

Inductive sensor

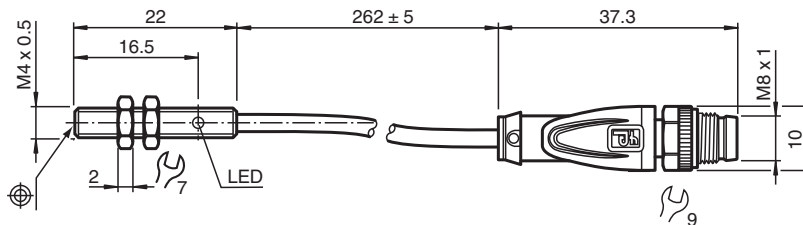
NBB1-4GM22-E2-0,3M-V3



- 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
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 3 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_o	≤ 10 mA
Switching state indicator		LED, yellow

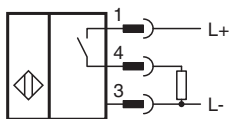
Functional safety related parameters

Release date: 2025-02-24 Date of issue: 2025-02-24 Filename: 224132_eng.pdf

Technical Data

MTTF _d		1340 a
Mission Time (T _M)		20 a
Diagnostic Coverage (DC)		0 %
Compliance with standards and directives		
Standard conformity		
Standards		EN IEC 60947-5-2
Approvals and certificates		
UL approval		cULus Listed, General Purpose
CCC approval		CCC approval / marking not required for products rated ≤36 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 ± 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		14 g
Dimensions		
Length		22 mm
Diameter		4 mm

Connection



Connection Assignment



Connection Assignment

Wire colors in accordance with EN 60947-5-2

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