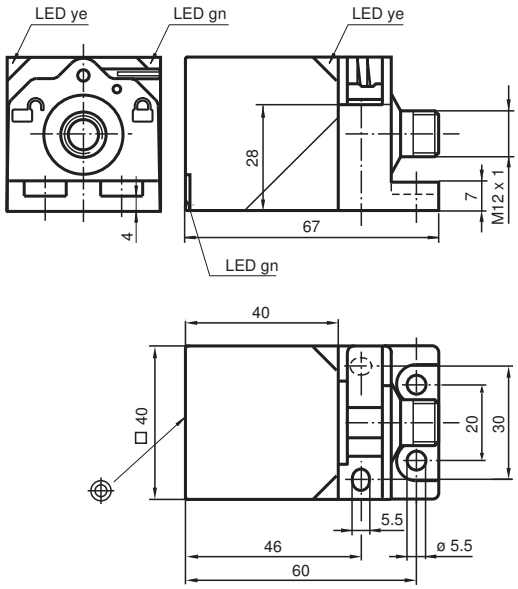


Inductive sensor

NRB20-L3-A2-C-V1

- 20 mm flush
- Reduction factor = 1
- Weld Immune
- Quick mounting bracket
- 4-way LED indicator

Dimensions



Technical Data

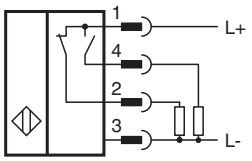
General specifications		
Switching function		complementary
Output type		PNP
Rated operating distance	s_n	20 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 16.2 mm
Actual operating distance	s_r	18 ... 22 mm typ. 20 mm
Reduction factor r_{Al}		1
Reduction factor r_{Cu}		1
Reduction factor r_{304}		1
Reduction factor r_{St37}		1
Output type		4-wire

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Technical Data

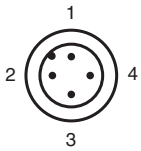
Nominal ratings		
Operating voltage	U_B	10 ... 30 V DC
Switching frequency	f	0 ... 440 Hz
Hysteresis	H	3 ... 15 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 2.5 V
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	0 ... 0.5 mA typ. 0.01 mA
No-load supply current	I_0	≤ 25 mA
Time delay before availability	t_v	15 ms
Constant magnetic field	B	200 mT
Alternating magnetic field	B	200 mT
Operating voltage indicator		LED, green
Switching state indicator		LED, yellow
Functional safety related parameters		
$MTTF_d$		1123 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		
Protection class		II
Rated insulation voltage	U_i	60 V
Rated impulse withstand voltage	U_{imp}	800 V
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		GD-ZnAl4Cu1, coated mounting flange PA6-GF35
Sensing face		PA 6 Grivory GVN-35H
Degree of protection		IP67
Mass		180 g

Connection



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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-G-2M-PUR**	Female cordset, M12, 4-pin, PUR cable
	**V1-W-2M-PUR**	Female cordset, M12, 4-pin, PUR cable
	**MHW 01**	Modular mounting bracket
	**MH 02-L**	Mounting aid
	**MH 04-2681F**	Mounting aid for VariKont, +U1+ and +U9*

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