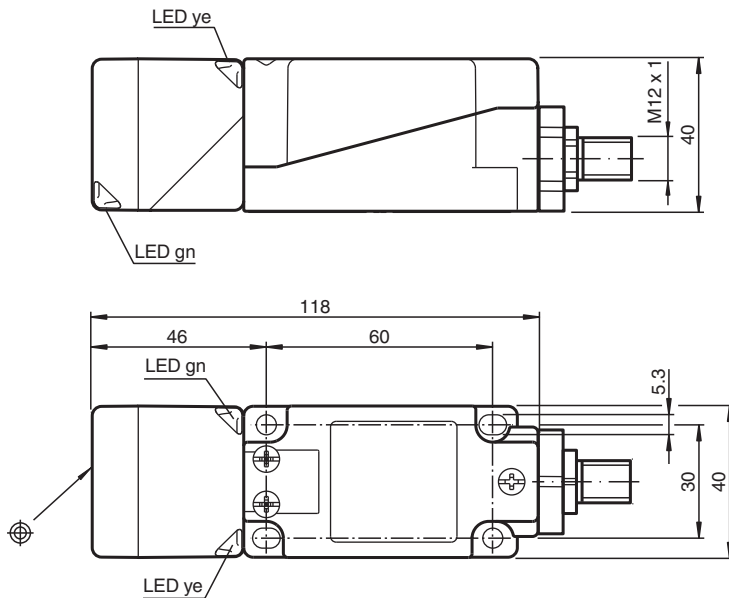


Inductive sensor NBB15-U4-A2-V1

- Sensor head bidirectional and rotatable
- 15 mm flush
- 4 LEDs indicator for 360° visibility



Dimensions



Technical Data

General specifications

Switching function		complementary
Output type		PNP
Rated operating distance	s_n	15 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 12.15 mm
Reduction factor r_{Al}		0.33
Reduction factor r_{Cu}		0.3
Reduction factor r_{304}		0.74
Reduction factor r_{Brass}		0.41
Output type		4-wire

Nominal ratings

Operating voltage	U_B	10 ... 30 V
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Technical Data

Switching frequency	f	0 ... 560 Hz
Hysteresis	H	typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 2 V
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	0 ... 0.5 mA
No-load supply current	I_0	≤ 20 mA
Time delay before availability	t_v	80 ms
Operating voltage indicator		LED, green
Switching state indicator		LED, yellow

Functional safety related parameters

MTTF _d		1289 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

UL approval		cULus Listed, General Purpose
CCC approval		CCC approval / marking not required for products rated ≤ 36 V

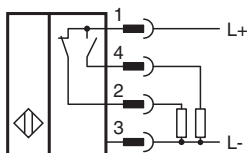
Ambient conditions

Ambient temperature		-25 ... 85 °C (-13 ... 185 °F)
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Mechanical specifications

Connection type		Connector plug
Housing material		PA/metal with epoxy powder coating
Sensing face		PA
Housing base		metal
Degree of protection		IP68 / IP69K
Connector		
Threading		M12 x 1
Number of pins		4
Mass		225 g
Dimensions		
Height		40 mm
Width		40 mm
Length		118 mm
Note		Tightening torque: 1.8 Nm (housing)

Connection



Connection Assignment



Wire colors in accordance with EN 60947-5-2

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