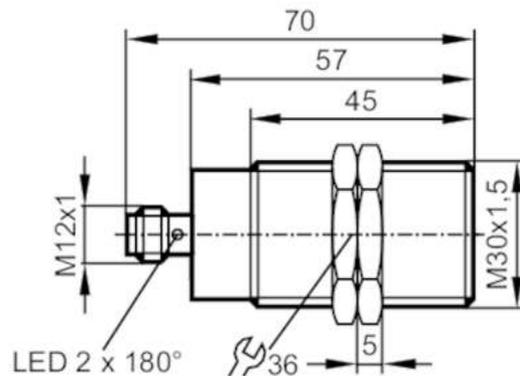


GI712S



Fail-safe inductive sensor

GIIA4010-2PS/SIL2/IUS



Product characteristics

| | | |
|-------------------|------|----------------------|
| Electrical design | | PNP |
| Output function | | 2 x OSSD (A1 and A2) |
| Enable zone | [mm] | 1...10 |
| Housing | | threaded type |
| Dimensions | [mm] | M30 x 1.5 / L = 70 |

Application

| | | |
|-------------------------|--|---|
| Special feature | | Gold-plated contacts |
| Type of operation | | continuous operation (maintenance-free) |
| Safety-related function | | safe state when undamped |
| Application | | industrial application |

Electrical data

| | | |
|-----------------------------|------|--------------|
| Operating voltage | [V] | 19.2...30 DC |
| Rated insulation voltage | [V] | 30 |
| Current consumption | [mA] | < 30 |
| Protection class | | III |
| Reverse polarity protection | | yes |
| Max. power-on delay time | [ms] | 1000 |

Outputs

| | | |
|---|------|---|
| Electrical design | | PNP |
| Output function | | 2 x OSSD (A1 and A2) |
| Max. voltage drop switching output DC | [V] | 2.5; (30 mA) |
| Permanent current rating of switching output DC | [mA] | 100 |
| Output data | | Interface type C class 1 |
| Output voltage at 24 V | | compatible with EN 61131-2 inputs type 1, 2 |
| Short-circuit protection | | yes |
| Overload protection | | no |
| Max. capacitive load CL_max | [nF] | 20 |

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| Detection zone | | |
|---|---------------------------|--|
| Enable zone | [mm] | 1...10 |
| Safe switching-off distance s(ar) | [mm] | 15 |
| Response times | | |
| Response time to safety request | [ms] | 10 |
| Response time when approaching the enable zone | [ms] | 1 |
| Risk time (response time for safety-related faults) | [ms] | 30 |
| Operating conditions | | |
| Applications | | class C to EN 60654-1 weatherproof application |
| Ambient temperature | [°C] | -25...70 |
| Note on ambient temperature | | operational life ≤ 87600 h |
| Ambient temperature | [°C] | 10...40 |
| Note on ambient temperature | | operational life ≤ 175200 h |
| Rate of temperature change | [K/min] | 0.5 |
| Max. relative air humidity | [%] | briefly: 5...95 %; permanent: 5...70 % |
| Air pressure | [kPa] | 80...106 |
| Max. height above sea level | [m] | 2000 |
| Ionising radiation | | not permissible |
| Salt spray | | no |
| Protection | | IP 65; IP 67 |
| Tests / approvals | | |
| EMC | IEC 60947-5-2 | |
| | IEC 60947-5-3 | |
| | EN 60947-5-3 | |
| | EN 61000-4-2 ESD | 6 kV CD / 8 kV AD |
| | EN 61000-4-3 HF radiated | 20 V/m |
| | EN 61000-4-4 Burst | 2 kV |
| | EN 61000-4-6 HF conducted | 10 V |
| | EN 61000-4-8 | 30 A/m |
| | EN 55011 | class B |
| | Shock resistance | IEC 60947-5-2 |
| Vibration resistance | IEC 60947-5-2 | |
| UL approval | Ta | -25...70 °C |
| | Enclosure type | Type 1 |
| | power supply | Limited Voltage/Current |
| | File number UL | E174191 |
| Safety classification | | |
| Complies with the requirements | | ISO 13849-1: 2015 category 2, PL d IEC 61508 SIL 2 IEC 62061 SIL 2 |
| Mission time TM | [h] | ≤ 175200 |
| Mission time TM (additional indication) | | 20 years |
| PFH | [1/h] | 1,0E-07 |

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| Mechanical data | |
|--------------------|--------------------------------|
| Weight [g] | 204.5 |
| Housing | threaded type |
| Mounting | flush mountable |
| Dimensions [mm] | M30 x 1.5 / L = 70 |
| Thread designation | M30 x 1.5 |
| Materials | brass white bronze coated; PBT |

| Displays / operating elements | | |
|-------------------------------|-----------|-----------------|
| Display | operation | 1 x LED, green |
| | signal | 1 x LED, yellow |

| Accessories | |
|----------------|--------------|
| Items supplied | lock nuts: 2 |

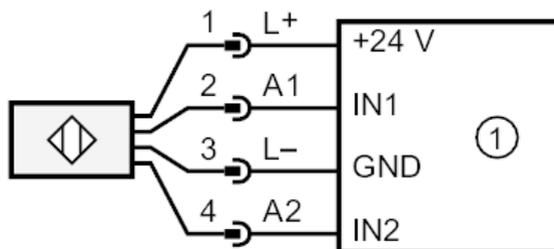
| Remarks | |
|---------------|--|
| Remarks | Unless stated otherwise, all data refer to the reference target plate to IEC 60947-5-2 over the whole temperature range. (FE360 = ST37K) 30x30x1 mm |
| Pack quantity | 1 pcs. |

Electrical connection - plug

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



1: safety-related logic unit