



## Model Number

**NBB20-L2-Z4-V1**

## Features

- **Sensor head bidirectional and rotatable**
- **20 mm flush**
- **2-wire DC**
- **Quick mounting bracket**

## Accessories

### V1-G

Female connector, M12, 4-pin, field attachable

### V1-W

Female connector, M12, 4-pin, field attachable

### 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

## Technical Data

### General specifications

Switching element function		NO contact
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	$U_B$	3.8 ... 30 V DC
Switching frequency	$f$	0 ... 30 Hz
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 3.8$ V
Operating current	$I_L$	2 ... 100 mA
Off-state current	$I_r$	0 ... 0.5 mA
Switching state indication		LED, yellow

### Ambient conditions

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

### Mechanical specifications

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

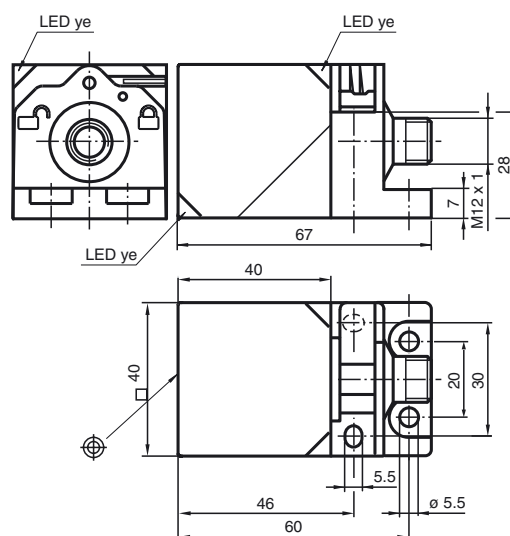
### Compliance with standards and directives

Standard conformity		
Standards		EN 60947-5-2:2007 IEC 60947-5-2:2007

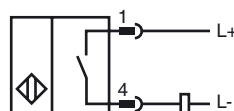
### Approvals and certificates

UL approval		cULus Listed, General Purpose
CSA approval		cCSAus Listed, General Purpose
CCC approval		CCC approval / marking not required for products rated $\leq 36$ V

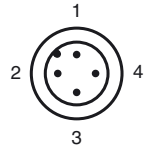
## Dimensions



## Electrical Connection



## Pinout



Wire colors in accordance with EN 60947-5-2

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