



Inductive sensor NBB30-L2K-A0-V1

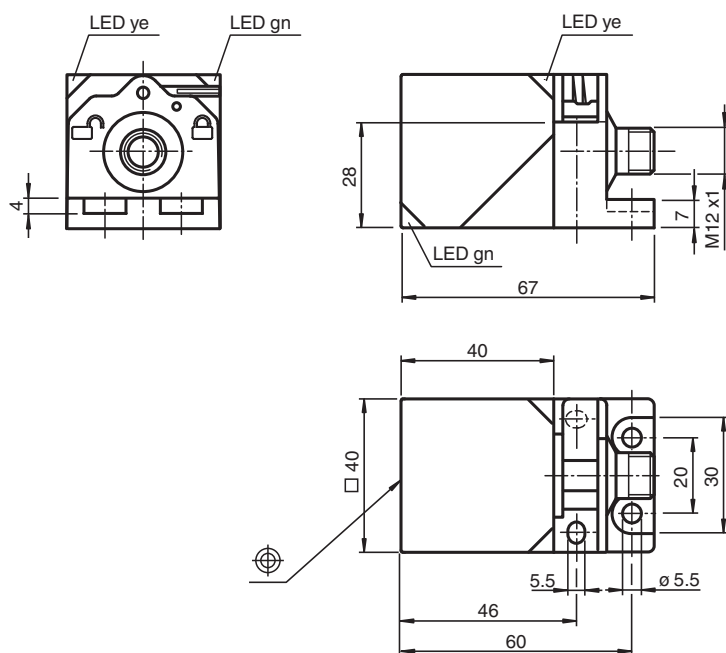
- 30 mm flush
- Active Shielding Technology
- 3-wire DC
- Sensor head bidirectional and rotatable
- Quick mounting bracket
- 4 LEDs indicator for 360° visibility



Function

Inductive sensors with active shielding technology detect in addition to the damping element also the installation environment. As a result, they keep the operating distance constantly high, regardless of the installation situation and the installation material.

Dimensions



Technical Data

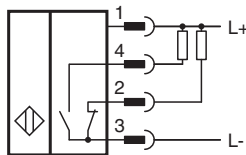
General specifications

Switching function		complementary
Output type		NPN
Rated operating distance	s_n	30 mm
Installation		flush
Output polarity		DC

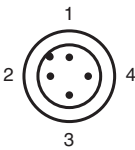
Technical Data

Assured operating distance	s_a	0 ... 24.3 mm
Actual operating distance	s_r	27 ... 33 mm typ.
Reduction factor r_{Al}		0.4
Reduction factor r_{Cu}		0.37
Reduction factor r_{304}		0.76
Reduction factor r_{Brass}		0.46
Output type		4-wire
Nominal ratings		
Operating voltage	U_B	10 ... 30 V DC
Switching frequency	f	0 ... 60 Hz
Hysteresis	H	typ. 2 %
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		910 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 ... 70 °C (-13 ... 158 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Connection type		Connector plug M12 x 1 , 4-pin
Housing material		PA
Sensing face		PA
Degree of protection		IP68 / IP69
Mass		130 g
Dimensions		
Height		40 mm
Width		40 mm
Length		67 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)

Release date: 2024-06-01 Date of issue: 2024-06-01 Filename: 316607-0008_eng.pdf