



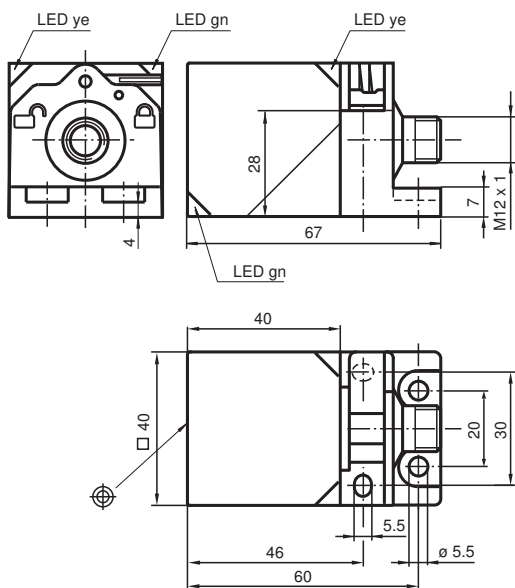
Inductive sensor

NBB20-L2-E2B-C-V1

- Sensor head bidirectional and rotatable
- Basic series
- Quick mounting bracket
- 4-way LED indicator
- Weld Immune
- Bistable version
- Set and Reset function



Dimensions



Technical Data

General specifications			
Switching function		Normally open (NO)	
Output type		PNP	
Rated operating distance	s_n	20 mm	
Installation		flush	
Output polarity		DC	
Assured operating distance	s_a	0 ... 16.2 mm	
Actual operating distance	s_r	18 ... 22 mm	
Reduction factor r_{Al}		0.33	
Reduction factor r_{Cu}		0.31	
Reduction factor r_{304}		0.74	
Reduction factor r_{Brass}		0.41	

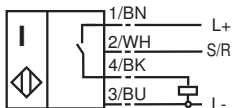
Nominal ratings

Technical Data

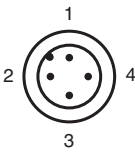
Operating voltage	U_B	10 ... 30 V
Switching frequency	f	0 ... 50 Hz
Hysteresis	H	typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 3 V
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	0 ... 0.5 mA
No-load supply current	I_0	≤ 25 mA
Time delay before availability	t_v	300 ms
Operating voltage indicator		LED, green
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		580 a
Mission Time (T_M)		20 a
Diagnostic Coverage (DC)		0 %
Input		
Input type		Set / Reset
Signal level		0 ... 30 V , max. U_B
Compliance with standards and directives		
Standard conformity		
Standards		EN 60947-5-2:2007 IEC 60947-5-2:2007
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		0 ... 50 °C (32 ... 122 °F)
Storage temperature		-25 ... 85 °C (-13 ... 185 °F)
Mechanical specifications		
Connection type		Connector M12 x 1 , 4-pin
Housing material		PA 6 Grivory GVN-35H
Sensing face		PA 6 Grivory GVN-35H
Degree of protection		IP69K

Connection

E2B



Connection Assignment

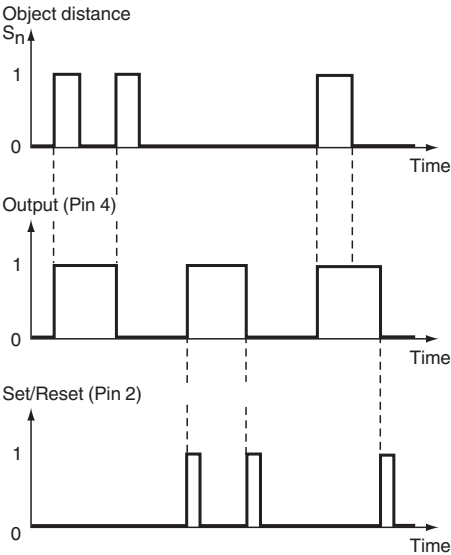


Wire colors in accordance with EN 60947-5-2

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

Additional Information

Function output/input



Accessories

	V1-G-2M-PUR	Female cordset, M12, 4-pin, PUR cable
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Accessories

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

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