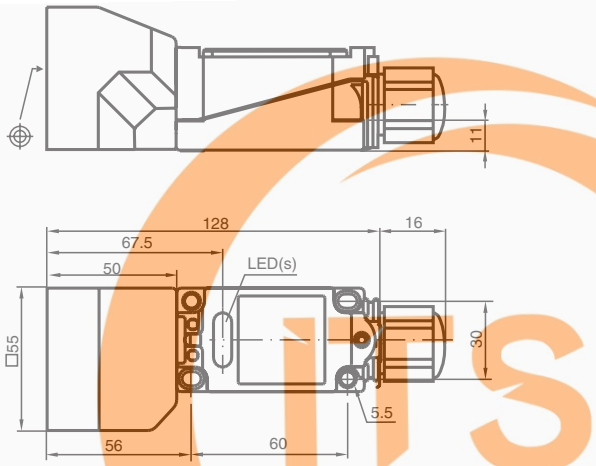
# Inductive sensor

## NJ40+U10+E2

- Comfort series
- With cable gland for cable diameters from 7 to 10.5 mm (extendable with different gasket)

## 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 |
| 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 |
| 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 | $U_d$ | ≤ 2.8 V |
| Voltage drop at $I_L$ | | |

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## Technical Data

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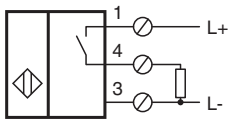
|---|---|---|
| Voltage drop $I_L$ = 1 mA, switching element on | $U_d$ | 0.5 ... 2.3 V typ. 0.9 V |
| Voltage drop $I_L$ = 10 mA, switching element on | $U_d$ | 0.8 ... 2.2 V typ. 1.4 V |
| Voltage drop $I_L$ = 20 mA, switching element on | $U_d$ | 0.9 ... 2.3 V typ. 1.5 V |
| Voltage drop $I_L$ = 50 mA, switching element on | $U_d$ | 0.9 ... 2.5 V typ. 1.6 V |
| Voltage drop $I_L$ = 100 mA, switching element on | $U_d$ | 1 ... 2.6 V typ. 1.8 V |
| Voltage drop $I_L$ = 200 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 °C, switching element off | | ≤ 100 µA |
| No-load supply current | $I_0$ | ≤ 10 mA |
| 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 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 ... 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!<br>tightening torque 1.2 Nm + 10 % |
| Core cross section | | up to 2.5 mm² |
| Minimum core cross-section | | without wire end ferrules 0.5 mm² , with connector sleeves 0.34 mm² |
| Maximum core cross-section | | without wire end ferrules 2.5 mm² , with connector sleeves 1.5 mm² |
| Housing material | | PBT |
| Sensing face | | PBT |
| Degree of protection | | IP68 |
| Dimensions | | |
| Height | | 55 mm |
| Width | | 55 mm |
| Length | | 128 mm |

## Connection

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