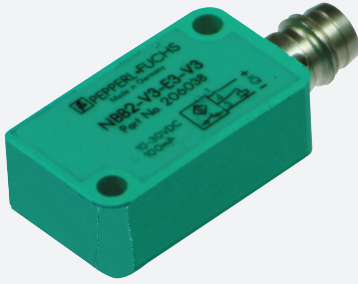


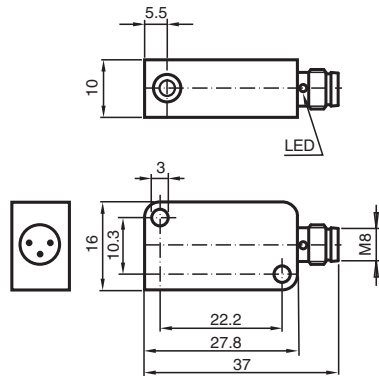
Inductive sensor NBB3-V3-E3-V3



- 3 mm flush
- 3-wire DC



Dimensions



Technical Data

General specifications

Switching function		Normally closed (NC)
Output type		PNP
Rated operating distance	s_n	3 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 2.43 mm
Reduction factor r_{Al}		0.35
Reduction factor r_{Cu}		0.33
Reduction factor r_{304}		0.82
Reduction factor r_{Brass}		0.5
Output type		3-wire

Nominal ratings

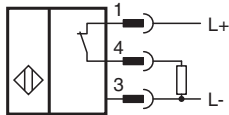
Operating voltage	U_B	10 ... 30 V DC
Switching frequency	f	0 ... 1000 Hz
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 3 V
Operating current	I_L	0 ... 100 mA
Off-state current	I_r	0 ... 0.5 mA typ. 0.1 μ A at 25 °C

Release date: 2024-05-28 Date of issue: 2024-06-07 Filename: 225244_eng.pdf

Technical Data

No-load supply current	I_0	$\leq 15 \text{ mA}$
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		2300 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		
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		Connector plug M8 x 1 , 3-pin
Housing material		PBT
Sensing face		PBT
Degree of protection		IP67
Tightening torque, fastening screws		$\leq 0.4 \text{ Nm}$
Dimensions		
Height		10.2 mm
Width		27.8 mm
Length		16 mm

Connection



Connection Assignment



Wire colors in accordance with EN 60947-5-2

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