



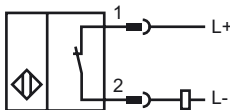
**Model Number**

NCN8-12GM40-Z5-V1

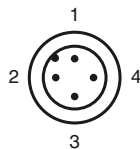
**Features**

- 8 mm non-flush
- Increased operating distance
- Extended temperature range
- 2-wire DC

**Connection**



**Pinout**



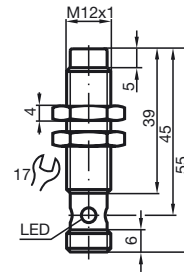
Wire colors in accordance with EN 60947-5-2

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

**Accessories**

- BF 12**  
Mounting flange, 12 mm
- 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

**Dimensions**



**Technical Data**

**General specifications**

Switching element function	DC	NC
Rated operating distance	$s_n$	8 mm
Installation		non-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 $r_{A1}$		0.49
Reduction factor $r_{Cu}$		0.49
Reduction factor $r_{304}$		0.74

**Nominal ratings**

Operating voltage	$U_B$	3.5 ... 30 V
Switching frequency	$f$	0 ... 750 Hz
Reverse polarity protection		conducting
Short-circuit protection		pulsing
Voltage drop	$U_d$	≤ 3.5 V
Temperature drift		± 15%
Operating current	$I_L$	2 ... 100 mA
Off-state current	$I_r$	0.4 ... 0.6 mA typ. 0.5 mA
Switching state indication		LED, yellow

**Functional safety related parameters**

MTTF <sub>d</sub>	1930 a
Mission Time (T <sub>M</sub> )	20 a
Diagnostic Coverage (DC)	0 %

**Ambient conditions**

Ambient temperature	-40 ... 70 °C (-40 ... 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 ≤36 V do not bear a CCC marking because they do not require approval.

Release date: 2013-02-11 10:20 Date of issue: 2013-02-11 121012\_eng.xml