

Inductive sensor

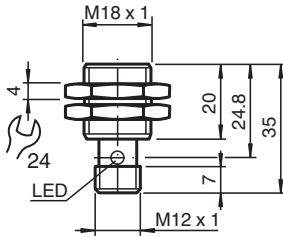
NBB5-18GM20-E2-V1



- 5 mm flush
- Extended temperature range



Dimensions



Technical Data

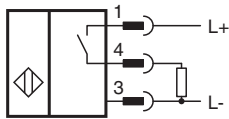
General specifications		
Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	s_n	5 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 4.05 mm (-25 ... 70 °C (-13 ... 158 °F)) 0 ... 3.8 mm (-40 ... -25 °C (-40 ... -13 °F))
Reduction factor r_{Al}		0.2
Reduction factor r_{Cu}		0.15
Reduction factor r_{304}		0.62
Output type		3-wire
Nominal ratings		
Operating voltage	U_B	10 ... 30 V
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
No-load supply current	I_o	≤ 20 mA
Switching state indicator		Multihole-LED, yellow
Functional safety related parameters		
MTTF _d		2210 a

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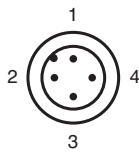
Technical Data

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	-40 ... 70 °C (-40 ... 158 °F)
Mechanical specifications	
Connection type	Connector plug
Housing material	brass, nickel-plated
Sensing face	PBT
Degree of protection	IP67
Connector	
Threading	M12 x 1
Number of pins	3
Dimensions	
Length	20 mm
Diameter	18 mm

Connection



Connection Assignment



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)