



## Model Number

**NBB5-18GM80-WO-V93**

## Features

- 5 mm flush
- 2-wire AC

## Accessories

### BF 18

Mounting flange, 18 mm

### EXG-18

Quick mounting bracket with dead stop

## Technical Data

### General specifications

Switching function		Normally closed (NC)
Output type		Two-wire
Rated operating distance	$s_n$	5 mm
Installation		flush
Output polarity		AC
Assured operating distance	$s_a$	0 ... 4.05 mm
Actual operating distance	$s_r$	4.5 ... 5.5 mm typ. 5 mm
Reduction factor $r_{AI}$		0.2
Reduction factor $r_{Cu}$		0.2
Reduction factor $r_{304}$		0.6
Output type		2-wire

### Nominal ratings

Operating voltage	$U_B$	20 ... 253 V
Switching frequency	$f$	0 ... 20 Hz
Hysteresis	$H$	typ. 6 %
Reverse polarity protection		reverse polarity tolerant
Voltage drop	$U_d$	< 5 V ( $I_L > 50$ mA); < 8 V ( $I_L < 50$ mA)
Momentary current (20 ms, 0.1 Hz)		0 ... 1600 mA
Operating current	$I_L$	5 ... 200 mA
Off-state current	$I_r$	0 ... 1.7 mA typ.
Time delay before availability	$t_v$	≤ 30 ms
Operating voltage indicator		LED, green
Switching state indicator		LED, yellow

### Functional safety related parameters

MTTF <sub>d</sub>		1135 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 plug 7/8 inch-16 UN , 3-pin
Housing material		brass, nickel-plated
Sensing face		PBT
Degree of protection		IP67
Note		<sup>1)</sup> In the temperature range below 0 °C, permissible operating voltage $U_b$ 80...253 V

Safety fuse ≤ 0.8 A (quick-blow) according to IEC 60127-2 Sheet 1  
 Recommendation: after a short circuit, check that the device is functioning correctly.

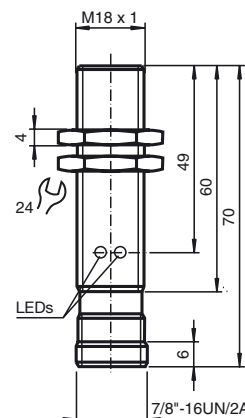
### Compliance with standards and directives

Standard conformity		
Standards		EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012

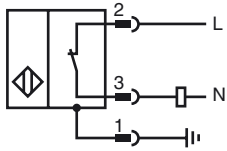
### Approvals and certificates

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

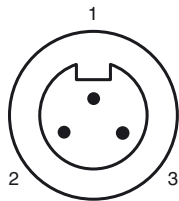
## Dimensions



Electrical Connection



Pinout



Wire colors

1		GN	(green)
2		BK	(black)
3		WH	(white)