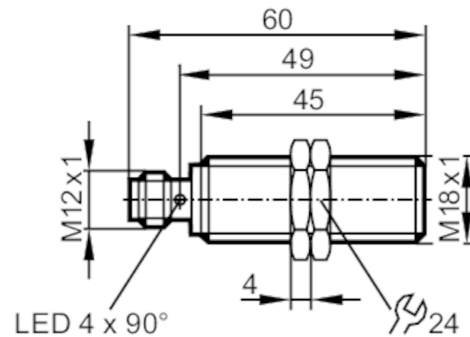


Inductive full-metal sensor

IGK3007BFRKG/AM/IO/US-104



Product characteristics

| | |
|-------------------------|--|
| Electrical design | PNP/NPN; (parameterisable) |
| Output function | normally open / normally closed; (parameterisable) |
| Communication interface | IO-Link |
| Housing | threaded type |
| Dimensions [mm] | M18 x 1 / L = 60 |

Application

| | |
|-------------------------|---|
| Application | Use in machine tools, coolants and lubricants |
| Pressure rating [bar] | 100 |
| Note on pressure rating | Sensing face |

Electrical data

| | |
|-----------------------------|------------|
| Operating voltage [V] | 10...30 DC |
| Current consumption [mA] | 15 |
| Protection class | III |
| Reverse polarity protection | yes |

Outputs

| | |
|--|--|
| Electrical design | PNP/NPN; (parameterisable) |
| Output function | normally open / normally closed; (parameterisable) |
| Max. voltage drop switching output DC [V] | 2.5 |
| Permanent current rating of switching output DC [mA] | 100 |
| Switching frequency DC [Hz] | 100 |
| Short-circuit protection | yes |
| Overload protection | yes |

Detection zone

| | |
|------------------------------|--------------------------------|
| Switch point IO-Link [mm] | 1.41...7.01; (parameterisable) |
| Measuring range IO-Link [mm] | 0.75...7.5 |



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| Accuracy / deviations | | |
|-----------------------------|---------------------------|---|
| Correction factor | | steel: 1 / stainless steel: 0.8 / brass: 0.5 / aluminium: 0.4 / copper: 0.2 |
| Hysteresis | [% of Sr] | 3...15 |
| Linearity error IO-Link | [%] | ± 2; (of the final value of the measuring range) |
| Repeatability IO-Link | [%] | ± 1; (of the final value of the measuring range) |
| Temperature coefficient | | ± 0,3 %/K; (of the final value of the measuring range) |
| Interfaces | | |
| Communication interface | | IO-Link |
| Transmission type | | COM2 (38,4 kBaud) |
| IO-Link revision | | 1.1 |
| SDCI standard | | IEC 61131-9 |
| IO-Link device ID | | 1090d / 000442h |
| Profiles | | Smart Sensor: Identification and diagnosis; Multi-channel, two setpoint switching sensor, type 0 Generic Profiled Sensor; Teach Channel |
| SIO mode | | yes |
| Required master port type | | A |
| Min. process cycle time | [ms] | 3.2 |
| Operating conditions | | |
| Ambient temperature | [°C] | -40...85 |
| Protection | | IP 65; IP 66; IP 67; IP 68; IP 69K |
| Tests / approvals | | |
| EMC | EN 61000-4-2 ESD | 4 kV CD / 8 kV AD |
| | EN 61000-4-3 HF radiated | 10 V/m |
| | EN 61000-4-4 Burst | 2 kV |
| | EN 61000-4-6 HF conducted | 10 V |
| | EN 55011 | class B |
| Impact resistance | | 1 J |
| Vibration resistance | EN 60068-2-6 Fc | 20 g (10...3000 Hz) / 50 sweep cycles per frequency; 1 octave per minute in 3 axes |
| Shock resistance | EN 60068-2-27 Ea | 100 g 11 ms half-sine; 3 shocks each in every direction of the 3 coordinate axes |
| Continuous shock resistance | EN 60068-2-27 | 40 g 6 ms; 4000 shocks each in every direction of the 3 coordinate axes |
| Fast temperature changes | EN 60068-2-14 Na | TA = -40 °C; TB = 85 °C; t1 = 30 min; t2 = < 10 s; 50 cycles |
| Salt spray test | EN 60068-2-52 Kb | severity level 5 (4 test cycles) |
| MTTF | [years] | 635 |
| UL approval | Ta | -25...70 °C |
| | Enclosure type | Type 1 |
| | voltage supply | Limited Voltage/Current |
| | UL Approval no. | A008 |
| | File number UL | E174191 |

IGC260



Inductive full-metal sensor

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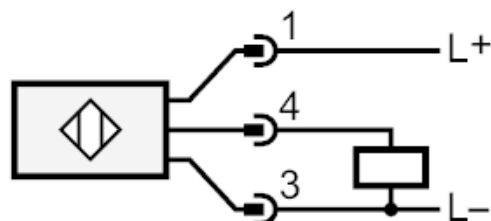
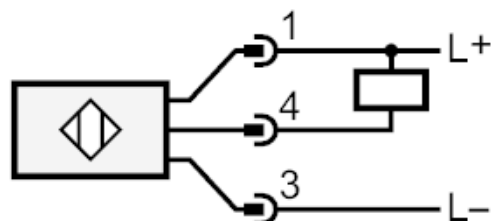
| Mechanical data | | |
|-------------------------------|------------------|--|
| Weight | [g] | 51.1 |
| Housing | | threaded type |
| Mounting | | flush mountable |
| Dimensions | [mm] | M18 x 1 / L = 60 |
| Thread designation | | M18 x 1 |
| Materials | | stainless steel (1.4404 / 316L); stainless steel (1.4404 / 316L); ; LED window: PEI; lock nuts: brass white bronze coated |
| Tightening torque | [Nm] | 50 |
| Length | [mm] | 60 |
| Displays / operating elements | | |
| Display | switching status | 4 x LED, yellow |
| Accessories | | |
| Accessories (supplied) | | lock nuts: 2 |
| Remarks | | |
| Pack quantity | | 1 pcs. |

Electrical connection

Connector: 1 x M12



Connection



4 OUT / IO-Link