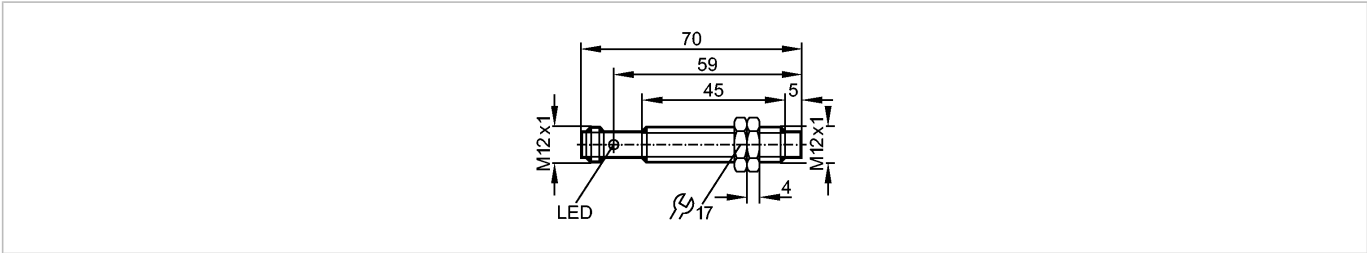


**GF711S**

GIFA4004-2PS/SIL2/V4A/US

Inductive sensors



Made in Germany

**Product characteristics**

Fail-safe inductive sensor
Metal thread M12 x 1
M12 connector
Enable zone 0.5...4 mm; [nf] non-flush mountable
Complies with the requirements: EN ISO 13849-1: PL d IEC 61508: SIL 2 IEC 62061: SILcl 2

**Application**

Type of operation	continuous operation (maintenance-free)
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**Electrical data**

Electrical design	DC PNP
Operating voltage [V]	24 DC (19.2...30 DC)
Rated insulation voltage [V]	30
Current consumption [mA]	< 20
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	1

**Outputs**

Output function	2 x OSSD (A1 and A2)
Output voltage at 24 V	compatible with EN 61131-2 inputs type 1, 2
Voltage drop [V]	< 2.5; (30 mA)
Current rating [mA]	100
Short-circuit protection	yes

**Range**

Enable zone [mm]	0.5...4
Safe switching off distance s(ar)[mm]	6

**Reaction times**

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

**Environment**

Applications	Class C to EN 60654-1 weatherproof application
Ambient temperature [°C]	-25...70, for service life ≤ 87600 h 10...40, for service life ≤ 175200 h
Rate of temperature change [K/min]	0.5

## GF711S

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Max. relative air humidity	[%]	95, for service life ≤ 87600 h 70, for service life ≤ 175200 h
Air pressure	[kPa]	80...106
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
Shock resistance		IEC 60947-5-2
Vibration resistance		IEC 60947-5-2

### Safety classification

Mission time TM	[h]	≤ 87600, (10 years) at -25...70 °C and 5...95 % relative humidity ≤ 175200, (20 years) at 10...40 °C and 5...70 % relative humidity
Safety-related reliability PFHd	[1/h]	1.0E-07
MTTFd	[Years]	2011
DC/CCF/Cat.		87 % / 70 % / 2

### Mechanical data

Mounting		non-flush mountable
Housing materials		stainless steel 316L / 1.4404; PBT
Weight	[kg]	0.116

### Displays / operating elements

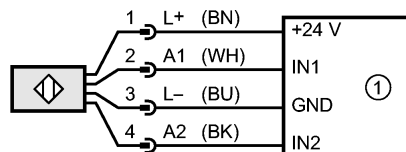
Display		LED yellow (signal), LED green (power)
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### Electrical connection

Connection		M12 connector; gold-plated contacts
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#### Wiring

Core colours  
 BK black  
 BN brown  
 BU blue  
 WH white



1: Safety-related logic unit

### Accessories

Accessories (included)		2 lock nuts
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### Remarks

Remarks		The core colours (BN, BK, BU, WH) apply to the use of ifm sockets. Unless stated otherwise, all data refer to the 12x12x1 mm reference target plate to IEC 60947-5-2 (FE360 = mild steel) over the whole temperature range.
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Pack quantity	[piece]	1
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