



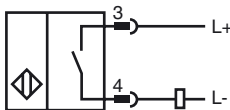
Model Number

NBB20-L2-Z0-V1

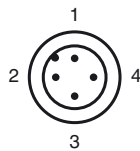
Features

- 20 mm flush
- 2-wire DC
- Quick mounting bracket

Connection



Pinout



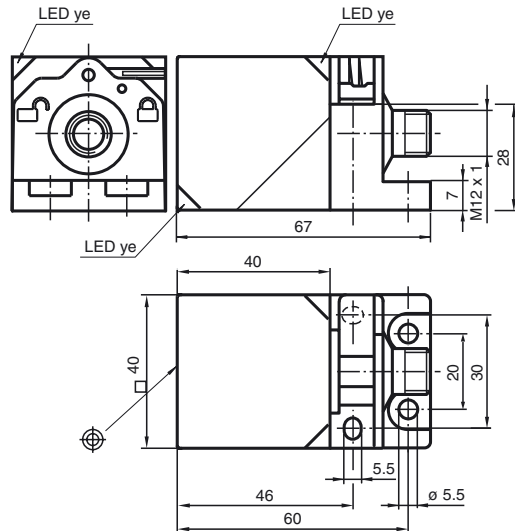
Wire colors in accordance with EN 60947-5-2

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**
Mounting aid

Dimensions



Technical Data

General specifications

Switching element function	NO
Rated operating distance	s_n 20 mm
Installation	flush
Assured operating distance	s_a 0 ... 16.2 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

Operating voltage	U_B 5 ... 30 V DC
Switching frequency	f 0 ... 30 Hz
Reverse polarity protected	tolerant
Short-circuit protection	pulsing
Voltage drop	U_d ≤ 5 V
Operating current	I_L 2 ... 100 mA
Off-state current	I_r 0 ... 0.5 mA
Indication of the switching state	LED, yellow

Functional safety related parameters

MTTF _d	1210 a
Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	0 %

Ambient conditions

Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
Storage temperature	-25 ... 85 °C (-13 ... 185 °F)

Mechanical specifications

Connection type	Device connector M12 x 1, 4-pin
Housing material	PA
Sensing face	PA
Protection degree	IP69K
Mass	130 g

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	Products with a maximum operating voltage of ≤36 V do not bear a CCC marking because they do not require approval.

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