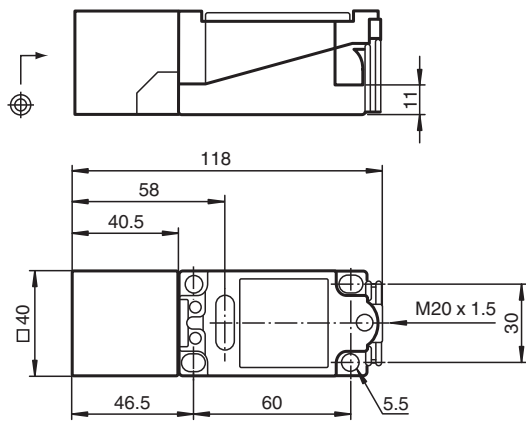


# Inductive sensor NJ15+U1+N

- Comfort series
- 15 mm flush



## Dimensions



## Technical Data

### General specifications

Switching function		Normally closed (NC)
Output type		NAMUR
Rated operating distance	$s_n$	15 mm
Installation		flush
Assured operating distance	$s_a$	0 ... 12.15 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 k $\Omega$ )
Switching frequency	$f$	0 ... 120 Hz
Current consumption		
Measuring plate not detected		min. 3 mA
Measuring plate detected		$\leq$ 1 mA

### Functional safety related parameters

Release date: 2020-12-15 Date of issue: 2020-12-15 Filename: 106672\_eng.pdf

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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## Technical Data

MTTF <sub>d</sub>	10750 a
Mission Time (T <sub>M</sub> )	20 a
Diagnostic Coverage (DC)	0 %
<b>Compliance with standards and directives</b>	
Standard conformity	
NAMUR	EN 60947-5-6:2000 IEC 60947-5-6:1999
Standards	EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012
<b>Approvals and certificates</b>	
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
FM approval	
Control drawing	116-0165
UL approval	
Ordinary Location	E87056
Hazardous Location	E501628
Control drawing	116-0451
CSA approval	
	cCSAus Listed, General Purpose
CCC approval	
Hazardous Location	2020322315002302
NEPSI approval	
NEPSI certificate	GYJ16.1394X
<b>Ambient conditions</b>	
Ambient temperature	-25 ... 100 °C (-13 ... 212 °F)
<b>Mechanical specifications</b>	
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 <sup>2</sup> , stripped insulation length: 7 mm
Minimum core cross-section	without wire end ferrule 0.5 mm <sup>2</sup> , with connector sleeves 0.34 mm <sup>2</sup>
Maximum core cross-section	without wire end ferrule 2.5 mm <sup>2</sup> , with connector sleeves 1.5 mm <sup>2</sup>
Connection (system side)	screw terminals, M20 x 1.5 cable gland, usable thread length 9.1 mm, screw-in depth max. 9.1 mm
Housing material	PBT
Sensing face	PBT
Degree of protection	IP68
Note	Tightening torque: 1.8 Nm (housing)
<b>General information</b>	
Use in the hazardous area	see instruction manuals

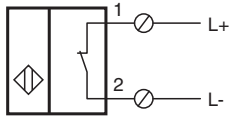
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## Connection



## Accessories

	<b>MH 04-2681F</b>	Mounting aid for VariKont, +U1+ and +U9*
	<b>MH 04-2057B</b>	Mounting aid for VariKont and +U1+
	<b>MHW 01</b>	Modular mounting bracket