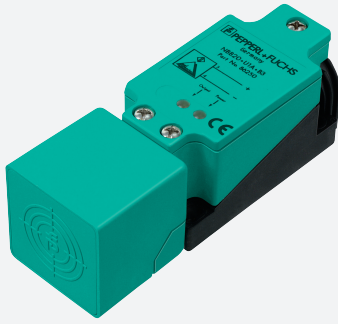
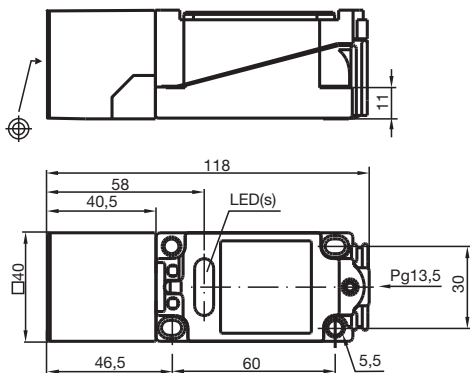


# Inductive sensor NJ15+U1+W

■ Comfort series



## Dimensions



## Technical Data

### General specifications

Switching function		Normally open/closed (NO/NC)
Output type		Two-wire
Rated operating distance	$s_n$	15 mm
Installation		flush
Output polarity		AC
Assured operating distance	$s_a$	0 ... 12.15 mm
Actual operating distance	$s_r$	13.5 ... 16.5 mm typ. 15 mm
Reduction factor $r_{Al}$		0.3
Reduction factor $r_{Cu}$		0.25
Reduction factor $r_{304}$		0.75
Output type		2-wire

### Nominal ratings

Operating voltage	$U_B$	20 ... 253 V <sup>1)</sup>
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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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## Technical Data

Switching frequency	f	0 ... 20 Hz
Hysteresis	H	1 ... 10 typ. 5 %
Voltage drop	$U_d$	$\leq 5$ V
Voltage drop at $I_L$		
Voltage drop $I_L = 10$ mA, switching element on	$U_d$	6 ... 11 V typ. 9 V
Voltage drop $I_L = 20$ mA, switching element on	$U_d$	5 ... 9.5 V typ. 8 V
Voltage drop $I_L = 50$ mA, switching element on	$U_d$	4 ... 7.5 V typ. 6.8 V
Voltage drop $I_L = 100$ mA, switching element on	$U_d$	4 ... 7 V typ. 6.5 V
Voltage drop $I_L = 200$ mA, switching element on	$U_d$	4 ... 7 V typ. 6.5 V
Voltage drop $I_L = 200$ mA, $T_U = 23^\circ$ C, switching element on	$U_d$	4 ... 7 V typ. 6 V
Voltage drop $I_L = 500$ mA, switching element on	$U_d$	4 ... 7 V typ. 6 V
Momentary current (20 ms, 0.1 Hz)		0 ... 3000 mA
Operating current	$I_L$	8 ... 500 mA
Off-state current	$I_r$	0.5 ... 1.95 mA typ. 1.2 mA
Off-state current $U_B 24$ V, switching element off	$I_r$	0.5 ... 1.7 mA typ. 1.2 $\mu$ A
Time delay before availability	$t_v$	$\leq 70$ ms
Operating voltage indicator		LED, green
Switching state indicator		LED, yellow

### Compliance with standards and directives

Standard conformity		
Standards		EN 60947-5-2:2007 IEC 60947-5-2:2007

### Approvals and certificates

UL approval		cULus Listed, General Purpose
CSA approval		cCSAus Listed, General Purpose
CCC approval		Certified by China Compulsory Certification (CCC)

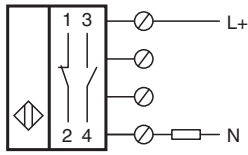
### Ambient conditions

Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Storage temperature		-25 ... 85 °C (-13 ... 185 °F)



### Mechanical specifications

Connection type		terminal compartment
Core cross-section		up to 2.5 mm <sup>2</sup>
Housing material		PBT
Sensing face		PBT
Housing base		PBT
Degree of protection		IP68
Note		1) In the temperature range below 0 °C, permissible operating voltage $U_b 80 \dots 253$ V Safety fuse $\leq 2$ A (quick-blow) according to IEC 60127-2 Sheet 1 Recommendation: after a short circuit, check that the device is functioning correctly.

## Connection



## Accessories

	<b>V1-M20-80</b>	Receptacles, M12/M20; plastic version
	<b>MHW 01</b>	Modular mounting bracket

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