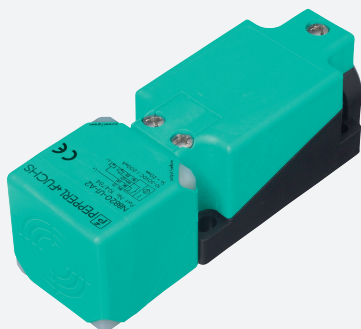


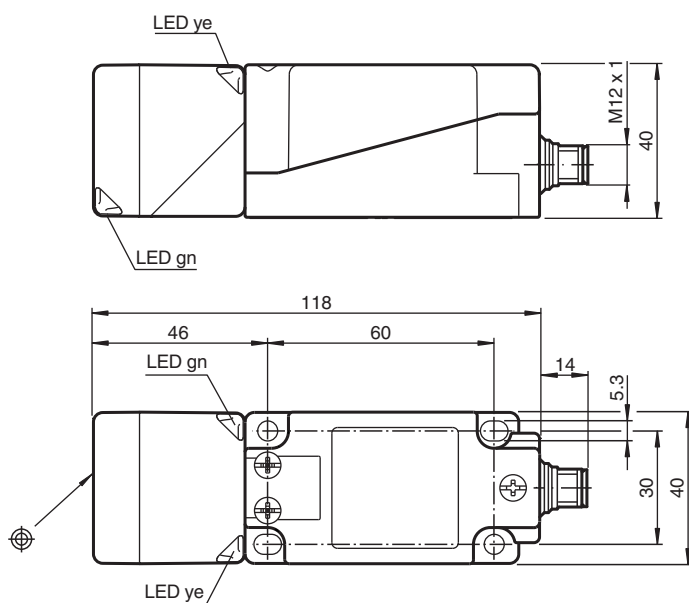


Inductive sensor NBN30-U1-A2-T-V1

- Sensor head bidirectional and rotatable
- 30 mm non-flush
- 4 LEDs indicator for 360° visibility
- Temperature range
-25 ... 100 °C (-13 ... 212 °F)



Dimensions



Technical Data

General specifications

Rated operating distance	s_n	30 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	s_a	0 ... 24.3 mm
Reduction factor r_{Al}		0.33
Reduction factor r_{Cu}		0.31
Reduction factor r_{304}		0.74
Reduction factor r_{Brass}		0.38
Output type		4-wire

Release date: 2025-05-21 Date of issue: 2025-05-21 Filename: 296377_eng.pdf

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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PEPPERL+FUCHS

Technical Data

Nominal ratings

Operating voltage	U_B	10 ... 30 V
Switching frequency	f	0 ... 230 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		1230 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

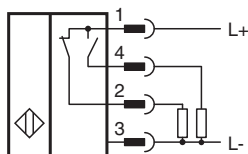
Ambient conditions

Ambient temperature		-25 ... 100 °C (-13 ... 212 °F)
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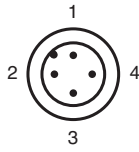
Mechanical specifications

Connection type		Connector plug
Housing material		PA/metal with epoxy powder coating
Sensing face		PA
Housing base		plastic
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)