

Inductive sensor

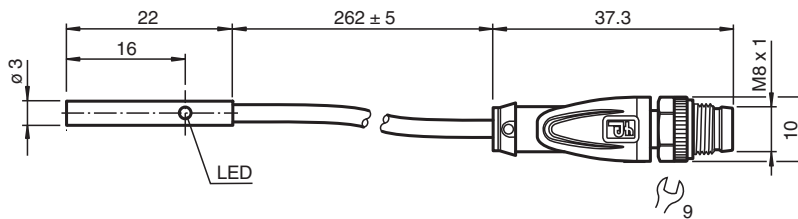
NBB1-3M22-E2-0,3M-V3



- 1 mm flush
- Miniature design
- Cable with M8 plug



Dimensions



Technical Data

General specifications		
Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	s_n	1 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 0.81 mm
Reduction factor r_{Al}		0.4
Reduction factor r_{Cu}		0.29
Reduction factor r_{304}		0.76
Reduction factor r_{Brass}		0.46
Output type		3-wire
Nominal ratings		
Operating voltage	U_B	10 ... 30 V
Switching frequency	f	0 ... 700 Hz
Hysteresis	H	typ. 5%
Reverse polarity protection		reverse polarity protected

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

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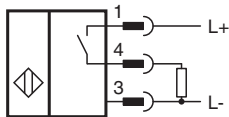
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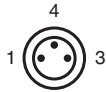
Technical Data

Short-circuit protection		pulsing
Voltage drop	U_d	$\leq 3 \text{ V}$
Operating current	I_L	0 ... 100 mA
Off-state current	I_r	0 ... 0.1 mA typ. at 25 °C
No-load supply current	I_0	$\leq 10 \text{ mA}$
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		1340 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		cULus Listed, General Purpose
CCC approval		CCC approval / marking not required for products rated $\leq 36 \text{ V}$
Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Mechanical specifications		
Connection type		fixed cable with plug
Housing material		Stainless steel 1.4305 / AISI 303
Sensing face		PC
Degree of protection		IP67
Connector		
Threading		M8 x 1
Tightening torque		0.4 Nm
Number of pins		3
Cable		
Cable diameter		2.6 mm $\pm$ 0.1 mm
Bending radius		> 10 x cable diameter
Material		PUR
Color		grey
Number of cores		3
Core cross section		0.055 mm ²
Length	L	0.3 m
Mass		12 g

Connection



Connection Assignment



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
3	BU	(blue)
4	BK	(black)

Mounting

