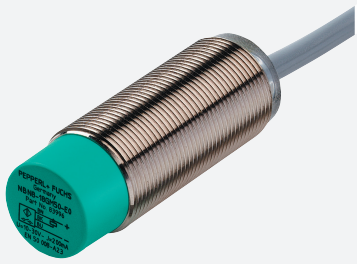


Inductive sensor

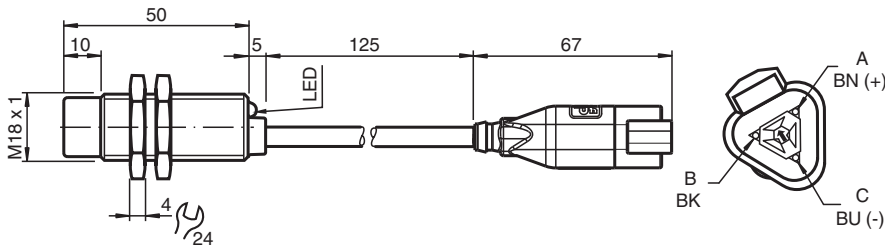
NBN12-18GM50-E2-M-Y70116627



- 12 mm non-flush
- Extended temperature range
-40 ... +85 °C
- Increased noise immunity 100 V/m
- With increased sealing, protection class
IP68 / IP69K
- Highly shock and vibration resistant



Dimensions



Technical Data

General specifications

Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	s_n	12 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	s_a	0 ... 9.72 mm
Reduction factor r_{Al}		0.5
Reduction factor r_{Cu}		0.4
Reduction factor r_{304}		0.7
Reduction factor r_{Brass}		0.5
Output type		3-wire

Nominal ratings

Operating voltage	U_B	10 ... 30 V
Switching frequency	f	0 ... 1500 Hz
Hysteresis	H	type 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
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

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Technical Data

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
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 IEC 60947-5-2
Ambient conditions		
Ambient temperature		-40 ... 85 °C (-40 ... 185 °F)
Storage 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-CE02 Deutsch wedge W3P Deutsch contact 1060-16-0622
Cable		
Cable diameter		6 mm \pm 0.2 mm
Bending radius		> 6 x cable diameter
Material		PUR
Color		black
Number of cores		3
Core cross section		0.75 mm ²
Length	L	125 mm
Mass		62 g
Dimensions		
Length		55 mm
Diameter		18 mm

Connection

