



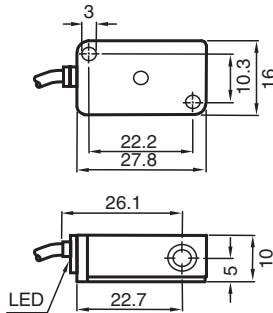
Inductive sensor

NCB2-V3-N0

- 2 mm flush
- Usable up to SIL 2 acc. to IEC 61508



Dimensions



Technical Data

General specifications

Switching function		Normally closed (NC)
Output type		NAMUR
Rated operating distance	s_n	2 mm
Installation		flush
Assured operating distance	s_a	0 ... 1.62 mm
Reduction factor r_{AI}		0.3
Reduction factor r_{Cu}		0.2
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 ... 2000 Hz
Hysteresis	H	typ. 3 %
Current consumption		
Measuring plate not detected		≥ 3 mA
Measuring plate detected		≤ 1 mA
Switching state indicator		LED, yellow

Functional safety related parameters

Safety Integrity Level (SIL)		SIL 2
MTTF _d		2180 a

Release date: 2025-06-12 Date of issue: 2025-06-15 Filename: 70133083_eng.pdf

Technical Data

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
Electromagnetic compatibility	NE 21:2007
Standards	EN IEC 60947-5-2
Approvals and certificates	
IECEX approval	
Equipment protection level Ga	IECEX PTB 11.0021X
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 Ga	PTB 00 ATEX 2032 X
Equipment protection level Gb	PTB 00 ATEX 2032 X
Equipment protection level Da	PTB 00 ATEX 2032 X
UL approval	
Ordinary Location	E87056
Hazardous Location	E501628
Control drawing	116-0451
CCC approval	
Hazardous Location	2020322315002302
CML approval	on request
ANZEx	19.3001X
Ambient conditions	
Ambient temperature	-25 ... 100 °C (-13 ... 212 °F)
Mechanical specifications	
Connection type	cable
Housing material	PBT
Sensing face	PBT
Degree of protection	IP67
Cable	
Cable diameter	2.6 mm ± 0.2 mm
Bending radius	> 10 x cable diameter
Material	PVC
Core cross section	0.14 mm ²
Length	L 130 mm
Tightening torque, fastening screws	≤ 0.4 Nm
Dimensions	
Height	10.2 mm
Width	27.8 mm
Length	16 mm
General information	
Use in the hazardous area	see instruction manuals

Connection Assignment

