



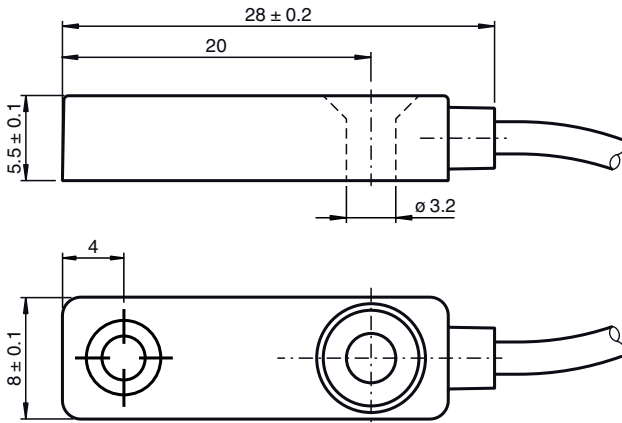
# Inductive sensor

## NBB2-F76-E2-0,5M

- 2 mm flush
- 3-wire DC



### Dimensions



### Technical Data

#### General specifications

Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	$s_n$	2 mm
Installation		flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 1.62 mm
Reduction factor $r_{Al}$		0.25
Reduction factor $r_{Cu}$		0.2
Reduction factor $r_{304}$		0.63
Reduction factor $r_{Brass}$		0.31
Output type		3-wire

#### Nominal ratings

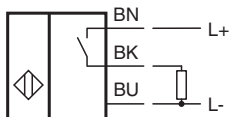
Operating voltage	$U_B$	10 ... 30 V DC
Switching frequency	$f$	0 ... 1500 Hz
Hysteresis	$H$	typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing

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## Technical Data

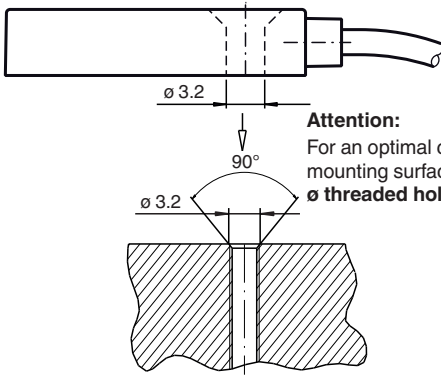
Voltage drop	$U_d$	$\leq 3 \text{ V}$
Operating current	$I_L$	0 ... 100 mA
Off-state current	$I_r$	0 ... 0.5 mA typ. 10 $\mu\text{A}$ at 25 °C
No-load supply current	$I_0$	$\leq 15 \text{ mA}$
Switching state indicator		LED yellow
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		1056 a
Mission Time (T <sub>M</sub> )		20 a
Diagnostic Coverage (DC)		0 %
<b>Compliance with standards and directives</b>		
Standard conformity		
Standards		EN IEC 60947-5-2
<b>Approvals and certificates</b>		
CCC approval		CCC approval / marking not required for products rated $\leq 36 \text{ V}$
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
<b>Mechanical specifications</b>		
Connection type		cable
Housing material		PC
Degree of protection		IP67
Cable		
Cable diameter		2.3 mm $\pm$ 0.2 mm
Bending radius		> 10 x cable diameter
Material		PVC
Color		black
Number of cores		3
Core cross section		0.09 mm <sup>2</sup>
Length	L	0.5 m
Mass		5 g
Tightening torque, fastening screws		$\leq 0.7 \text{ Nm}$
Dimensions		
Height		5.5 mm
Width		8 mm
Length		25 mm

## Connection



## Assembly

### Important Mounting Note

**Attention:**

For an optimal connection of the sensor via its sleeve with the mounting surface, the following applies:

**$\varnothing$  threaded hole on mounting surface (countersink) <  $\varnothing$  sleeve**

## Mounting

**Caution:**

The diameter of any countersink on the on-site M3 threaded hole must not be greater than 3.2 mm. Only in this way is the shouldering of the sensor's metal insert bushing guaranteed.