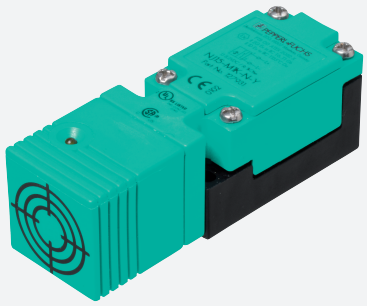
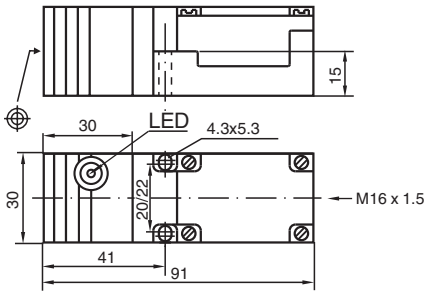


Inductive sensor

NJ15-M1K-N

- Comfort series
- 15 mm non-flush

Dimensions



Technical Data

General specifications		
Switching function		Normally closed (NC)
Output type		NAMUR
Rated operating distance	s_n	15 mm
Installation		non-flush
Assured operating distance	s_a	0 ... 12.15 mm
Actual operating distance	s_r	13.5 ... 16.5 mm typ.
Reduction factor r_{Al}		0.45
Reduction factor r_{Cu}		0.4
Reduction factor r_{304}		0.8
Output type		2-wire
Nominal ratings		
Nominal voltage	U_o	8.2 V (R_i approx. 1 kΩ)
Switching frequency	f	0 ... 100 Hz
Current consumption		
Measuring plate not detected		min. 3 mA
Measuring plate detected		≤ 1 mA
Switching state indicator		LED, yellow
Functional safety related parameters		
$MTTF_d$		2424 a
Mission Time (T_M)		20 a
Diagnostic Coverage (DC)		0 %

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Technical Data

Compliance with standards and directives	
Standard conformity	
NAMUR	EN 60947-5-6:2000 IEC 60947-5-6:1999
Electromagnetic compatibility	NE 21:2012
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
NEPSI approval	
NEPSI certificate	GYJ16.1394X
CML approval	on request
ANZEx	19.3001X
Ambient conditions	
Ambient temperature	-25 ... 100 °C (-13 ... 212 °F)
Mechanical specifications	
Connection type	screw terminals
Information for connection	A maximum of two conductors with the same core cross section may be mounted on one terminal connection! tightening torque 1.2 Nm + 10 %
Core cross section	up to 2.5 mm^2
Minimum core cross-section	without wire end ferrules 0.5 mm^2 , with connector sleeves 0.34 mm^2
Maximum core cross-section	without wire end ferrules 2.5 mm^2 , with connector sleeves 1.5 mm^2
Housing material	PBT
Sensing face	PBT
Degree of protection	IP67
Dimensions	
Height	30 mm
Width	30 mm
Length	91 mm
General information	
Use in the hazardous area	see instruction manuals

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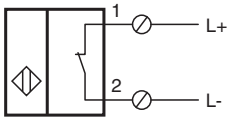
Connection



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