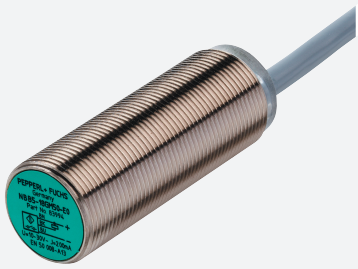


Inductive sensor

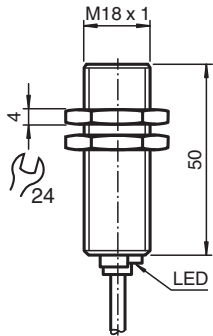
NJ5-18GM50-E2-3G-3D-5M



- 5 mm flush
- ATEX-/IECEX-approvals for zone 2/22 (Ex ec/tc)
- Stainless steel housing
- 5 meter connection cable



Dimensions



Technical Data

General specifications

| | | |
|------------------------------|-------|--------------------------|
| Switching function | | Normally open (NO) |
| Output type | | PNP |
| Rated operating distance | s_n | 5 mm |
| Installation | | flush |
| Output polarity | | DC |
| Assured operating distance | s_a | 0 ... 4.05 mm |
| Actual operating distance | s_r | 4.5 ... 5.5 mm typ. 5 mm |
| Reduction factor r_{Al} | | 0.2 |
| Reduction factor r_{Cu} | | 0.13 |
| Reduction factor r_{304} | | 0.62 |
| Reduction factor r_{Brass} | | 0.26 |
| Output type | | 3-wire |

Nominal ratings

| | | |
|-----------------------------|-------|----------------------------|
| Operating voltage | U_B | 10 ... 30 V DC |
| Switching frequency | f | 0 ... 2000 Hz |
| Hysteresis | H | 3 ... 15 % typ. 5 % |
| Reverse polarity protection | | reverse polarity protected |
| Short-circuit protection | | pulsing |
| Voltage drop | U_d | ≤ 3 V |
| Voltage drop at I_L | | |

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

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PF PEPPERL+FUCHS

Technical Data

| | | |
|---|-------|---|
| Voltage drop $I_L = 200$ mA, switching element on | U_d | 1 ... 2 V typ. 1.5 V |
| Operating current | I_L | ≤ 200 mA |
| Off-state current | I_r | 0 ... 0.5 mA typ. 0.01 mA |
| No-load supply current | I_0 | ≤ 15 mA |
| Time delay before availability | t_v | ≤ 100 ms |
| Switching state indicator | | LED, yellow |
| Functional safety related parameters | | |
| MTTF _d | | 1504 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 | | |
| IECEx approval | | |
| Equipment protection level Gc (ec) | | IECEx TUR 21.0017X |
| Equipment protection level Dc (tc) | | IECEx TUR 21.0018X |
| ATEX approval | | |
| Equipment protection level Gc (ec) | | TÜV 20 ATEX 8523 X |
| Equipment protection level Dc (tc) | | TÜV 20 ATEX 8524 X |
| UL approval | | cULus Listed, General Purpose, Class 2 Power Source |
| CCC approval | | |
| Hazardous Location | | 2024322315005977 2024322315005859 |
| Ambient conditions | | |
| Ambient temperature | | -25 ... 70 °C (-13 ... 158 °F) |
| Storage temperature | | -40 ... 85 °C (-40 ... 185 °F) |
| Mechanical specifications | | |
| Connection type | | cable |
| Housing material | | Stainless steel 1.4305 / AISI 303 |
| Sensing face | | PBT |
| Degree of protection | | IP66 / IP67 |
| Cable | | |
| Wire end ferrules | | yes |
| Cable diameter | | 6.4 mm \pm 0.2 mm |
| Bending radius | | > 10 x cable diameter |
| Material | | PVC |
| Color | | grey |
| Number of cores | | 3 |
| Core cross section | | 0.5 mm ² |
| Length | L | 5 m |
| Mass | | 334 g |
| Dimensions | | |
| Length | | 50 mm |
| Diameter | | 18 mm |
| General information | | |
| Scope of delivery | | 2 self locking nuts in scope of delivery |
| Use in the hazardous area | | see instruction manuals |

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Connection



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