



Inductive sensor

NBB30-L2K-E2-V1

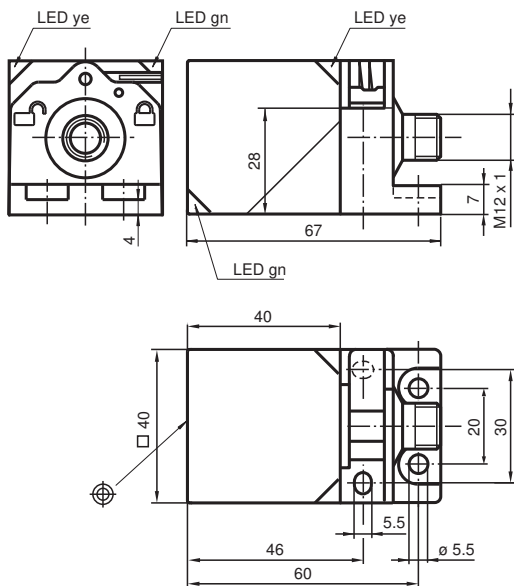
- 30 mm flush
- Active Shielding Technology
- 3-wire DC
- Sensor head bidirectional and rotatable
- Quick mounting bracket
- 4 LEDs indicator for 360° visibility



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



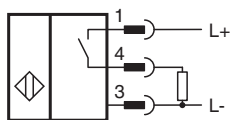
Technical Data

General specifications		
Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	S _n	30 mm
Installation		flush
Output polarity		DC
Assured operating distance	S _a	0 ... 24.3 mm
Actual operating distance	S _r	27 ... 33 mm typ.
Reduction factor r _{AI}		0.4
Reduction factor r _{Cu}		0.37

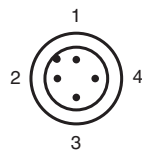
Technical Data

Reduction factor r_{304}		0.76
Reduction factor r_{Brass}		0.46
Output type		3-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		899 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
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

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

	V1-W-2M-PUR	Female cordset, M12, 4-pin, PUR cable
	V1-G-2M-PUR	Female cordset, M12, 4-pin, PUR cable
	MHW 01	Modular mounting bracket
	MH 02-L	Mounting aid

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