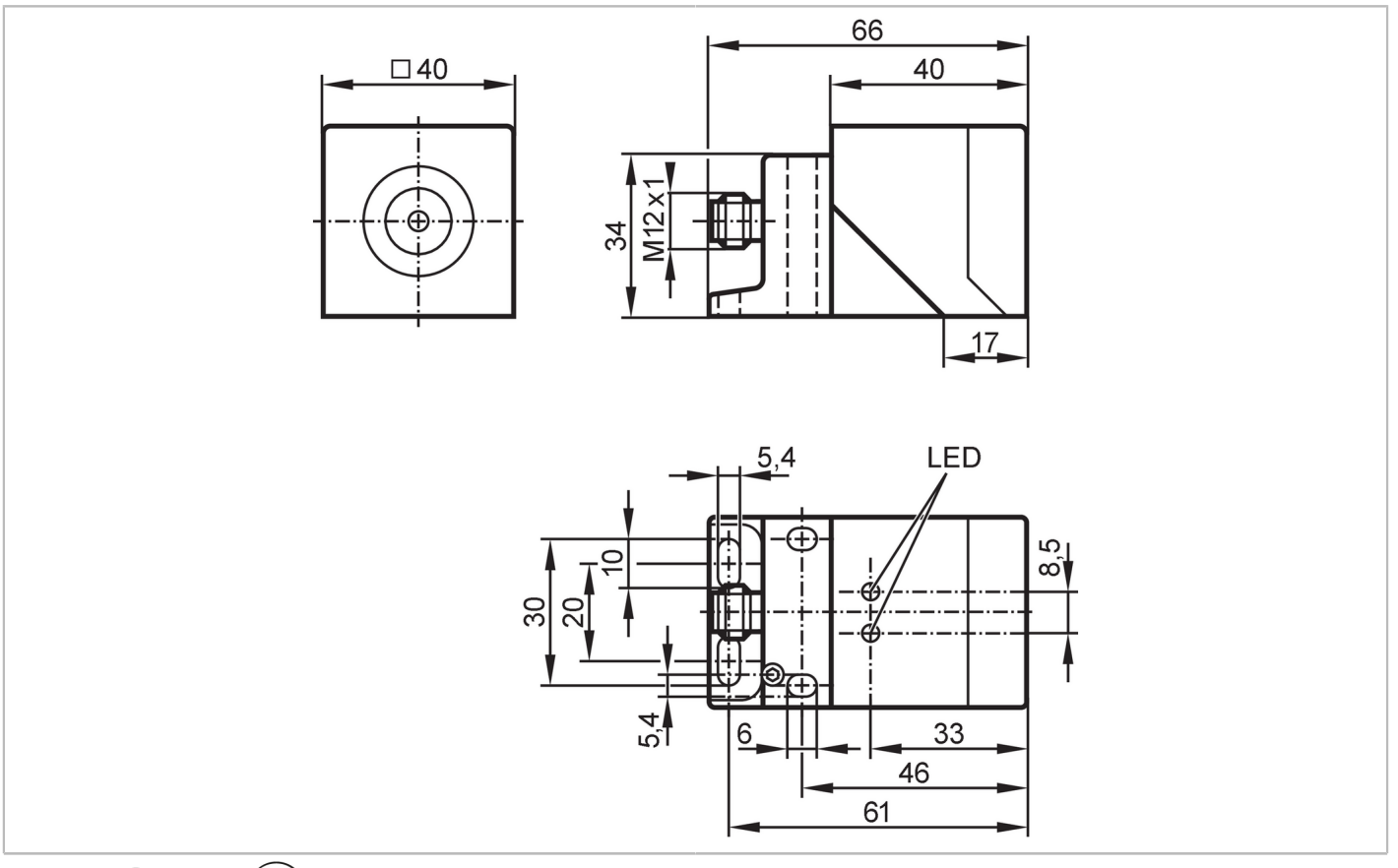
# GM504S

## Fail-safe inductive sensor

GIMC-4030-US




| | | |
|---|---|---|
| **Product characteristics** | | |
| Output function | | clock signal |
| Enable zone | [mm] | 10...15 |
| Housing | | rectangular |
| Dimensions | [mm] | 40 x 40 x 66 |
| **Application** | | |
| Special feature | | Gold-plated contacts |
| Type of operation | | continuous operation (maintenance-free) |
| Safety-related sub-function | | safe state when undamped correctly (s > sAs (sar)) |
| Application | | Industrial applications / factory automation |
| **Electrical data** | | |
| Operating voltage | [V] | 19.2...30 DC |
| Rated insulation voltage | [V] | 30 |
| Current consumption | [mA] | < 15 |
| Protection class | | III |
| Reverse polarity protection | | yes |
| Max. power-on delay time | [ms] | 5000 |
| **Inputs** | | |
| Max. input capacitance Ci_max | [nF] | 2 |

# GM504S

## Fail-safe inductive sensor

GIMC-4030-US

| | | |
|---|---|---|
| **Outputs** | | |
| Output function | | clock signal |
| Output data | | Interface type B |
| Short-circuit protection | | yes |
| Max. capacitive load CL_max | [nF] | 20 |
| **Detection zone** | | |
| Enable zone | [mm] | 10...15 |
| Safe switch-off distance s(ar) | [mm] | 30 |
| **Response times** | | |
| Response time to safety request | [ms] | 20 |
| Response time when approaching the enable zone | [ms] | 200;  (typical 100) |
| **Operating conditions** | | |
| Applications | | class C to EN 60654-1 sheltered locations |
| 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 |
| Ionising radiation | | not permissible |
| Salt spray | | no |
| Protection | | IP 65; IP 67;  (to EN 60529) |

| | | |
|---|---|---|
| **Tests / approvals** | | |
| EMC | IEC 60947-5-2 | |
| | IEC 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 | |

| | | |
|---|---|---|
| **Safety classification** | | |
| Complies with the requirements | | ISO 13849-1: 2015 category 3, PL e |
| | | IEC 61508 SIL 3 |
| Mission time TM | [h] | ≤ 175200 |
| Mission time TM (additional indication) | | 20 years |
| PFH | [1/h] | 1E-08 |
| **Mechanical data** | | |
| Weight | [g] | 358 |
| Housing | | rectangular |

# GM504S

## Fail-safe inductive sensor

GIMC-4030-US

| | | |
|---|---|---|
| Mounting | | non-flush mountable |
| Dimensions | [mm] | 40 x 40 x 66 |
| Materials | | PPE; diecast zinc |

### Displays / operating elements

| | | |
|---|---|---|
| Display | operation | 1 x LED, green |
| | signal | 1 x LED, yellow |

### Remarks

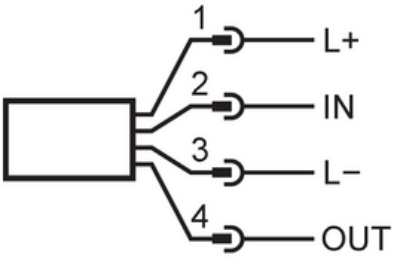
| | |
|---|---|
| Remarks | Unless stated otherwise, all data refer to the reference target plate to IEC 60947-5-2 over the whole temperature range. |
| | (FE360 = ST37K) 45x45x1 mm |
| Pack quantity | 1 pcs. |

### Electrical connection - plug

Connector: 1 x M12; coding: A; Contacts: 4, gold-plated




Connection




| | |
|---|---|
| 1 | L+ |
| 2 | IN |
| 3 | L- |
| 4 | OUT |

IN: input; OUT: Output