



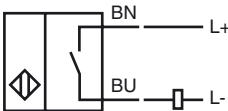
### Model Number

NBB2-12GM40-Z0

### Features

- 2 mm flush
- 2-wire DC

### Connection



### Accessories

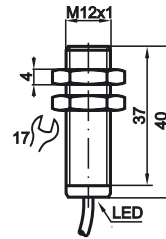
#### BF 12

Mounting flange, 12 mm

#### EXG-12

Quick mounting bracket with dead stop

### 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 $r_{Al}$		0.18
Reduction factor $r_{Cu}$		0.12
Reduction factor $r_{304}$		0.67

#### Nominal ratings

Operating voltage	$U_B$	5 ... 60 V
Switching frequency	$f$	0 ... 1000 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
Lowest operating current	$I_m$	2 mA
Off-state current	$I_r$	0 ... 0.5 mA typ.
Indication of the switching state		all direction LED, yellow

#### Functional safety related parameters

MTTF <sub>d</sub>	2250 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	cable PVC , 2 m
Core cross-section	0.14 mm <sup>2</sup>
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	Certified by China Compulsory Certification (CCC)