

Inductive sensor

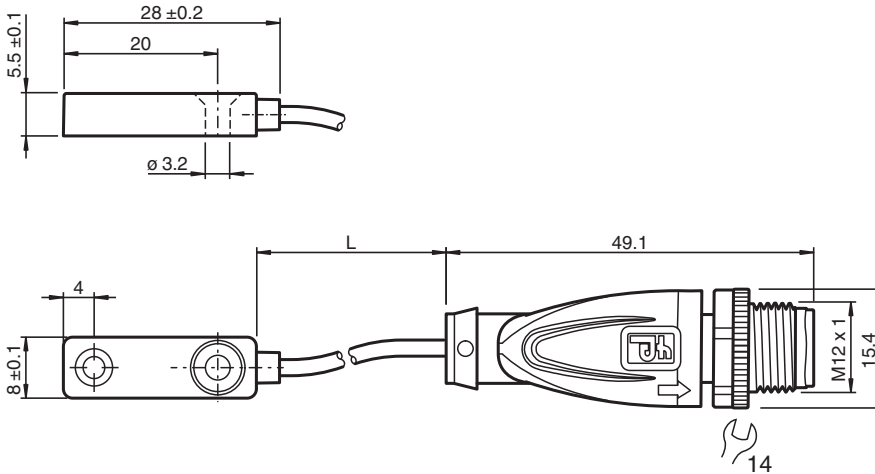
NBB2-F76-E2-0,5M-Y70182080



- 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

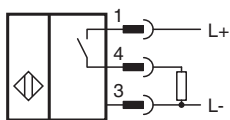
Operating voltage	U_B	10 ... 30 V DC
Switching frequency	f	0 ... 1500 Hz
Hysteresis	H	typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing

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Technical Data

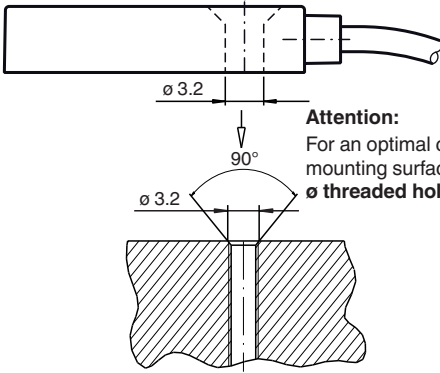
Voltage drop	U_d	$\leq 3 \text{ V}$
Operating current	I_L	0 ... 100 mA
Off-state current	I_r	0 ... 0.5 mA typ. 10 μA at 25 °C
No-load supply current	I_0	$\leq 15 \text{ mA}$
Switching state indicator		LED yellow
Functional safety related parameters		
MTTF _d		1056 a
Mission Time (T _M)		20 a
Diagnostic Coverage (DC)		0 %
Compliance with standards and directives		
Standard conformity		
Standards		EN IEC 60947-5-2
Approvals and certificates		
CCC approval		CCC approval / marking not required for products rated $\leq 36 \text{ V}$
Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Mechanical specifications		
Connection type		fixed cable with plug
Housing material		PC
Degree of protection		IP67
Connector		
Threading		M12 x 1
Number of pins		3
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 ²
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.