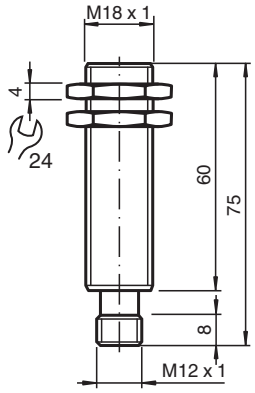
# Inductive analog sensor

## NBB5-18GM60-I-V1

- Inductive analog sensor
- Output 4 mA ... 20 mA
- Flush mounting

## Dimensions




## Technical Data

| | | |
|---|---|---|
| **General specifications** | | |
| Output type | | Analog current output |
| Installation | | flush |
| Output polarity | | DC |
| Measuring range | | 1 ... 5 mm |
| Output type | | 3-wire |
| **Nominal ratings** | | |
| Operating voltage | $U_B$ | 10 ... 30 V DC typ. 20 V DC |
| Reverse polarity protection | | yes |
| Repeat accuracy | | 0 ... 80 µm |
| No-load supply current | $I_0$ | ≤ 12 mA |
| **Analog output** | | |
| Output type | | 4 ... 20 mA |
| Slope of output characteristic | | 4 mA / mm |
| Linearity error | | ≤ ± 5 % of full-scale value |
| Load resistor | | ≤ 1000 Ω typ. 500 Ω |
| Rate of current rise | | |
| 4 ... 20 mA | | max. 30.9 A/s |
| 20 ... 4 mA | | max. 11.1 A/s |

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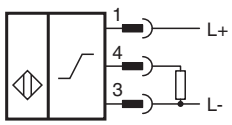
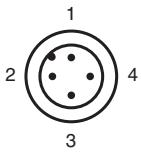
## Technical Data

| | |
|---|---|
| Recovery time | 1 ... 10 ms , typ. 5 ms |
| Adjustment tolerance zero point | ≤ ± 5 % of full-scale value |
| Temperature drift | ≤ ± 0.15 %/K of full-scale value |
| Residual ripple | ± 125 µA |
| **Compliance with standards and directives** | |
| Standard conformity | |
| Standards | EN IEC 60947-5-2 |
| **Approvals and certificates** | |
| UL approval | cULus Listed, 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) |
| **Mechanical specifications** | |
| Connection type | Connector plug |
| Housing material | brass, nickel-plated |
| Sensing face | PBT |
| Degree of protection | IP67 |
| Connector | |
| Threading | M12 x 1 |
| Number of pins | 3 |
| Dimensions | |
| Length | 75 mm |
| Diameter | 18 mm |

## Connection




## Connection Assignment




Wire colors in accordance with EN 60947-5-2

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

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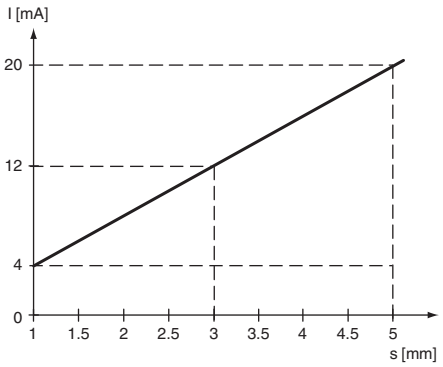
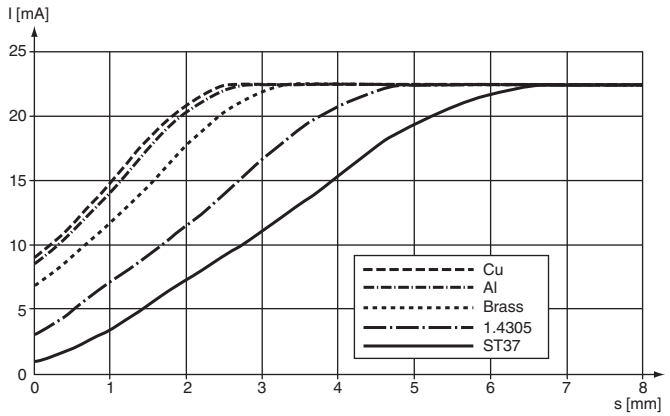
## Characteristic Curve

### Output characteristics




### Reduction factor

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