

Inductive sensor

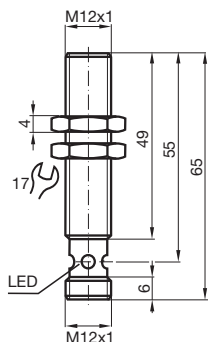
NBB4-12GM50-E2-V1-Y70112307



- 4 mm flush
- Increased operating distance
- Extended temperature range



Dimensions



Technical Data

General specifications		
Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	s _n	4 mm
Installation		flush
Output polarity		DC
Assured operating distance	s _a	0 ... 3.24 mm (-25 ... 70 °C (-13 ... 158 °F)) 0 ... 3.04 mm (-40 ... -25 °C (-40 ... -13 °F))
Reduction factor r _{Al}		0.39
Reduction factor r _{Cu}		0.35
Reduction factor r ₃₀₄		0.75
Reduction factor r _{Brass}		0.49
Output type		3-wire
Nominal ratings		

Technical Data

Operating voltage	U_B	10 ... 30 V
Switching frequency	f	0 ... 800 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 ... 200 mA
Off-state current	I_r	0 ... 0.5 mA typ. 0.1 μ A at 25 °C
No-load supply current	I_0	≤ 15 mA
Time delay before availability	t_v	≤ 5 ms
Switching state indicator		Multihole-LED, yellow

Functional safety related parameters

MTTF _d	1820 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, Class 2 Power Source
CCC approval	CCC approval / marking not required for products rated ≤ 36 V

Ambient conditions

Ambient temperature	-40 ... 70 °C (-40 ... 158 °F)
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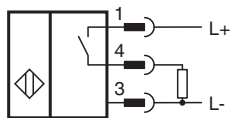
Mechanical specifications

Connection type	Connector plug M12 x 1 , 4-pin
Housing material	brass, nickel-plated
Sensing face	PBT
Degree of protection	IP67

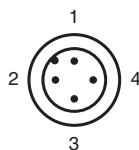
General information

Scope of delivery	2 self locking nuts in scope of delivery Supplied with 2 toothed lock washers
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Connection



Connection Assignment



Wire colors in accordance with EN 60947-5-2

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

Accessories

	BF 12	Mounting flange, 12 mm
	EXG-12	Quick mounting bracket with dead stop
	V1-G-2M-PUR	Female cordset, M12, 4-pin, PUR cable
	V1-W-2M-PUR	Female cordset, M12, 4-pin, PUR cable

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