



### Model Number

**NBB10-30GM30-E0-T-V1-Y263235**

### Features

- Extended temperature range
- 10 mm flush

### Accessories

#### BF 30

Mounting flange, 30 mm

#### EXG-30

Quick mounting bracket with dead stop

#### V1-W

Female connector, M12, 4-pin, field attachable

#### V1-G

Female connector, M12, 4-pin, field attachable

## Technical Data

### General specifications

Switching element function		NPN	NO
Rated operating distance	$s_n$	10 mm	
Installation		flush	
Output polarity		DC	
Assured operating distance	$s_a$	0 ... 8.1 mm	
Actuating element		mild steel, e. g. 1.0037, SR235JR (formerly St37-2)	
		30 mm x 30 mm x 1 mm	
Reduction factor $r_{Al}$		0.4	
Reduction factor $r_{Cu}$		0.3	
Reduction factor $r_{304}$		0.7	
Reduction factor $r_{Brass}$		0.4	

### Nominal ratings

Installation conditions			
B		25 mm	
C		16 mm	
F		37 mm	
Operating voltage	$U_B$	10 ... 30 V	
Switching frequency	f	0 ... 300 Hz	
Hysteresis	H	0.05 ... 2.2 mm	
Reverse polarity protection		yes	
Short-circuit protection		yes	
Overload resistance		yes	
Wire breakage protection		yes	
Inductive overvoltage protection		yes	
Surge suppression		yes	
Ripple		10 %	
Voltage drop	$U_d$	$\leq 2.5$ V	
Repeat accuracy		0.3 mm	
Operating current	$I_L$	0 ... 200 mA up to 85 °C, above this temperature max 150 mA	
Off-state current	$I_r$	$\leq 0.01$ mA	
No-load supply current	$I_0$	$\leq 7$ mA	
Time delay before availability	$t_v$	$\leq 40$ ms	
Switching state indicator		Multihole-LED, yellow	

### Functional safety related parameters

Mission Time ( $T_M$ )	20 a
Diagnostic Coverage (DC)	0 %

### Ambient conditions

Ambient temperature	-25 ... 100 °C (-13 ... 212 °F)
Storage temperature	-40 ... 100 °C (-40 ... 212 °F)

### Mechanical specifications

Connection type	Connector M12 x 1, 3-pin
Housing material	brass, nickel-plated
Sensing face	PBT
Protection degree	IP67
Mass	80 g

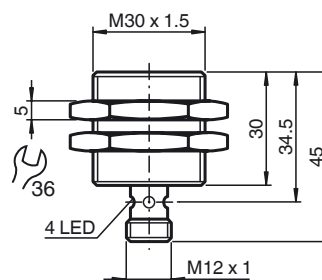
### General information

Note  
The sensor can be operated at ambient temperatures of up to 120 °C for short periods (<30 minutes). In such cases, the output load capacity drops to 100 mA.

### Compliance with standards and directives

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

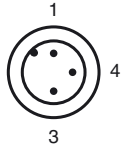
## Dimensions



**Electrical Connection**



**Pinout**



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
3	BU	(blue)
4	BK	(black)