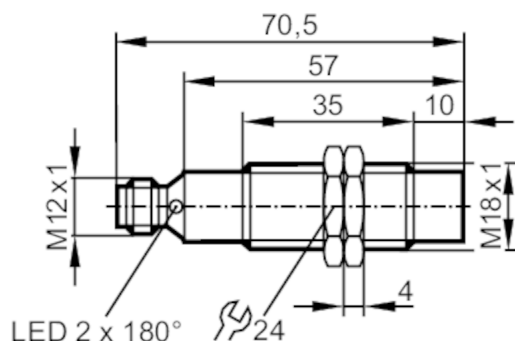


## Fail-safe inductive sensor

GIGA4008-2PS/SIL2/IV4A/US



## Product characteristics

|                   |                      |
|-------------------|----------------------|
| Electrical design | PNP                  |
| Output function   | 2 x OSSD (A1 and A2) |
| Enable zone [mm]  | 1...8                |
| Housing           | threaded type        |
| Dimensions [mm]   | M18 x 1 / L = 70.5   |

## 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]      | < 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                                          |

## Detection zone

|                  |       |
|------------------|-------|
| Enable zone [mm] | 1...8 |
|------------------|-------|



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|                                     |    |
|-------------------------------------|----|
| Safe switch-off distance s(ar) [mm] | 12 |
|-------------------------------------|----|

### Response times

|                                                          |    |
|----------------------------------------------------------|----|
| Response time to safety request [ms]                     | 1  |
| Response time when approaching the enable zone [ms]      | 1  |
| Risk time (response time for safety-related faults) [ms] | 20 |

### 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                                  |
| 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             |                   |

### 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                            |

### Mechanical data

|                    |                     |
|--------------------|---------------------|
| Weight [g]         | 129.5               |
| Housing            | threaded type       |
| Mounting           | non-flush mountable |
| Dimensions [mm]    | M18 x 1 / L = 70.5  |
| Thread designation | M18 x 1             |

GG711S



Fail-safe inductive sensor

GIGA4008-2PS/SIL2/IV4A/US

|           |                                     |
|-----------|-------------------------------------|
| Materials | stainless steel (316Ti/1.4571); PBT |
|-----------|-------------------------------------|

Displays / operating elements

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

Accessories

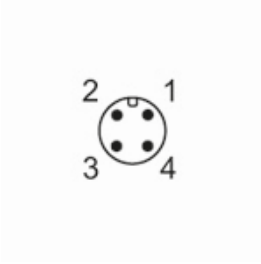
|                |              |
|----------------|--------------|
| Items supplied | lock nuts: 2 |
|----------------|--------------|

Remarks

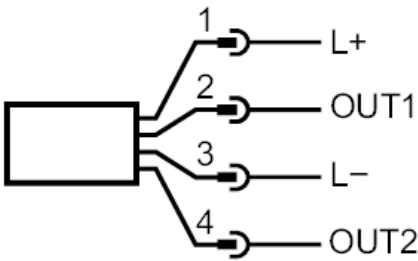
|               |                                                                                                                                                        |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| Remarks       | Unless stated otherwise, all data refer to the reference target plate to IEC 60947-5-2 over the whole temperature range.<br>(FE360 = ST37K) 24x24x1 mm |
| Pack quantity | 1 pcs.                                                                                                                                                 |

Electrical connection - plug

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



Connection



|             |      |       |
|-------------|------|-------|
| 1           | L+   |       |
| 2           | OUT1 | OSSD1 |
| 3           | L-   |       |
| 4           | OUT2 | OSSD2 |
| OUT: Output |      |       |