

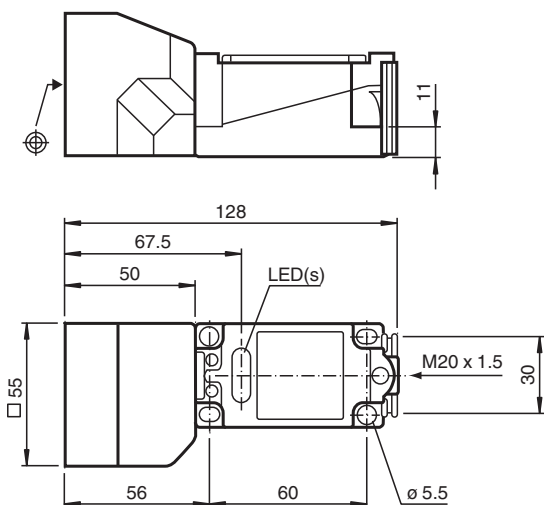
Inductive sensor

NJ40+U1+E

- Comfort series
- 40 mm non-flush



Dimensions



Technical Data

General specifications		
Switching function		Normally open (NO)
Output type		NPN
Rated operating distance	s _n	40 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	s _a	0 ... 32.4 mm
Actual operating distance	s _r	36 ... 44 mm typ. 40 mm
Reduction factor r _{Al}		0.5
Reduction factor r _{Cu}		0.45
Reduction factor r ₃₀₄		0.8
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
Short-circuit protection		pulsing
Voltage drop	U _d	≤ 2.8 V

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

Technical Data

Voltage drop at I_L		
Voltage drop $I_L = 1 \text{ mA}$, switching element on	U_d	0.5 ... 2.3 V typ. 0.9 V
Voltage drop $I_L = 10 \text{ mA}$, switching element on	U_d	0.8 ... 2.2 V typ. 1.4 V
Voltage drop $I_L = 20 \text{ mA}$, switching element on	U_d	0.9 ... 2.3 V typ. 1.5 V
Voltage drop $I_L = 50 \text{ mA}$, switching element on	U_d	0.9 ... 2.5 V typ. 1.6 V
Voltage drop $I_L = 100 \text{ mA}$, switching element on	U_d	1 ... 2.6 V typ. 1.8 V
Voltage drop $I_L = 200 \text{ mA}$, switching element on	U_d	1.2 ... 2.8 V typ. 2 V
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	0 ... 0.5 mA typ. 0.01 mA
Off-state current $T_U = 40 \text{ °C}$, 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 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)

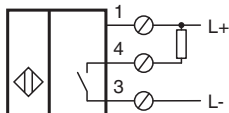
Ambient conditions

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

Mechanical specifications

Connection type		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 ferrule 0.5 mm ² , with connector sleeves 0.34 mm ²
Maximum core cross-section		without wire end ferrule 2.5 mm ² , with connector sleeves 1.5 mm ²
Housing material		PBT
Sensing face		PBT
Degree of protection		IP68

Connection



Accessories

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

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