

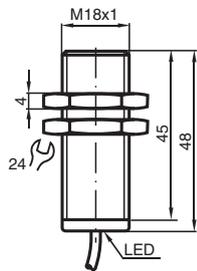
Inductive sensor

NCB8-18GM50-Z4

- 8 mm flush
- 2-wire DC
- Increased operating distance



Dimensions



Technical Data

General specifications

| | | |
|------------------------------|-------|--------------------|
| Switching function | | Normally open (NO) |
| Output type | | Two-wire |
| Rated operating distance | s_n | 8 mm |
| Installation | | flush |
| Output polarity | | DC |
| Assured operating distance | s_a | 0 ... 6.48 mm |
| Reduction factor r_{Al} | | 0.4 |
| Reduction factor r_{Cu} | | 0.4 |
| Reduction factor r_{304} | | 0.7 |
| Reduction factor r_{Brass} | | 0.5 |
| Output type | | 2-wire |

Nominal ratings

| | | |
|-----------------------------|-------|-----------------------------|
| Operating voltage | U_B | 3.5 ... 30 V |
| Switching frequency | f | 0 ... 1000 Hz |
| Hysteresis | H | typ. 5% |
| Reverse polarity protection | | reverse polarity-conductive |
| Short-circuit protection | | pulsing |
| Voltage drop | U_d | ≤ 3.5 V |
| Temperature drift | | $\pm 15\%$ |
| Operating current | I_L | 2 ... 100 mA |
| Off-state current | I_r | typ. 0.8 mA |

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

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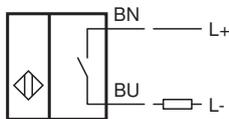
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PF PEPPERL+FUCHS

Technical Data

| | | |
|---|---|--|
| Switching state indicator | | LED, yellow |
| Stability alarm indicator | | LED, red |
| Stability control-switch point | | 0,8 s _r ... 0,9 s _r |
| Functional safety related parameters | | |
| MTTF _d | | 1370 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 |
| CCC approval | | CCC approval / marking not required for products rated ≤36 V |
| Ambient conditions | | |
| Ambient temperature | | -25 ... 70 °C (-13 ... 158 °F) |
| Storage temperature | | -25 ... 85 °C (-13 ... 185 °F) |
| Mechanical specifications | | |
| Connection type | | cable |
| Housing material | | brass, nickel-plated |
| Sensing face | | PBT |
| Degree of protection | | IP67 |
| Cable | | |
| Wire end ferrules | | yes |
| Cable diameter | | 4.8 mm ± 0.2 mm |
| Bending radius | | > 10 x cable diameter |
| Material | | PVC |
| Color | | grey |
| Number of cores | | 2 |
| Core cross section | | 0.34 mm ² |
| Length | L | 2 m |
| Dimensions | | |
| Length | | 48 mm |
| Diameter | | 18 mm |

Connection



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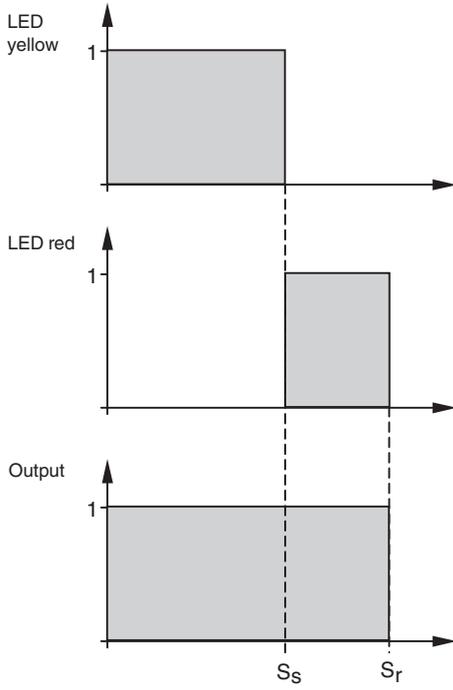
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 **PEPPERL+FUCHS**

Operation

Correlation between output signal/LED-function and stable operating distance s_s /effective operating distance s_r : (s_s typ. 80 % of s_r)



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