

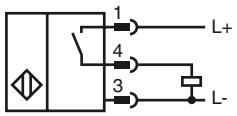
Model Number

NRB20-L3-E2-V1

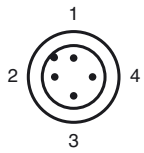
Features

- **20 mm flush**
- **Reduction factor = 1**
- **Magnetic field resistant**
- **Quick mounting bracket**
- **4-way LED indicator**

Connection



Pinout



Wire colors in accordance with EN 60947-5-2

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

Accessories

V1-G
4-pin, M12 female field-attachable connector

V1-W
4-pin, M12 female field-attachable connector

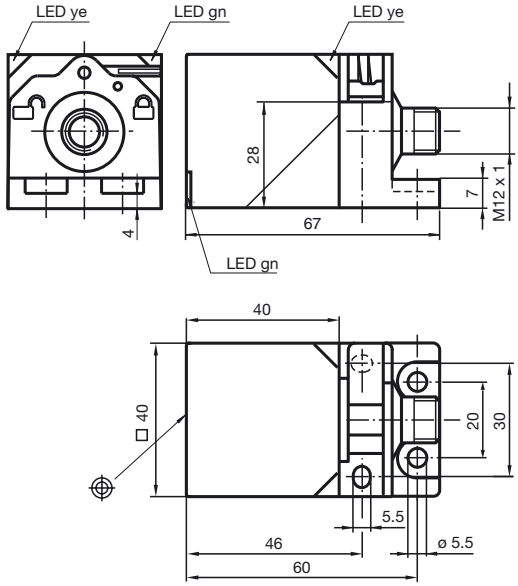
V1-G-2M-PUR
Cable socket, M12, 4-pin, PUR cable

V1-W-2M-PUR
Cable socket, M12, 4-pin, PUR cable

MHW 01
Modular mounting bracket

MH 02-L

Dimensions



Technical Data

General specifications		
Switching element function		PNP NO
Rated operating distance	s_n	20 mm
Installation		flush
Output polarity		switched high
Assured operating distance	s_a	0 ... 16.2 mm
Reduction factor r_{Al}		1
Reduction factor r_{Cu}		1
Reduction factor r_{304}		1
Reduction factor r_{St37}		1
Nominal ratings		
Operating voltage	U_B	10 ... 30 V DC
Switching frequency	f	0 ... 100 Hz
Hysteresis	H	3 ... 15 %
Reverse polarity protected		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
Constant magnetic field	B	200 mT
Alternating magnetic field	B	200 mT
Operating voltage display		LED, green
Indication of the switching state		LED, yellow
Functional safety related parameters		
$MTTF_d$		995 a
Mission Time (T_M)		20 a
Diagnostic Coverage (DC)		0 %
Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Connection type		Device connector M12 x 1 , 4-pin
Housing material		GD-ZnAl4Cu1, coated mounting flange PA6-GF35
Sensing face		PA 6 Grivory GVN-35H
Protection degree		IP67
Mass		180 g
Compliance with standards and directives		
Standard conformity		
Standards		EN 60947-5-2:2007 IEC 60947-5-2:2007
Approvals and certificates		
Protection class		II
Rated insulation voltage	U_i	60 V
Design-impulse-voltage withstand	U_{imp}	800 V
UL approval		cULus Listed, General Purpose
CSA approval		cCSAus Listed, General Purpose
CCC approval		Products with a maximum operating voltage of ≤36 V do not bear a CCC marking because they do not require approval.

Release date: 2012-06-22 16:27 Date of issue: 2012-06-22 217100_eng.xml

Subject to modifications without notice
Copyright Pepperl+Fuchs