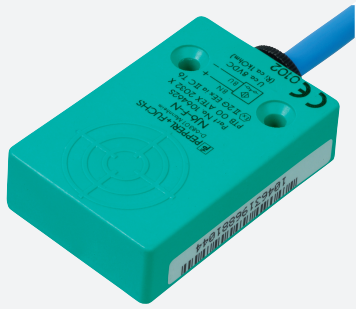


# Inductive sensor

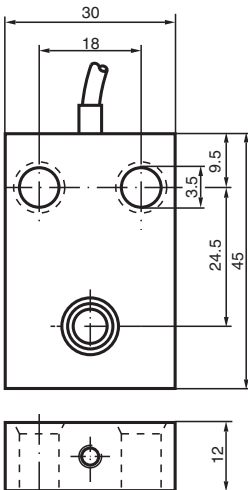
## NJ10-F-N



- 10 mm non-flush
- NAMUR output
- Polarity reversal protected



### Dimensions



### Technical Data

General specifications		
Switching function		Normally closed (NC)
Output type		NAMUR
Rated operating distance	$s_n$	10 mm
Installation		non-flush
Assured operating distance	$s_a$	0 ... 8.1 mm
Actual operating distance	$s_r$	9 ... 11 mm typ.
Reduction factor $r_{Al}$		0.4
Reduction factor $r_{Cu}$		0.3
Reduction factor $r_{304}$		0.7
Output type		2-wire
Nominal ratings		
Nominal voltage	$U_o$	8.2 V ( $R_i$ approx. 1 k $\Omega$ )
Switching frequency	$f$	0 ... 3000 Hz
Hysteresis	$H$	0 ... 0.3 % typ. 0.1 %
Reverse polarity protection		reverse polarity protected
Current consumption		

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## Technical Data

Measuring plate not detected		min. 3 mA
Measuring plate detected		≤ 1 mA
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		4540 a
Mission Time (T <sub>M</sub> )		20 a
Diagnostic Coverage (DC)		0 %
<b>Compliance with standards and directives</b>		
Standard conformity		
NAMUR		EN 60947-5-6:2000 IEC 60947-5-6:1999
Standards		EN IEC 60947-5-2
<b>Approvals and certificates</b>		
IECEX approval		
Equipment protection level Gb		IECEX PTB 11.0021X
Equipment protection level Da		IECEX PTB 11.0021X
Equipment protection level Mb		IECEX PTB 11.0021X
ATEX approval		
Equipment protection level Gb		PTB 00 ATEX 2032 X
Equipment protection level Da		PTB 00 ATEX 2032 X
UL approval		cULus Listed, General Purpose
CCC approval		
Hazardous Location		2020322315002302
NEPSI approval		
NEPSI certificate		GYJ16.1394X
CML approval		on request
ANZEx		19.3001X
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 100 °C (-13 ... 212 °F)
<b>Mechanical specifications</b>		
Connection type		cable
Housing material		PBT
Sensing face		PBT
Degree of protection		IP67
<b>Cable</b>		
Wire end ferrules		yes
Cable diameter		4.8 mm ± 0.2 mm
Bending radius		> 10 x cable diameter
Material		PUR
Color		blue
Number of cores		2
Core cross section		0.34 mm <sup>2</sup>
Length	L	2 m
Mass		80 g
<b>Dimensions</b>		
Height		30 mm
Width		45 mm
Length		20 mm
<b>General information</b>		
Use in the hazardous area		see instruction manuals

## Connection Assignment

