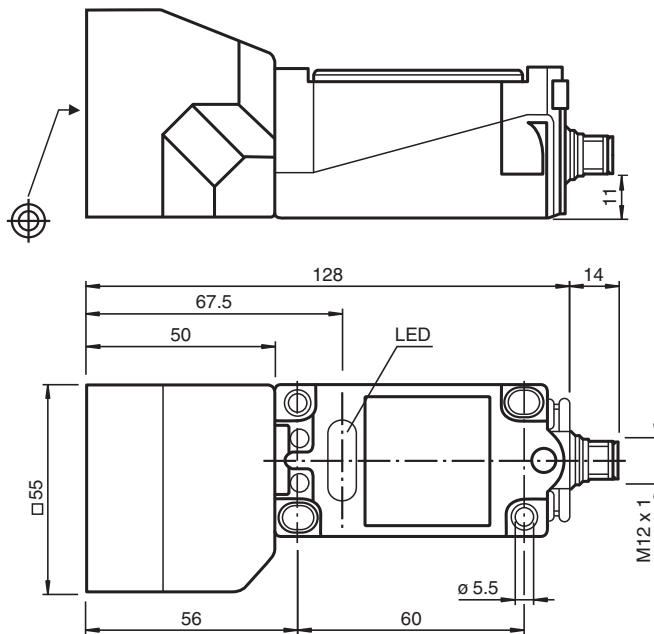


# Inductive sensor NJ40+U1+E2-V1

■ 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

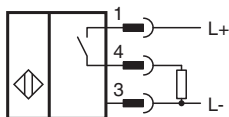
Operating voltage	$U_B$	10 ... 60 V
Switching frequency	$f$	0 ... 100 Hz
Hysteresis	$H$	1 ... 10 % typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 2.8$ V
Voltage drop at $I_L$		

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## Technical Data

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 $T_U = 40 \text{ }^\circ\text{C}$ , switching element off		$\leq 100 \text{ } \mu\text{A}$
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
<b>Compliance with standards and directives</b>		
Standard conformity		
Standards		EN IEC 60947-5-2
<b>Approvals and certificates</b>		
UL approval		cULus Listed, General Purpose
CCC approval		Certified by China Compulsory Certification (CCC)
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 70 $^\circ\text{C}$ (-13 ... 158 $^\circ\text{F}$ )
Storage temperature		-25 ... 85 $^\circ\text{C}$ (-13 ... 185 $^\circ\text{F}$ )
<b>Mechanical specifications</b>		
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)