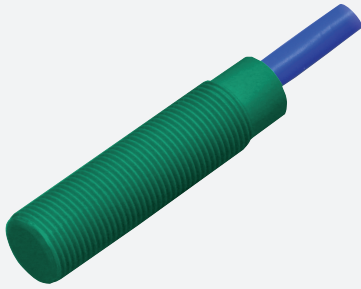


Inductive sensor

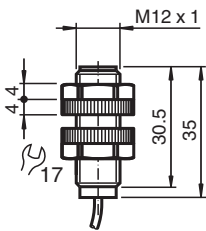
NJ4-12GK-N



- 4 mm non-flush
- Usable up to SIL 2 acc. to IEC 61508
- NAMUR output



Dimensions



Technical Data

General specifications		
Switching function		Normally closed (NC)
Output type		NAMUR
Rated operating distance	s_n	4 mm
Installation		non-flush
Assured operating distance	s_a	0 ... 3.24 mm
Reduction factor r_{AI}		0.4
Reduction factor r_{Cu}		0.3
Reduction factor r_{304}		0.85
Output type		2-wire
Nominal ratings		
Nominal voltage	U_o	8.2 V (R_i approx. 1 k Ω)
Switching frequency	f	0 ... 1500 Hz
Current consumption		
Measuring plate not detected		min. 3 mA
Measuring plate detected		\leq 1 mA
Functional safety related parameters		

Release date: 2025-09-17 Date of issue: 2025-09-17 Filename: 70133052_eng.pdf

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0001
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

PF PEPPERL+FUCHS

Technical Data

Safety Integrity Level (SIL)	SIL 2
MTTF _d	11774 a
Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	0 %
Compliance with standards and directives	
Standard conformity	
NAMUR	EN 60947-5-6:2000 IEC 60947-5-6:1999
Standards	EN IEC 60947-5-2
Approvals and certificates	
IECEX approval	
Equipment protection level Gb	IECEX PTB 11.0037X
Equipment protection level Da	IECEX PTB 11.0037X
Equipment protection level Mb	IECEX PTB 11.0037X
ATEX approval	
Equipment protection level Gb	PTB 00 ATEX 2048 X
Equipment protection level Da	PTB 00 ATEX 2048 X
UL approval	cULus Listed Load Type: General Purpose Circuitry: Class 2 Power Source Enclosure Type Rating: Type 1 Supply/Switching Voltage: 8.2 V DC
CCC approval	
Hazardous Location	2020322315002255
CML approval	on request
ANZEx	18.3018X
KCC approval	
Hazardous Location	19-AV4BO-0227
Marine approval	DNVGL TAA00001A5
Ambient conditions	
Ambient temperature	-25 ... 100 °C (-13 ... 212 °F)
Mechanical specifications	
Connection type	cable
Housing material	PBT
Sensing face	PBT
Degree of protection	IP66 / IP68
Cable	
Cable diameter	4.8 mm ± 0.2 mm
Bending radius	> 10 x cable diameter
Material	PVC
Core cross section	0.34 mm ²
Length	L 2 m
Dimensions	
Length	35 mm
Diameter	12 mm
General information	
Scope of delivery	Supplied with 2 nuts
Use in the hazardous area	see instruction manuals

Release date: 2025-09-17 Date of issue: 2025-09-17 Filename: 70133052_eng.pdf

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0001
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

 PEPPERL+FUCHS

Connection Assignment



Release date: 2025-09-17 Date of issue: 2025-09-17 Filename: 70133052_eng.pdf

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0001
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com