



**Model Number**

**NBB2-12GM40-Z0**

**Features**

- 2 mm flush
- 2-wire DC

**Accessories**

- BF 12**  
Mounting flange, 12 mm
- EXG-12**  
Quick mounting bracket with dead stop

**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 protection		reverse polarity 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.
Time delay before availability	$t_v$	$\leq$
Switching state indicator		all direction LED, yellow

**Functional safety related parameters**

MTTF <sub>d</sub>	2250 a
Mission Time (T <sub>M</sub> )	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
Degree of protection	IP67

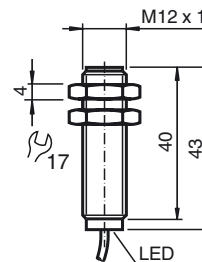
**Compliance with standards and directives**

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

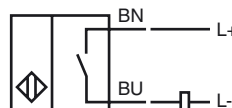
**Approvals and certificates**

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

**Dimensions**



**Electrical Connection**



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