

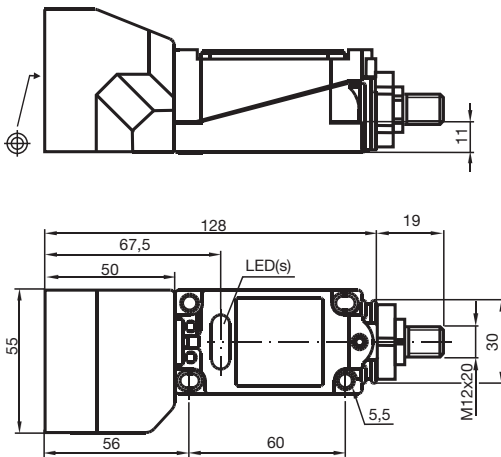


Inductive sensor NJ40+U4+W-V12-N.O.

- 2-wire AC
- Surface mount
- Sensing range 40 mm



Dimensions



Technical Data

General specifications

Switching function		Normally open (NO)
Output type		Two-wire
Rated operating distance	s_n	40 mm
Installation		non-flush
Output polarity		AC
Assured operating distance	s_a	0 ... 32.4 mm
Actual operating distance	s_r	36 ... 44 mm typ. 40 mm
Reduction factor r_{AI}		0.5
Reduction factor r_{Cu}		0.45
Reduction factor r_{304}		0.8
Output type		2-wire

Nominal ratings

Operating voltage	U_B	20 ... 253 V ¹⁾
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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	≤ 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 μ A
Time delay before availability	t_v	≤ 100 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)

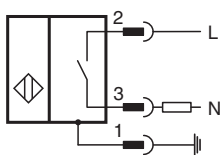
Ambient conditions

Ambient temperature		-25 ... 70 $^\circ$ C (-13 ... 158 $^\circ$ F)
Storage temperature		-25 ... 85 $^\circ$ C (-13 ... 185 $^\circ$ F)

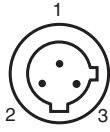
Mechanical specifications

Connection type		Connector plug 1/2"-20 UN , 3-pin
Housing material		PBT
Sensing face		PBT
Housing base		metal
Degree of protection		IP68
Note		¹⁾ In the temperature range below 0 $^\circ$ C, permissible operating voltage U_b 80...253 V Safety fuse ≤ 2 A (quick-blow) according to IEC 60127-2 Sheet 1 Recommendation: after a short circuit, check that the device is functioning correctly.

Connection



Connection Assignment



Wire colors

1	GN	(green)
2	RD/BK	(red/black)
3	RD/WH	(red/white)