



### Model Number

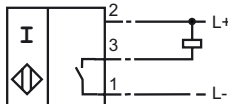
**NBB4-12GM50-E0-1M-Y224396**

### Features

- **Basic series**
- **4 mm embeddable**
- **Increased operating distance**

### Connection

E / E0



### Accessories

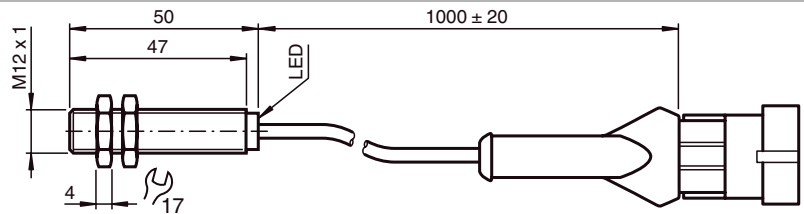
#### BF 12

Mounting flange, 12 mm

#### EXG-12

Quick mounting bracket with dead stop

### Dimensions



### Technical Data

#### General specifications

Switching element function		NPN	NO
Rated operating distance	$s_n$	4 mm	
Installation		embeddable	
Output polarity		DC	
Assured operating distance	$s_a$	0 ... 3.24 mm	
Reduction factor $r_{Al}$		0.39	
Reduction factor $r_{Cu}$		0.35	
Reduction factor $r_{303}$		0.75	
Reduction factor $r_{Brass}$		0.49	

#### Nominal ratings

Operating voltage	$U_B$	10 ... 30 V
Switching frequency	$f$	0 ... 800 Hz
Hysteresis	$H$	typ. 5 %
Reverse polarity protected		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	$U_d$	≤ 3 V
Operating current	$I_L$	0 ... 200 mA
Off-state current	$I_r$	0 ... 0.5 mA typ. 0.1 μA at 25 °C
No-load supply current	$I_0$	≤ 15 mA
Indication of the switching state		LED, yellow

#### Functional safety related parameters

MTTF <sub>d</sub>	1600 a
Mission Time ( $T_M$ )	20 a
Diagnostic Coverage (DC)	0 %

#### Ambient conditions

Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
---------------------	--------------------------------

#### Mechanical specifications

Connection type	cable PVC, 1 m
Connection assembly	AMP housing 282105-1 AMP crimp: 183036-1 Seal: 281934-4 Cable bushing: MTA 45.20921
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