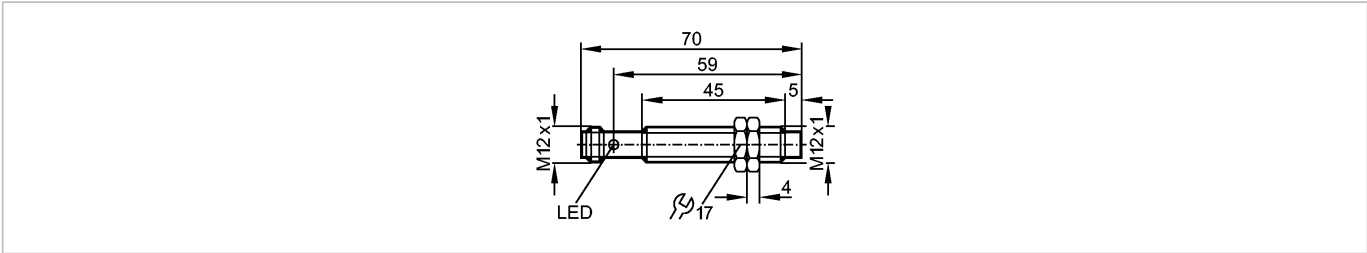


GF711S

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: 2008 category 2 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

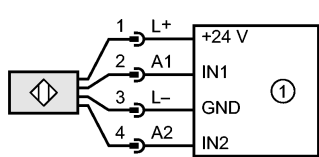
Reaction times

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

GF711S

GIFA4004-2PS/SIL2/V4A/US

Inductive sensors

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
Max. relative air humidity [%]	5...95, briefly 5...70, permanently
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]	≤ 175200, (20 years)
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)
Electrical connection	
Connection	M12 connector; Gold-plated contacts
Wiring	 <p>1: Safety-related logic unit</p>
Accessories	
Accessories (included)	2 lock nuts
Remarks	
Remarks	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.
Pack quantity [piece]	1