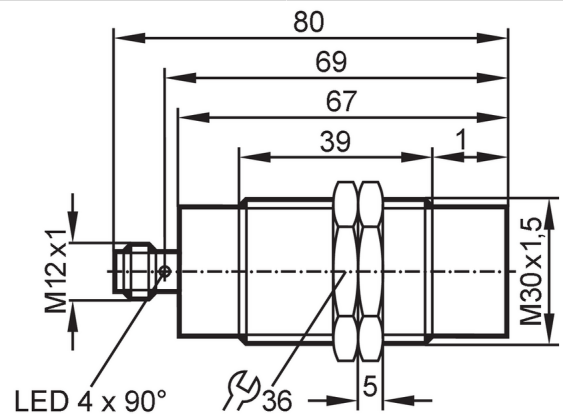


GI506S



Fail-safe inductive sensor

GIIA-4030-3PT/SIL3/V4A/US



Product characteristics

Output function		Clock signal
Enable zone	[mm]	6...12
Housing		Threaded type
Dimensions	[mm]	M30 x 1.5 / L = 80

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

Electrical data

Operating voltage	[V]	19.2...30 DC
Current consumption	[mA]	< 15
Protection class		III
Reverse polarity protection		yes
Max. power-on delay time	[ms]	5000

Inputs

Max. input capacitance	[nF]	2
Ci_max		

Outputs

Output function		Clock signal
Output data		Interface type B
Short-circuit protection		yes
Max. capacitive load CL_max	[nF]	20

Monitoring range

Enable zone	[mm]	6...12
Safe switching-off distance	[mm]	30
s(ar)		

Reaction times

Response time to safety request	[ms]	20
---------------------------------	------	----



Fail-safe inductive sensor

GIIA-4030-3PT/SIL3/V4A/US

Response time when approaching the enable zone [ms]	200; (typical 100)
---	--------------------

Operating conditions

Applications	Class C to EN 60654-1 weatherproof application
Ambient temperature [°C]	0...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
Ionizing radiation	not permissible
Salt spray	no
Protection	IP 68; IP 69K; (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]	254.85
Housing	Threaded type
Mounting	non-flush mountable
Dimensions [mm]	M30 x 1.5 / L = 80
Thread designation	M30 x 1.5
Material	housing: stainless steel; sensing face: PEEK; O-ring: FKM

Displays / operating elements

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

Accessories

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

GI506S



Fail-safe inductive sensor

GIIA-4030-3PT/SIL3/V4A/US

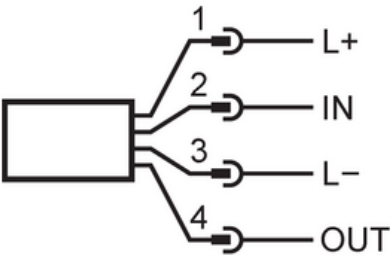
Remarks	
Remarks	Unless stated otherwise, all data refer to the reference target plate to IEC 60947-5-2 over the whole temperature range. (FE360 = ST37K) 45x45x1 mm
Pack quantity	1 pcs.

Electrical connection - plug

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



Connection



1	L+
2	IN
3	L-
4	OUT

IN: Input; OUT: Output