

Inductive sensor

NAB4-12GM35-U-V1

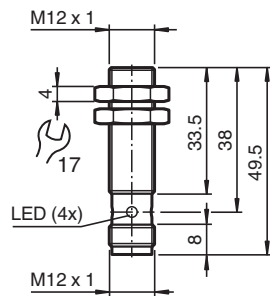


- Inductive analog sensor
- Output 0 V ... 10 V
- Measuring range 0 ... 4 mm
- Flush mounting
- Flexible use with versatile mounting opportunities

Inductive distance sensor with analog voltage output



Dimensions



Technical Data

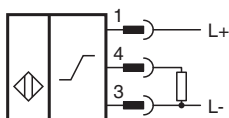
| General specifications | | |
|-----------------------------|-------|---|
| Output type | | Analog voltage output |
| Installation | | flush |
| Output polarity | | DC |
| Actuating element | | mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 12 mm x 12 mm x 1 mm |
| Measuring range | | 0 ... 4 mm |
| Output type | | 3-wire |
| Nominal ratings | | |
| Operating voltage | U_B | 15 ... 30 V |
| Reverse polarity protection | | reverse polarity protected |
| Short-circuit protection | | current limited |
| Linearity error | | ± 3 % of full-scale value |
| Temperature drift | | ± 10 % of full-scale value |
| Repeat accuracy | | ± 1 % of full-scale value |
| Recovery time | | ≤ 50 ms |
| No-load supply current | I_0 | 12 mA |

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Technical Data

| | | |
|---|------------------|--|
| Status indicator | | Multihole-LED, yellow permanently on: damping element within measuring range slowly flashing (2 Hz): damping element outside measuring range fast flashing (10 Hz): fault state |
| Functional safety related parameters | | |
| MTTF _d | | 941 a |
| Mission Time (T _M) | | 20 a |
| Diagnostic Coverage (DC) | | 0 % |
| Analog output | | |
| Output type | | 0 ... 10 V |
| Slope of output characteristic | | 2.5 V / mm |
| Load resistor | | ≥ 500 Ω |
| Settling time | | ≤ 100 ms |
| Conformity | | |
| PWIS conformity | | VDMA 24364-A1/B2/C1/T100°C-W |
| Compliance with standards and directives | | |
| Standard conformity | | |
| Standards | | EN IEC 60947-5-2 EN IEC 60947-5-7 |
| Approvals and certificates | | |
| Protection class | | II |
| Rated insulation voltage | U _i | 30 V |
| Rated impulse withstand voltage | U _{imp} | 500 V |
| UL approval | | cULus Listed, General Purpose, Class 2 Power Source |
| CCC approval | | CCC approval / marking not required for products rated ≤36 V |
| Ambient conditions | | |
| Ambient temperature | | -25 ... 70 °C (-13 ... 158 °F) |
| Storage temperature | | -40 ... 85 °C (-40 ... 185 °F) |
| Mechanical specifications | | |
| Connection type | | Connector plug |
| Housing material | | brass , white bronze coated |
| Sensing face | | PBT , green |
| Degree of protection | | IP65 / IP67 |
| Connector | | |
| Threading | | M12 x 1 |
| Number of pins | | 3 |
| Mass | | 24 g |
| Dimensions | | |
| Length | | 49.5 mm |
| Diameter | | 12 mm |
| Mounting | | with nuts, M12 |
| Tightening torque | | ≤ 10 Nm |
| General information | | |
| Scope of delivery | | 2 self locking nuts in scope of delivery |

Connection Assignment



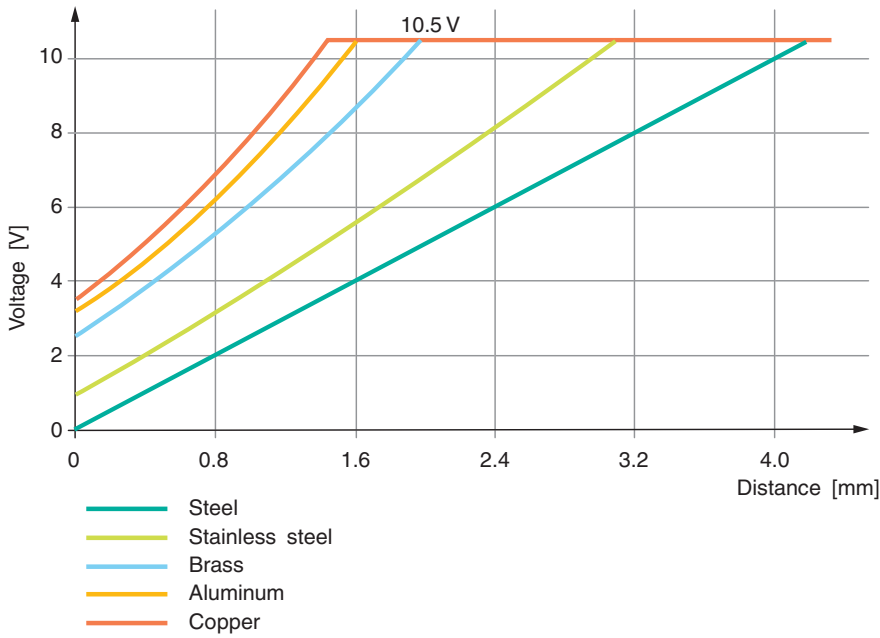
Connection Assignment



Wire colors in accordance with EN 60947-5-2

| | | |
|---|----|---------|
| 1 | BN | (brown) |
| 2 | WH | (white) |
| 3 | BU | (blue) |
| 4 | BK | (black) |

Characteristic Curve



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