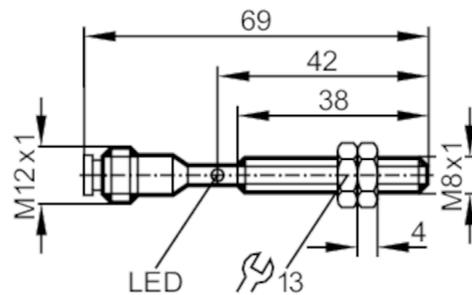


IE5203



Inductive sensor

IEK2001-FRKG/US-104



Product characteristics

| | | |
|--------------------|---|--|
| Electrical design | PNP/NPN | |
| Output function | normally open / normally closed; (selectable) | |
| Sensing range [mm] | 1 | |
| Housing | threaded type | |
| Dimensions [mm] | M8 x 1 / L = 69 | |

Electrical data

| | | |
|-----------------------|-----------|--|
| Operating voltage [V] | 5...36 DC | |
| Protection class | III | |

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] | 0.8 | |
| Permanent current rating of switching output DC [mA] | 200 | |
| Switching frequency DC [Hz] | 2000 | |
| Short-circuit protection | yes | |
| Overload protection | yes | |

Detection zone

| | | |
|-------------------------------|--------------|--|
| Sensing range [mm] | 1 | |
| Real sensing range S_r [mm] | $1 \pm 10\%$ | |
| Operating distance [mm] | 0...0.8 | |

Accuracy / deviations

| | | |
|----------------------------------|---|--|
| Correction factor | steel: 1 / stainless steel: 0.7 / brass: 0.4 / aluminium: 0.3 / copper: 0.2 | |
| Hysteresis [% of S_r] | 1...15 | |
| Switch point drift [% of S_r] | -10...10 | |

Operating conditions

| | | |
|--------------------------|----------|--|
| Ambient temperature [°C] | -25...80 | |
| Protection | IP 67 | |

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| Tests / approvals | | |
|-------------------------------|---------------------------|---|
| EMC | EN 61000-4-2 ESD | 4 kV CD / 8 kV AD |
| | EN 61000-4-3 HF radiated | 3 V/m |
| | EN 61000-4-4 Burst | 2 kV |
| | EN 61000-4-6 HF conducted | 3 V |
| | EN 55011 | class B |
| Embedded software included | yes | |
| UL approval | Ta | -25...80 °C |
| | Enclosure type | Type 1 |
| | power supply | Class 2 |
| | File number UL | E174191 |
| Mechanical data | | |
| Weight | [g] | 22.5 |
| Housing | | threaded type |
| Mounting | | flush mountable |
| Dimensions | [mm] | M8 x 1 / L = 69 |
| Thread designation | | M8 x 1 |
| Materials | | housing: brass white bronze coated; sensing face: PBT |
| Tightening torque | [Nm] | A = 5 mm: 1 Nm; B: 2 Nm |
| Displays / operating elements | | |
| Display | switching status | 1 x LED, yellow |
| Accessories | | |
| Items supplied | | lock nuts: 2 |
| Remarks | | |
| Pack quantity | | 1 pcs. |

IE5203

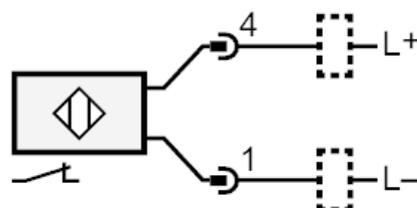
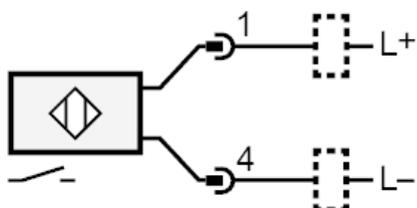


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Electrical connection - plug

Connector: 1 x M12; coding: A



Diagrams and graphs

Installation

