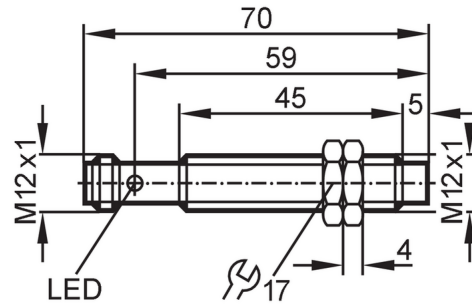


GF711S



Fail-safe inductive sensor

GIFA4004-2PS/SIL2/V4A/US



Product characteristics

Electrical design		PNP
Output function		2 x OSSD (A1 and A2)
Enable zone	[mm]	0.5...4
Housing		threaded type
Dimensions	[mm]	M12 x 1 / L = 70

Application

Special feature		Gold-plated contacts
Type of operation		continuous operation (maintenance-free)
Safety-related sub-function		safe state when properly undamped
Application		Industrial applications / factory automation

Electrical data

Operating voltage	[V]	19.2...30 DC
Rated insulation voltage	[V]	30
Current consumption	[mA]	< 20
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]	0.5...4
Safe switch-off distance s(ar)	[mm]	6

GF711S



Fail-safe inductive sensor

GIFA4004-2PS/SIL2/V4A/US

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]	109.45	
Housing	threaded type	
Mounting	non-flush mountable	
Dimensions [mm]	M12 x 1 / L = 70	
Thread designation	M12 x 1	
Materials	stainless steel (316L/1.4404); PBT	

GF711S



Fail-safe inductive sensor

GIFA4004-2PS/SIL2/V4A/US

Displays / operating elements

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

Accessories

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

Remarks

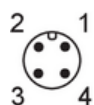
Remarks	Unless stated otherwise, all data refer to the reference target plate to IEC 60947-5-2 over the whole temperature range.
---------	--

(FE360 = ST37K) 12x12x1 mm

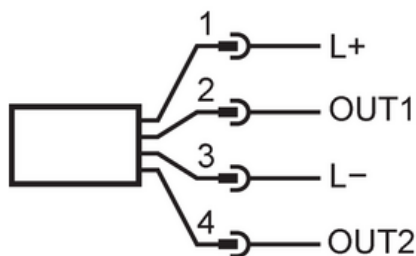
Pack quantity	1 pcs.
---------------	--------

Electrical connection - plug

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



Connection



1	L+	
2	OUT1	OSSD1
3	L-	
4	OUT2	OSSD2

OUT: Output