



Model Number

NCN4-12GM40-Z0-V1

Features

- 4 mm non-flush
- 2-wire DC

Accessories

BF 12

Mounting flange, 12 mm

V1-G

Female connector, M12, 4-pin, field attachable

V1-W

Female connector, M12, 4-pin, field attachable

V1-W-2M-PUR

Female cordset, M12, 4-pin, PUR cable

V1-G-2M-PUR

Female cordset, M12, 4-pin, PUR cable

Technical Data

General specifications

Switching element function		DC	NO
Rated operating distance	s_n	4 mm	
Installation		non-flush	
Output polarity		DC	
Assured operating distance	s_a	0 ... 3.24 mm	
Actual operating distance	s_r	3.6 ... 4.4 mm typ.	
Reduction factor r_{AI}		0.42	
Reduction factor r_{Cu}		0.4	
Reduction factor r_{304}		0.75	

Nominal ratings

Operating voltage	U_B	5 ... 60 V
Switching frequency	f	0 ... 800 Hz
Hysteresis	H	1 ... 10 typ. 5 %
Reverse polarity protection		reverse polarity tolerant
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 5 V
Voltage drop at I_L		Voltage drop $I_L = 10$ mA, switching element 3.5 ... 4.7 V typ. 4.3 V on U_d
Operating current	I_L	2 ... 100 mA
Off-state current	I_r	0 ... 0.5 mA typ.
Time delay before availability	t_v	≤ 15 ms
Switching state indicator		Multihole-LED, yellow

Functional safety related parameters

MTTF _d	2020 a
Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	0 %

Ambient conditions

Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
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Mechanical specifications

Connection type	Connector M12 x 1, 4-pin
Housing material	Stainless steel 1.4305 / AISI 303
Sensing face	PBT
Degree of protection	IP67

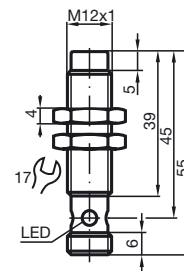
Compliance with standards and directives

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

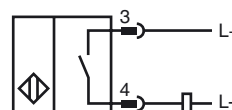
Approvals and certificates

UL approval	cULus Listed, General Purpose
CSA approval	cCSAus Listed, General Purpose
CCC approval	Certified by China Compulsory Certification (CCC)

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)