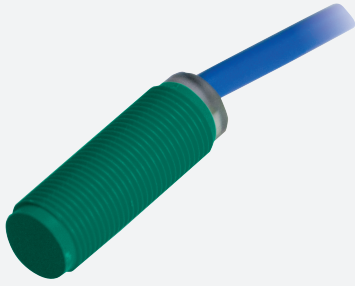


Inductive sensor

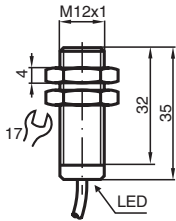
NCB2-12GK35-N0



- 2 mm flush
- Usable up to SIL 2 acc. to IEC 61508
- NAMUR output
- Polarity reversal protected



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
Actual operating distance	s_r	1.8 ... 2.2 mm typ.
Reduction factor r_{Al}		0.2
Reduction factor r_{Cu}		0.1
Reduction factor r_{304}		0.5
Output type		2-wire
Nominal ratings		
Nominal voltage	U_o	8.2 V (R_i approx. 1 k Ω)
Switching frequency	f	0 ... 1000 Hz
Hysteresis	H	1 ... 10 % typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		yes

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Technical Data

Suitable for 2:1 technology	yes , Reverse polarity protection diode not required	
Current consumption		
Measuring plate not detected	min. 3 mA	
Measuring plate detected	≤ 1 mA	
Switching state indicator	all direction LED, yellow	
Functional safety related parameters		
Safety Integrity Level (SIL)	SIL 2	
MTTF _d	2490 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	
Electromagnetic compatibility	NE 21:2007	
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	
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	4.6 mm ± 0.2 mm	
Bending radius	> 12 x cable diameter	
Material	PVC	
Color	blue	
Number of cores	2	
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	

Connection Assignment



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