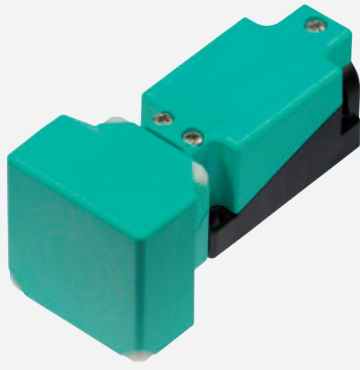


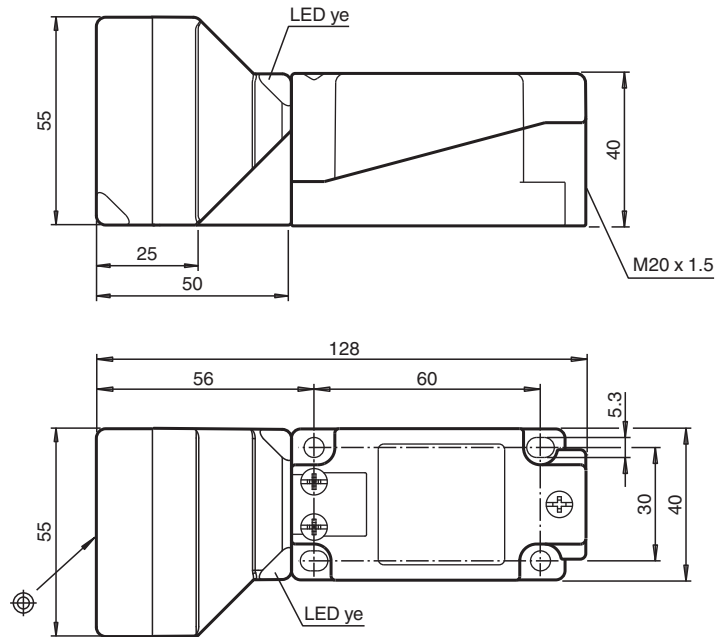


Inductive sensor NBN40-U1L-Z2

- Sensor head bidirectional and rotatable
- Basic series
- 40 mm non-flush
- 2-wire DC
- 2 LEDs indicator for 360° visibility



Dimensions



Technical Data

General specifications

Switching function		Normally open/closed (NO/NC)
Output type		Two-wire
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}		0.39
Reduction factor r_{Cu}		0.37
Reduction factor r_{304}		0.76
Output type		2-wire

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

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0001
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

Technical Data

Nominal ratings

Operating voltage	U_B	5 ... 60 V DC
Switching frequency	f	0 ... 100 Hz
Hysteresis	H	1 ... 10 % typ. 5 %
Reverse polarity protection		reverse polarity tolerant
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 5 V
Voltage drop at I_L		
Voltage drop $I_L = 100$ mA, switching element on	U_d	... 5 V
Rated insulation voltage	U_{BIS}	60 V
Operating current	I_L	2 ... 200 mA
Off-state current	I_r	0 ... 1 mA typ. 0.7 mA
Switching state indicator		2 LED, yellow

Functional safety related parameters

MTTF _d		1170 a
Mission Time (T_M)		20 a
Diagnostic Coverage (DC)		0 %

Compliance with standards and directives

Standard conformity		
Standards		EN IEC 60947-5-2

Approvals and certificates

Protection class		II
Rated insulation voltage	U_i	60 V
Rated impulse withstand voltage	U_{imp}	800 V
UL approval		cULus Listed, General Purpose

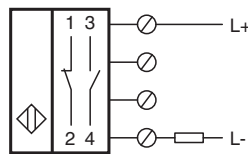
Ambient conditions

Ambient temperature		-25 ... 85 °C (-13 ... 185 °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 ferrules 0.5 mm ² , with connector sleeves 0.34 mm ²
Maximum core cross-section		without wire end ferrules 2.5 mm ² , with connector sleeves 1.5 mm ²
Housing material		PA
Sensing face		PA
Housing base		plastic
Degree of protection		IP68 / IP69K
Mass		225 g
Dimensions		
Height		55 mm
Width		55 mm
Length		128 mm
Note		Tightening torque: 1.8 Nm (housing)

Connection



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