



Model Number

NCB4-12GM40-N0-V1

Features

- 4 mm flush
- Usable up to SIL 2 acc. to IEC 61508

Accessories

BF 12

Mounting flange, 12 mm

V1-G-N-2M-PUR

Female cordset, M12, 2-pin, NAMUR, PUR cable

V1-W-N-2M-PUR

Female cordset, M12, 2-pin, NAMUR, PUR cable

Technical Data

General specifications

Switching element function		NAMUR, NC
Rated operating distance	s_n	4 mm
Installation		flush
Output polarity		NAMUR
Assured operating distance	s_a	0 ... 3.24 mm
Actual operating distance	s_r	3.6 ... 4.4 mm typ.
Reduction factor r_{AI}		0.41
Reduction factor r_{CU}		0.39
Reduction factor r_{304}		0.78

Nominal ratings

Nominal voltage	U_o	8.2 V (R_i approx. 1 k Ω)
Switching frequency	f	0 ... 1500 Hz
Hysteresis	H	1 ... 15 typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		yes
Suitable for 2:1 technology		yes, Reverse polarity protection diode not required
Current consumption		
Measuring plate not detected		≥ 2.2 mA
Measuring plate detected		≤ 1 mA
Switching state indicator		Multihole-LED, yellow

Functional safety related parameters

MTTF _d	3010 a
Mission Time (T_M)	20 a
Diagnostic Coverage (DC)	0 %

Ambient conditions

Ambient temperature	-25 ... 100 °C (-13 ... 212 °F)
Storage temperature	-40 ... 100 °C (-40 ... 212 °F)

Mechanical specifications

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

General information

Scope of delivery	2 self locking nuts in scope of delivery
Use in the hazardous area	see instruction manuals
Category	1G; 2G; 3G; 3D

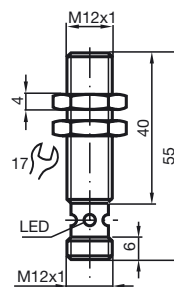
Compliance with standards and directives

Standard conformity	
NAMUR	EN 60947-5-6:2000 IEC 60947-5-6:1999
Electromagnetic compatibility	NE 21:2007
Standards	EN 60947-5-2:2007 IEC 60947-5-2:2007

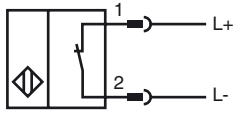
Approvals and certificates

FM approval	
Control drawing	116-0165
UL approval	cULus Listed, General Purpose
CSA approval	cCSAus Listed, General Purpose
CCC approval	CCC approval / marking not required for products rated ≤ 36 V

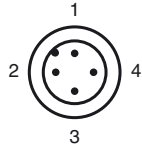
Dimensions



Electrical Connection



Pinout



Wire colors in accordance with EN 60947-5-6

1	BN	(brown)
2	BU	(blue)