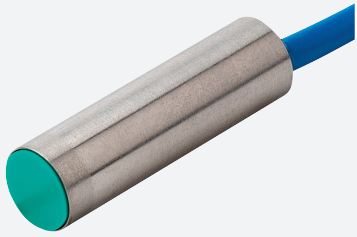


Inductive sensor

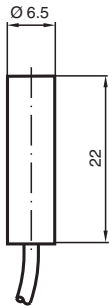
NJ1,5-6,5-N



- 1.5 mm 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	1.5 mm
Installation		flush
Assured operating distance	s_a	0 ... 1.215 mm
Actual operating distance	s_r	1.35 ... 1.65 mm typ.
Reduction factor r_{Al}		0.22
Reduction factor r_{Cu}		0.19
Reduction factor r_{304}		0.65
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	1 ... 10 % typ. 5 %
Suitable for 2:1 technology		yes , Reverse polarity protection diode not required
Current consumption		

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Technical Data

Measuring plate not detected		min. 3 mA
Measuring plate detected		≤ 1 mA
Functional safety related parameters		
Safety Integrity Level (SIL)		SIL 2
MTTF _d		11467 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 Ga		IECEX PTB 11.0037X
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 Ga		PTB 00 ATEX 2048 X
Equipment protection level Gb		PTB 00 ATEX 2048 X
Equipment protection level Da		PTB 00 ATEX 2048 X
UL approval		
Ordinary Location		E87056
Hazardous Location		E501628
Control drawing		116-0452
CCC approval		
Hazardous Location		2020322315002256
CML approval		on request
ANZEx		18.3018X
Ambient conditions		
Ambient temperature		-25 ... 100 °C (-13 ... 212 °F)
Mechanical specifications		
Connection type		cable
Housing material		Stainless steel 1.4305 / AISI 303
Sensing face		PBT
Degree of protection		IP66 / IP67
Cable		
Wire end ferrules		yes
Cable diameter		2.6 mm ± 0.2 mm
Bending radius		> 10 x cable diameter
Material		PVC
Color		blue
Number of cores		2
Core cross section		0.14 mm ²
Length	L	2 m
Dimensions		
Length		22 mm
Diameter		6.5 mm
General information		
Use in the hazardous area		see instruction manuals

Connection Assignment

