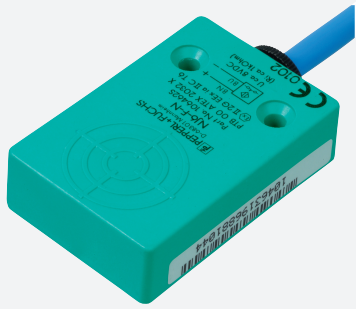


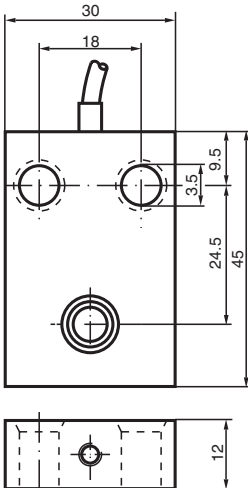
Inductive sensor NJ6-F-N



- 6 mm flush
- NAMUR output
- Polarity reversal protected



Dimensions



Technical Data

General specifications

Switching function		Normally closed (NC)
Output type		NAMUR
Rated operating distance	s_n	6 mm
Installation		flush
Assured operating distance	s_a	0 ... 4.8 mm
Actual operating distance	s_r	5.4 ... 6.6 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

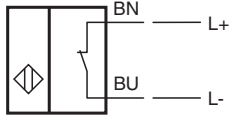
Nominal voltage	U_o	8.2 V (R_i approx. 1 k Ω)
Switching frequency	f	0 ... 5000 Hz
Hysteresis	H	0 ... 0.3 mm typ. 5 %
Reverse polarity protection		reverse polarity protected
Current consumption		

Release date: 2025-06-13 Date of issue: 2025-06-17 Filename: 70133121_eng.pdf

Technical Data

Measuring plate not detected		min. 3 mA
Measuring plate detected		≤ 1 mA
Functional safety related parameters		
MTTF _d		4540 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		
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
Ambient conditions		
Ambient temperature		-25 ... 100 °C (-13 ... 212 °F)
Storage temperature		-40 ... 100 °C (-40 ... 212 °F)
Mechanical specifications		
Connection type		cable
Housing material		PBT
Sensing face		PBT
Degree of protection		IP67
Cable		
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 ²
Length	L	2 m
Mass		78 g
Dimensions		
Height		30 mm
Width		45 mm
Length		12 mm
General information		
Use in the hazardous area		see instruction manuals

Connection Assignment



Release date: 2025-06-13 Date of issue: 2025-06-17 Filename: 70133121_eng.pdf

Operation

Attention!

NAMUR-compliant switch amplifiers can, due to a low current consumption at the recorded measuring plate (0.2 mA ... 1 mA), incorrectly report cable breaks (required in accordance with EN 60947-5-6:2000: 0.4 mA ... 1 mA).