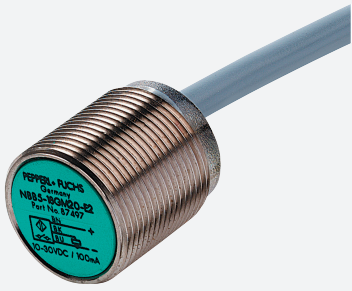


# Inductive sensor

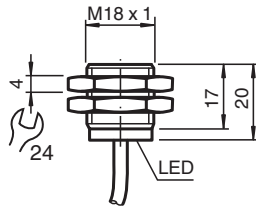
## NBB5-18GM20-E2



- Basic series
- 5 mm flush



### Dimensions



### Technical Data

#### General specifications

Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	$s_n$	5 mm
Installation		flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 4.05 mm
Reduction factor $r_{Al}$		0.2
Reduction factor $r_{Cu}$		0.15
Reduction factor $r_{304}$		0.62
Output type		3-wire

#### Nominal ratings

Operating voltage	$U_B$	10 ... 30 V
Switching frequency	$f$	0 ... 1000 Hz
Reverse polarity protection		reverse polarity protected
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	$I_0$	$\leq 20$ mA
Switching state indicator		LED, yellow

#### Functional safety related parameters

MTTF <sub>d</sub>		2210 a
Mission Time ( $T_M$ )		20 a
Diagnostic Coverage (DC)		0 %

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## Technical Data

### Compliance with standards and directives

Standard conformity	
Standards	EN IEC 60947-5-2

### Approvals and certificates

UL approval	cULus Listed, General Purpose
CCC approval	CCC approval / marking not required for products rated $\leq 36$ V

### Ambient conditions

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

Connection type		cable
Housing material		brass, nickel-plated
Sensing face		PBT
Degree of protection		IP67
Cable		
Wire end ferrules		yes
Cable diameter		4.6 mm $\pm$ 0.2 mm
Bending radius		> 10 x cable diameter
Material		PVC
Color		grey
Number of cores		3
Core cross section		0.34 mm <sup>2</sup>
Length	L	2 m
Dimensions		
Length		20 mm
Diameter		18 mm

## Connection

