

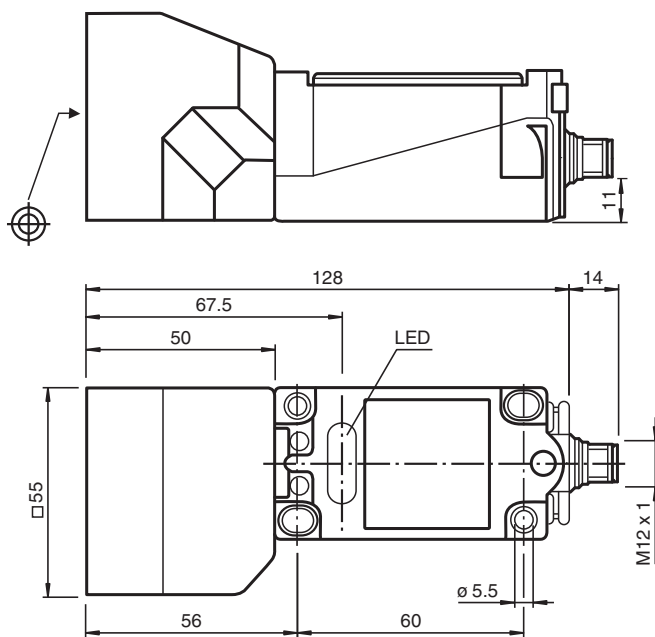
Inductive sensor

NJ40+U1+E2-V1

- Comfort series
- 40 mm non-flush



Dimensions



Technical Data

General specifications

Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	s_n	40 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	s_a	0 ... 32.4 mm
Reduction factor r_{Al}		0.5
Reduction factor r_{Cu}		0.45
Reduction factor r_{304}		0.8
Output type		3-wire

Nominal ratings

Operating voltage	U_B	10 ... 60 V
Switching frequency	f	0 ... 100 Hz
Hysteresis	H	1 ... 10 % typ. 5 %
Reverse polarity protection		reverse polarity protected

Release date: 2024-12-10 Date of issue: 2024-12-11 Filename: 089883_eng.pdf

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

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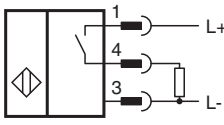
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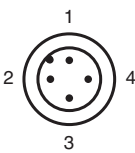
Technical Data

Short-circuit protection		pulsing
Voltage drop	U_d	$\leq 2.8 \text{ V}$
Voltage drop at I_L		
Voltage drop $I_L = 1 \text{ mA}$, switching element on	U_d	$0.5 \dots 2.3 \text{ V typ. } 0.9 \text{ V}$
Voltage drop $I_L = 10 \text{ mA}$, switching element on	U_d	$0.8 \dots 2.2 \text{ V typ. } 1.4 \text{ V}$
Voltage drop $I_L = 20 \text{ mA}$, switching element on	U_d	$0.9 \dots 2.3 \text{ V typ. } 1.5 \text{ V}$
Voltage drop $I_L = 50 \text{ mA}$, switching element on	U_d	$0.9 \dots 2.5 \text{ V typ. } 1.6 \text{ V}$
Voltage drop $I_L = 100 \text{ mA}$, switching element on	U_d	$1 \dots 2.6 \text{ V typ. } 1.8 \text{ V}$
Voltage drop $I_L = 200 \text{ mA}$, switching element on	U_d	$1.2 \dots 2.8 \text{ V typ. } 2 \text{ V}$
Operating current	I_L	$0 \dots 200 \text{ mA}$
Off-state current	I_r	$0 \dots 0.5 \text{ mA typ. } 0.01 \text{ mA}$
Off-state current $T_U = 40^\circ\text{C}$, switching element off		$\leq 100 \mu\text{A}$
No-load supply current	I_0	$\leq 10 \text{ mA}$
Time delay before availability	t_v	$\leq 100 \text{ ms}$
Operating voltage indicator		LED, green
Switching state indicator		LED, yellow
Compliance with standards and directives		
Standard conformity		
Standards		EN IEC 60947-5-2
Approvals and certificates		
UL approval		cULus Listed, General Purpose
CCC approval		Certified by China Compulsory Certification (CCC)
Ambient conditions		
Ambient temperature		$-25 \dots 70^\circ\text{C} (-13 \dots 158^\circ\text{F})$
Storage temperature		$-25 \dots 85^\circ\text{C} (-13 \dots 185^\circ\text{F})$
Mechanical specifications		
Connection type		Connector plug
Housing material		PBT
Sensing face		PBT
Degree of protection		IP67
Connector		
Threading		M12 x 1
Number of pins		4
Dimensions		
Height		55 mm
Width		55 mm
Length		128 mm

Connection



Connection Assignment



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)

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