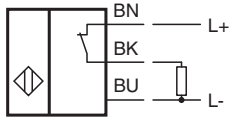
Release date: 2023-01-25 Date of issue: 2023-01-25 Filename: 326161-0008_eng.pdf

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




Pepperl+Fuchs Group
www.pepperl-fuchs.comUSA: +1 330 486 0001
fa-info@us.pepperl-fuchs.comGermany: +49 621 776 1111
fa-info@de.pepperl-fuchs.comSingapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

Connection Assignment



Accessories

	BF 12	Mounting flange, 12 mm
	BF 12-F	Plastic mounting adapter, 12 mm
	MH-EXG-12	Quick mounting bracket with dead stop



**SCATTERGOOD
& JOHNSON LTD**
ELECTRICAL ENGINEERING & FLUID CONTROL DISTRIBUTORS

Est.1899

At Scattergood & Johnson Ltd, we pride ourselves on being a technical distributor to specialist industries.

Working with a range of quality product manufacturers across a number of specialist markets, we are not your average 'box shifter' - we are your technical and supply chain partner.

We fully support every product we sell - for free! Our internal team and external sales engineers can answer any product or application question, no matter the complexity.

Backing up this technical ability is a range of 50,000+ products available from stock for nationwide next day delivery (same day if required!), or you can collect what you need from any of our trade counters around the UK.

Select your specialist interest below to learn more about how we can help.



Online, In Branch and On the Road - Scattergood & Johnson Ltd, there when you need us.

www.scatts.co.uk