



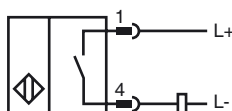
**Model Number**

NCB2-12GM40-Z3-V1

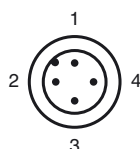
**Features**

- 2 mm flush
- 2-wire DC

**Connection**



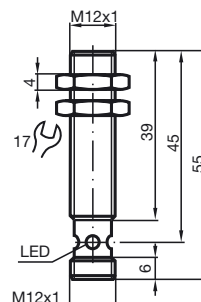
**Pinout**



Wire colors in accordance with EN 60947-5-2

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

**Dimensions**



**Technical Data**

**General specifications**

Switching element function	DC	NO
Rated operating distance	$s_n$	2 mm
Installation	flush	
Output polarity	DC	
Assured operating distance	$s_a$	0 ... 1.62 mm
Reduction factor $r_{Al}$	0.28	
Reduction factor $r_{Cu}$	0.23	
Reduction factor $r_{304}$	0.7	

**Nominal ratings**

Operating voltage	$U_B$	5 ... 60 V
Switching frequency	$f$	0 ... 800 Hz
Hysteresis	$H$	1 ... 10 typ. 5 %
Reverse polarity protected	tolerant	
Short-circuit protection	pulsing	
Voltage drop	$U_d$	$\leq 5$ V
Operating current	$I_L$	2 ... 100 mA
Off-state current	$I_r$	0 ... 0.5 mA typ.
Indication of the switching state	Multihole-LED, yellow	

**Functional safety related parameters**

MTTF <sub>d</sub>	2090 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	Device connector M12 x 1 , 4-pin
Housing material	Stainless steel 1.4305 / AISI 303
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

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