



## Model Number

NCB4-12GM40-Z4-V1

## Features

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

## Accessories

### BF 12

Mounting flange, 12 mm

### EXG-12

Quick mounting bracket with dead stop

### 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

## Technical Data

### General specifications

Switching function		Normally open (NO)
Output type		Two-wire
Rated operating distance	$s_n$	4 mm
Installation		flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 3.24 mm
Reduction factor $r_{AI}$		0.49
Reduction factor $r_{CU}$		0.47
Reduction factor $r_{304}$		0.76
Output type		2-wire

### Nominal ratings

Operating voltage	$U_B$	3.5 ... 30 V
Switching frequency	$f$	0 ... 1000 Hz
Hysteresis	$H$	typ. 5 %
Reverse polarity protection		reverse polarity-conductive
Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 3.5$ V
Temperature drift		$\pm 15\%$
Operating current	$I_L$	2 ... 100 mA
Off-state current	$I_r$	0.4 ... 0.6 mA typ. 0.5 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>	1883 a
Mission Time (T <sub>M</sub> )	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	Connector plug M12 x 1, 4-pin
Housing material	brass, nickel-plated
Sensing face	PBT
Degree of protection	IP67

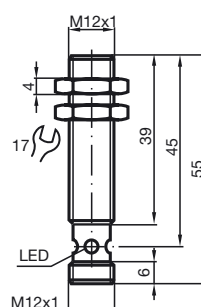
### Compliance with standards and directives

Standard conformity	
Standards	EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012

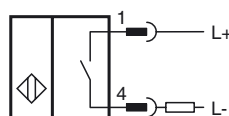
### Approvals and certificates

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

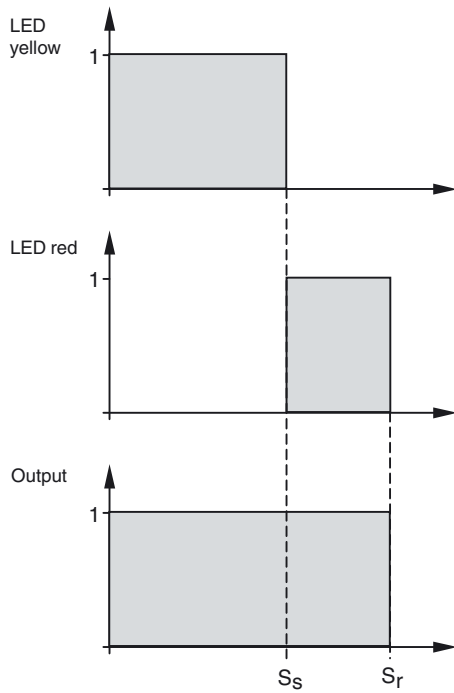


Wire colors in accordance with EN 60947-5-2

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

Installation Hint

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



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