



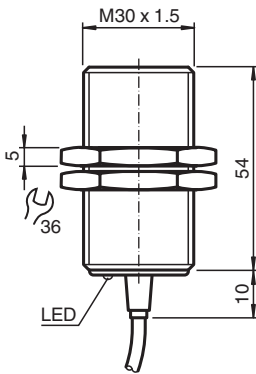
Inductive sensor

NBB10-30GM50-Z0-T

- Extended temperature range
- 10 mm flush
- Two wire, normally open contact



Dimensions



Technical Data

| General specifications | | |
|------------------------------|-------|---|
| Switching function | | Normally open (NO) |
| Output type | | Two-wire |
| Rated operating distance | s_n | 10 mm |
| Installation | | flush |
| Output polarity | | DC |
| Assured operating distance | s_a | 0 ... 8.1 mm |
| Actuating element | | mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 30 mm x 30 mm x 1 mm |
| Reduction factor r_{Al} | | 0.4 |
| Reduction factor r_{Cu} | | 0.3 |
| Reduction factor r_{304} | | 0.7 |
| Reduction factor r_{Brass} | | 0.4 |
| Output type | | 2-wire |
| Nominal ratings | | |
| Installation conditions | | |
| B | | 25 mm |
| C | | 16 mm |
| F | | 37 mm |
| Operating voltage | U_B | 15 ... 30 V |

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Technical Data

| | | |
|---|-------|--|
| Switching frequency | f | 0 ... 300 Hz |
| Hysteresis | H | 0.05 ... 2.2 mm |
| Reverse polarity protection | | reverse polarity-conductive |
| Short-circuit protection | | no |
| Overload resistance | | no |
| Wire breakage protection | | yes |
| Inductive overvoltage protection | | yes |
| Surge suppression | | yes |
| Ripple | | 10 % |
| Voltage drop | U_d | ≤ 8 V |
| Repeat accuracy | R | 0.3 mm |
| Operating current | I_L | 2 ... 25 mA |
| Lowest operating current | I_m | 2 mA |
| No-load supply current | I_0 | ≤ 1.5 mA |
| Time delay before availability | t_v | ≤ 40 ms |
| Switching state indicator | | LED, yellow |
| Functional safety related parameters | | |
| 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 | | |
| CCC approval | | CCC approval / marking not required for products rated ≤ 36 V |
| Ambient conditions | | |
| Ambient temperature | | -25 ... 100 °C (-13 ... 212 °F) |
| Storage temperature | | -40 ... 100 °C (-40 ... 212 °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 | | 4.5 mm \pm 0.15 mm |
| Bending radius | | > 10 x cable diameter |
| Material | | PUR |
| Color | | black |
| Number of cores | | 3 |
| Core cross section | | 0.25 mm ² |
| Length | L | 2 m |
| Mass | | 145 g |
| Dimensions | | |
| Length | | 54 mm |
| Diameter | | 30 mm |

Connection

