



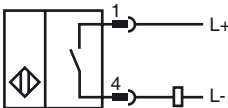
### Model Number

NCB4-12GM40-Z4-V1

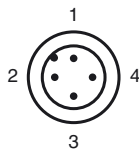
### Features

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

### Connection



### Pinout



Wire colors in accordance with EN 60947-5-2

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

### Accessories

#### BF 12

Mounting flange, 12 mm

#### EXG-12

Quick mounting bracket with dead stop

#### V1-W

4-pin, M12 female field-attachable connector

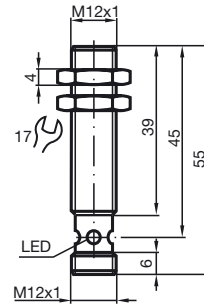
#### V1-G-2M-PUR

Cable socket, M12, 4-pin, PUR cable

#### V1-W-2M-PUR

Cable socket, M12, 4-pin, PUR cable

### Dimensions



### Technical Data

#### General specifications

Switching element function		DC	NO
Rated operating distance	$s_n$	4 mm	
Installation		embeddable	
Output polarity		DC	
Assured operating distance	$s_a$	0 ... 3.24 mm	
Reduction factor $r_{Al}$		0.49	
Reduction factor $r_{Cu}$		0.47	
Reduction factor $r_{303}$		0.76	

#### Nominal ratings

Operating voltage	$U_B$	3.5 ... 30 V
Switching frequency	$f$	0 ... 1000 Hz
Hysteresis	$H$	typ. 5 %
Reverse polarity protected		leading
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
Indication of the switching state		LED, yellow
Pre-fault indication		LED, red
Stability control-switch point		0,8 $s_r$ ... 0,9 $s_r$

#### 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	brass, nickel-plated
Sensing face	PBT
Protection degree	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	Products with a maximum operating voltage of $\leq 36$ V do not bear a CCC marking because they do not require approval.

Installation hint

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

