



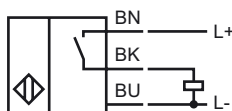
### Model Number

NBB15-30GM30-E2

### Features

- Basic series
- 15 mm embeddable
- increased operating distance

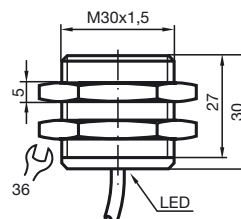
### Connection



### Accessories

- BF 30**  
Mounting flange
- EXG-30**  
Mounting aid

### Dimensions



### Technical Data

#### General specifications

Switching element function	PNP	Make function
Rated operating distance	$s_n$	15 mm
Installation		embeddable
Output polarity		DC
Assured operating distance	$s_a$	0 ... 12.15 mm
Reduction factor $r_{Al}$		0.3
Reduction factor $r_{Cu}$		0.3
Reduction factor $r_{V2A}$		0.75

#### Nominal ratings

Operating voltage	$U_B$	10 ... 30 V
Switching frequency	$f$	0 ... 200 Hz
Hysteresis	$H$	typ. 5 %
Reverse polarity protection		protected against reverse polarity
Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 3$ V
Operating current	$I_L$	0 ... 100 mA
Off-state current	$I_r$	0 ... 0.5 mA typ. 0.1 $\mu$ A at 25 °C
No-load supply current	$I_0$	$\leq 15$ mA
Indication of the switching state		all direction LED, yellow

#### Functional safety related parameters

MTTF <sub>d</sub>	2090 a
Mission Time ( $T_M$ )	20 a
Diagnostic Coverage (DC)	0 %

#### Ambient conditions

Ambient temperature	-25 ... 70 °C (248 ... 343 K)
---------------------	-------------------------------

#### Mechanical specifications

Connection type	2 m, PVC cable
Core cross-section	0.34 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