



## Model Number

NCB8-18GM50-Z4-V1

## Features

- 8 mm flush
- Increased operating distance
- 2-wire DC

## Accessories

### BF 18

Mounting flange, 18 mm

### 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

### EXG-18

Quick mounting bracket with dead stop

## Technical Data

### General specifications

Switching element function	DC	NO
Rated operating distance	$s_n$	8 mm
Installation		flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 6.48 mm ( -25 ... 70 °C ( -13 ... 158 °F ) ) 0 ... 6.08 mm ( -40 ... -25 °C ( -40 ... -13 °F ) )
Reduction factor $r_{Al}$		0.4
Reduction factor $r_{Cu}$		0.4
Reduction factor $r_{304}$		0.7
Reduction factor $r_{Brass}$		0.5

### Nominal ratings

Operating voltage	$U_B$	3.5 ... 30 V
Switching frequency	$f$	0 ... 1000 Hz
Reverse polarity protection		reverse polarity-conductive
Short-circuit protection		pulsing
Voltage drop	$U_d$	≤ 3.5 V
Temperature drift		± 15%
Operating current	$I_L$	2 ... 100 mA
Off-state current	$I_r$	typ. 0.8 mA
Switching state indicator		LED, yellow
Pre-fault indicator		LED, red
Stability control-switch point		0,8 $s_r$ ... 0,9 $s_r$

### Functional safety related parameters

MTTF <sub>d</sub>	1370 a
Mission Time (T <sub>M</sub> )	20 a
Diagnostic Coverage (DC)	0 %

### Ambient conditions

Ambient temperature	-40 ... 70 °C ( -40 ... 158 °F )
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### Mechanical specifications

Connection type	Connector M12 x 1, 4-pin
Housing material	brass, nickel-plated
Sensing face	PBT
Degree of protection	IP67

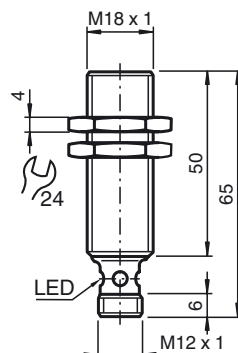
### Compliance with standards and directives

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

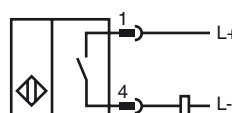
### Approvals and certificates

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

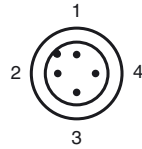
## Dimensions



## Electrical Connection



## Pinout



Wire colors in accordance with EN 60947-5-2

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

## Installation Hint

Correlation between output signal/LED-function  
and stable operating distance  $s_s$ /effective  
operating distance  $s_r$ : ( $s_s$  typ. 80 % of  $s_r$ )

