



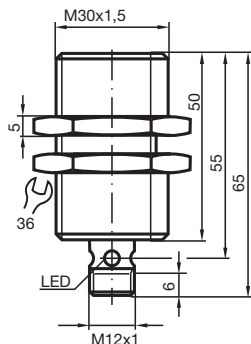
Inductive sensor

NBB15-30GM50-E2-V1

- 15 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	15 mm
Installation		flush
Output polarity		DC
Assured operating distance	s _a	0 ... 12.15 mm (-25 ... 70 °C (-13 ... 158 °F)) 0 ... 11.4 mm (-40 ... -25 °C (-40 ... -13 °F))
Reduction factor r _{AI}		0.3
Reduction factor r _{Cu}		0.3
Reduction factor r ₃₀₄		0.75
Output type		3-wire
Nominal ratings		
Operating voltage	U _B	10 ... 30 V

Technical Data

Switching frequency	f	0 ... 200 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 µA at 25 °C
No-load supply current	I ₀	≤ 15 mA
Switching state indicator		Multihole-LED, yellow

Functional safety related parameters

MTTF _d		1058 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
CSA approval		cCSAus Listed, General Purpose
CCC approval		CCC approval / marking not required for products rated ≤36 V

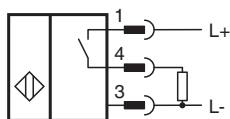
Ambient conditions

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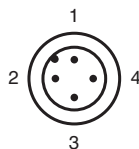
Mechanical specifications

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

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 30	Mounting flange, 30 mm
	EXG-30	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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