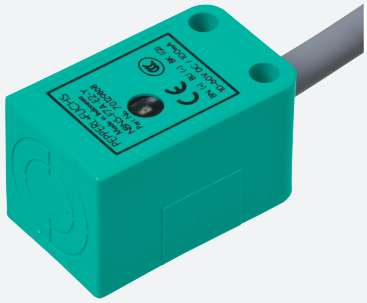
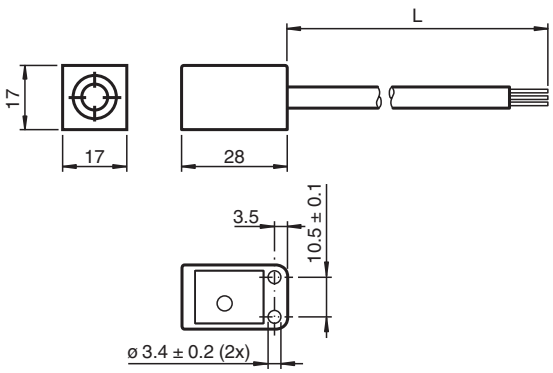


# Inductive sensor

## NBN5-F7A-E2-1M 10pcs

- Extended operating voltage range
- Operating distance 5 mm

## Dimensions




## Technical Data

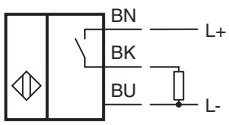
| | | |
|---|---|---|
| **General specifications** | | |
| Switching function | | Normally open (NO) |
| Output type | | PNP |
| Rated operating distance | $s_n$ | 5 mm |
| Installation | | single-sided flush mountable |
| Output polarity | | DC |
| Assured operating distance | $s_a$ | 0 ... 4.05 mm |
| Reduction factor $r_{Al}$ | | 0.4 |
| Reduction factor $r_{Cu}$ | | 0.37 |
| Reduction factor $r_{304}$ | | 0.89 |
| Output type | | 3-wire |
| **Nominal ratings** | | |
| Operating voltage | $U_B$ | 10 ... 60 V |
| Switching frequency | f | 0 ... 500 Hz |
| Hysteresis | H | typ. 5 % |
| Reverse polarity protection | | reverse polarity protected |
| Short-circuit protection | | pulsing |
| Voltage drop | $U_d$ | ≤ 3 V |
| Operating current | $I_L$ | 0 ... 100 mA |
| Off-state current | $I_r$ | 0 ... 0.5 mA typ. 0.1 µA at 25 °C |

Release date: 2026-05-21 Date of issue: 2026-05-21 Filename: 70163736_eng.pdf

## Technical Data

| | | |
|---|---|---|
| No-load supply current | $I_0$ | ≤ 9 mA |
| Switching state indicator | | LED, yellow |
| **Safety-relevant product characteristics** | | |
| $MTTF_d$ | | 1396 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** | | |
| UL approval | | cULus Listed, General Purpose, Class 2 Power Source |
| CCC approval | | Certified by China Compulsory Certification (CCC) |
| **Ambient conditions** | | |
| Ambient temperature | | -25 ... 70 °C (-13 ... 158 °F)<br>-30 ... 70 °C (-22 ... 158 °F) , fixed installation |
| Storage temperature | | -25 ... 70 °C (-13 ... 158 °F) |
| **Mechanical specifications** | | |
| Connection type | | cable |
| Housing material | | PBT |
| Sensing face | | PBT |
| Degree of protection | | IP67 |
| Cable | | |
| Wire end ferrules | | yes |
| Cable diameter | | 3.5 mm ± 0.2 mm |
| Bending radius | | > 10 x cable diameter |
| Material | | PVC |
| Color | | grey |
| Number of cores | | 3 |
| Core cross section | | 0.14 $mm^2$ |
| Length | L | 1 m |
| Tightening torque, fastening screws | | ≤ 0.3 Nm |
| Dimensions | | |
| Height | | 17 mm |
| Width | | 17 mm |
| Length | | 28 mm |
| **General information** | | |
| Delivery quantity | | 10 |

## Connection Assignment




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