



### Model Number

NCB8-18GM40-N0-10M-OG

### Features

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

### Accessories

#### EXG-18

Quick mounting bracket with dead stop

#### BF 18

Mounting flange, 18 mm

## Technical Data

### General specifications

Switching function		Normally closed (NC)
Output type		NAMUR
Rated operating distance	$s_n$	8 mm
Installation		flush
Assured operating distance	$s_a$	0 ... 6.48 mm
Actual operating distance	$s_r$	7.2 ... 8.8 mm typ. 8 mm
Reduction factor $r_{AI}$		0.39
Reduction factor $r_{CU}$		0.36
Reduction factor $r_{304}$		0.71
Output type		2-wire

### Nominal ratings

Nominal voltage	$U_o$	8.2 V ( $R_i$ approx. 1 k $\Omega$ )
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		$\geq 2.2$ mA
Measuring plate detected		$\leq 1$ mA
Switching state indicator		all direction LED, yellow

### Functional safety related parameters

MTTF <sub>d</sub>	2660 a
Mission Time ( $T_M$ )	20 a
Diagnostic Coverage (DC)	0 %

### Ambient conditions

Ambient temperature	-25 ... 80 °C (-13 ... 176 °F)
Storage temperature	-40 ... 80 °C (-40 ... 176 °F)

### Mechanical specifications

Connection type	cable PUR (halogen-free), 10 m blue, Oil resistant, Flame-retardant as per IEC 60332-1 Mud-resistant according to IEC61892-4, appendix D Flexible at temperatures as low as -40 °C
Core cross-section	2x 1 mm <sup>2</sup> , black
Housing material	Stainless steel 1.4305 / AISI 303
Sensing face	PBT
Degree of protection	IP66 / IP67
Cable	
Bending radius	> 5 x cable diameter

### General information

Use in the hazardous area	see instruction manuals
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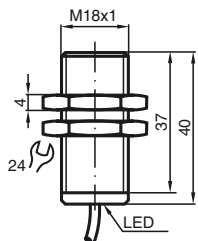
### Compliance with standards and directives

Standard conformity	
NAMUR	EN 60947-5-6:2000 IEC 60947-5-6:1999
Electromagnetic compatibility	NE 21:2007
Standards	EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012

### Approvals and certificates

IECEX approval	
Equipment protection level Ga	IECEX PTB 11.0037X
Equipment protection level Gb	IECEX PTB 11.0037X
Equipment protection level Da	IECEX PTB 11.0037X
Equipment protection level Mb	IECEX PTB 11.0037X
ATEX approval	
Equipment protection level Ga	PTB 00 ATEX 2048 X
Equipment protection level Gb	PTB 00 ATEX 2048 X
Equipment protection level Gc (ic)	PF13CERT2895 X
Equipment protection level Da	PTB 00 ATEX 2048 X
CCC approval	CCC approval / marking not required for products rated $\leq 36$ V

Dimensions



Electrical Connection

