



Model Number

NCN12-18GM50-Z4-V1

Features

- 12 mm non-flush
- 2-wire DC
- Increased operating distance

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

Technical Data

General specifications

Switching element function		DC	NO
Rated operating distance	s_n	12 mm	
Installation		non-flush	
Output polarity		DC	
Assured operating distance	s_a	0 ... 9.1 mm	
Reduction factor r_{Al}		0.5	
Reduction factor r_{Cu}		0.45	
Reduction factor r_{304}		0.75	
Reduction factor r_{Brass}		0.55	

Nominal ratings

Operating voltage	U_B	3.5 ... 30 V
Switching frequency	f	0 ... 1000 Hz
Hysteresis	H	typ. 3 %
Reverse polarity protection		reverse polarity-conductive
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 3.5 V
Temperature drift		$\pm 15\%$
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

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	brass, nickel-plated
Sensing face	PBT
Degree of protection	IP67

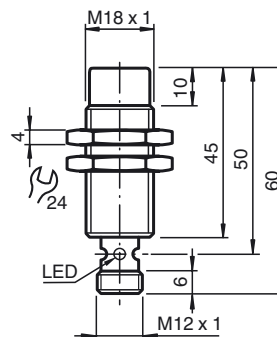
Compliance with standards and directives

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

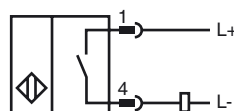
Approvals and certificates

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

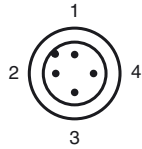
Dimensions



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)

