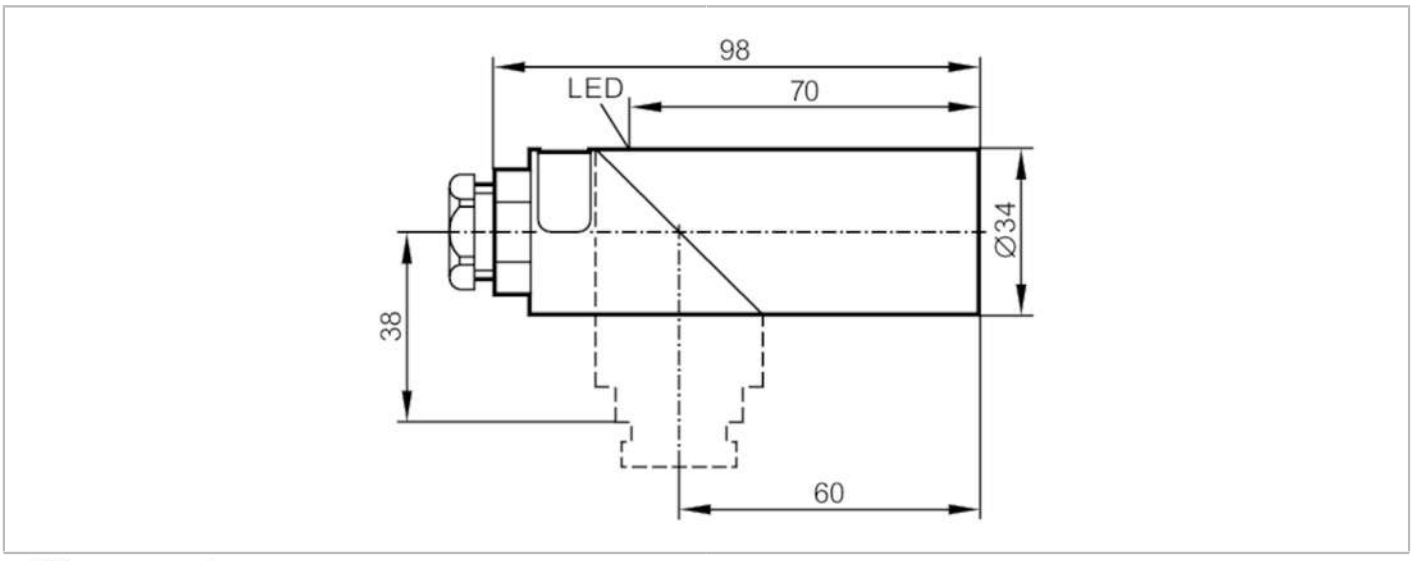
# IB5124

## Inductive sensor

IBE2020-FRKG




| | | |
|---|---|---|
| **Product characteristics** | | |
| Electrical design | | PNP/NPN |
| Output function | | normally open / normally closed; (selectable) |
| Sensing range | [mm] | 20 |
| Housing | | cylindrical |
| Dimensions | [mm] | Ø 34 / L = 98 |
| **Electrical data** | | |
| Operating voltage | [V] | 10...55 DC |
| Protection class | | II |
| Reverse polarity protection | | yes |
| **Outputs** | | |
| Electrical design | | PNP/NPN |
| Output function | | normally open / normally closed; (selectable) |
| Max. voltage drop switching output DC | [V] | 4.6 |
| Minimum load current | [mA] | 4 |
| Max. leakage current | [mA] | 1 |
| Permanent current rating of switching output DC | [mA] | 300 |
| Switching frequency DC | [Hz] | 300 |
| Short-circuit protection | | yes |
| Type of short-circuit protection | | pulsed |
| Overload protection | | yes |
| **Detection zone** | | |
| Sensing range | [mm] | 20 |
| Real sensing range Sr | [mm] | 20 ± 10 % |
| Operating distance | [mm] | 0...16.2 |

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| | | | |
|---|---|---|---|
| **Accuracy / deviations** | | | |
| Correction factor | | steel: 1 / stainless steel: 0.7 / brass: 0.4 / aluminium: 0.3 / copper: 0.2 | |
| Hysteresis | [% of Sr] | 1...15 | |
| Switch point drift | [% of Sr] | -10...10 | |
| **Operating conditions** | | | |
| Ambient temperature | [°C] | -25...80 | |
| Protection | | IP 65 | |
| **Tests / approvals** | | | |
| EMC | | EN 60947-5-2 | |
| | | EN 55011 | class B |
| MTTF | [years] | 1647 | |
| UL approval | | Ta | 0...40 °C |
| | | Enclosure type | Type 1 |
| | | power supply | Hazardous voltage |
| | | File number UL | E174191 |
| **Mechanical data** | | | |
| Weight | [g] | 183 | |
| Housing | | cylindrical | |
| Mounting | | non-flush mountable | |
| Dimensions | [mm] | Ø 34 / L = 98 | |
| Materials | | PBT; end cap: PC | |
| **Displays / operating elements** | | | |
| Display | | switching status | 1 x LED, yellow |
| **Accessories** | | | |
| Items supplied | | Mounting clamps: 1 | |
| **Remarks** | | | |
| Pack quantity | | 1 pcs. | |

**Electrical connection**

terminals: ...2.5 mm²; Cable sheath: Ø 7...13 mm; Cable gland: M20 X 1.5

Connection

