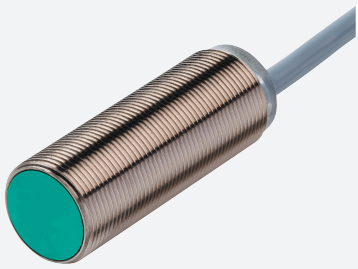


Inductive sensor

NBB8-18GM50-E2-M-150MM-3DT04-Y

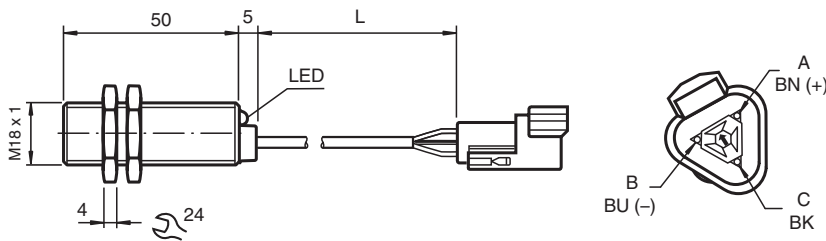


- 8 mm flush
- Increased operating distance
- Extended temperature range
-40 ... +85 °C
- 3-pin Deutsch connector (DT04)
- 100 V/m radiated field immunity
- E1-Type approval

Mobile Equipment Series



Dimensions



Technical Data

General specifications

Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	s_n	8 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 6.48 mm
Reduction factor r_{Al}		0.4
Reduction factor r_{Cu}		0.4
Reduction factor r_{304}		0.7
Reduction factor r_{Brass}		0.45
Output type		3-wire

Nominal ratings

Operating voltage	U_B	5 ... 60 V
Switching frequency	f	0 ... 1500 Hz
Hysteresis	H	typ. 5 %
Reverse polarity protection		yes

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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

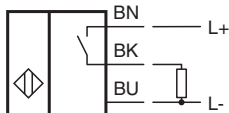
Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

Technical Data

Short-circuit protection		yes
Inductive overvoltage protection		yes
Surge suppression		yes
Voltage drop	U_d	≤ 2 V
Rated insulation voltage	U_{BIS}	60 V
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	0 ... 0.5 mA typ. 0.1 μ A at 25 °C
No-load supply current	I_0	≤ 7 mA
Time delay before availability	t_v	≤ 220 ms
Switching state indicator		LED : yellow Output
Functional safety related parameters		
MTTF _d		1085.5 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		
UL approval		UL Recognized
Ambient conditions		
Ambient 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-C015 Deutsch contact 1060-16-0622 Deutsch wedge W3P
Cable		
Cable diameter		6 mm \pm 0.2 mm
Bending radius		> 6 x cable diameter
Material		PUR
Color		grey
Number of cores		3
Core cross section		0.75 mm ²
Length	L	L = 150 mm

Connection



Wire colors

A	BN
B	BU
C	BK

Technical Features

Interference immunity in accordance with
 DIN ISO 11452-2: 100 V/m
 Frequency band 20 MHz up to 2 GHz

Mains-borne interference in accordance with ISO 7637-2: Pulse

	1	2a	2b	3 a	3b	4	5
Severity level	III	III	III	III	III	III	III
Failure criterion	C	A	C	A	A	A	B

EN 61000-4-2:	CD: 8 kV / AD: 15 kV
Severity level	IV IV
EN 61000-4-3:	30 V/m (80...2500 MHz)
Severity level	IV
EN 61000-4-4:	2 kV
Severity level	III
EN 61000-4-6:	10 V (0.01...80 MHz)
Severity level	III
EN 55011:	Class A

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