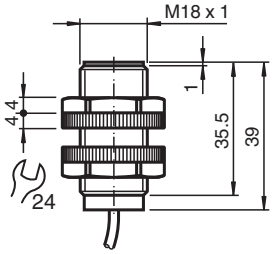
Inductive sensor

NJ8-18GK-N

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



Dimensions



Technical Data

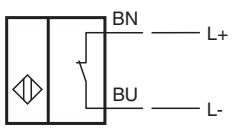
General specifications		
Switching function		Normally closed (NC)
Output type		NAMUR
Rated operating distance	s_n	8 mm
Installation		non-flush
Assured operating distance	s_a	0 ... 6.48 mm
Reduction factor r_{Al}		0.4
Reduction factor r_{Cu}		0.3
Reduction factor r_{304}		0.85
Output type		2-wire
Nominal ratings		
Nominal voltage	U_o	8.2 V (R_i approx. 1 kΩ)
Switching frequency	f	0 ... 200 Hz
Hysteresis	H	1 ... 7 typ. 4 %
Current consumption		
Measuring plate not detected		min. 3 mA
Measuring plate detected		≤ 1 mA

Release date: 2024-10-09 Date of issue: 2024-10-09 Filename: 70133065_eng.pdf

Technical Data

Functional safety related parameters		
Safety Integrity Level (SIL)		SIL 2
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, General Purpose
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/PPS
Sensing face		PBT
Degree of protection		IP66 / IP68
Cable		
Cable diameter		6 mm ± 0.2 mm
Bending radius		> 10 x cable diameter
Material		PVC
Core cross section		0.75 mm^2
Length	L	2 m
Dimensions		
Length		39 mm
Diameter		18 mm
General information		
Use in the hazardous area		see instruction manuals

Connection



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