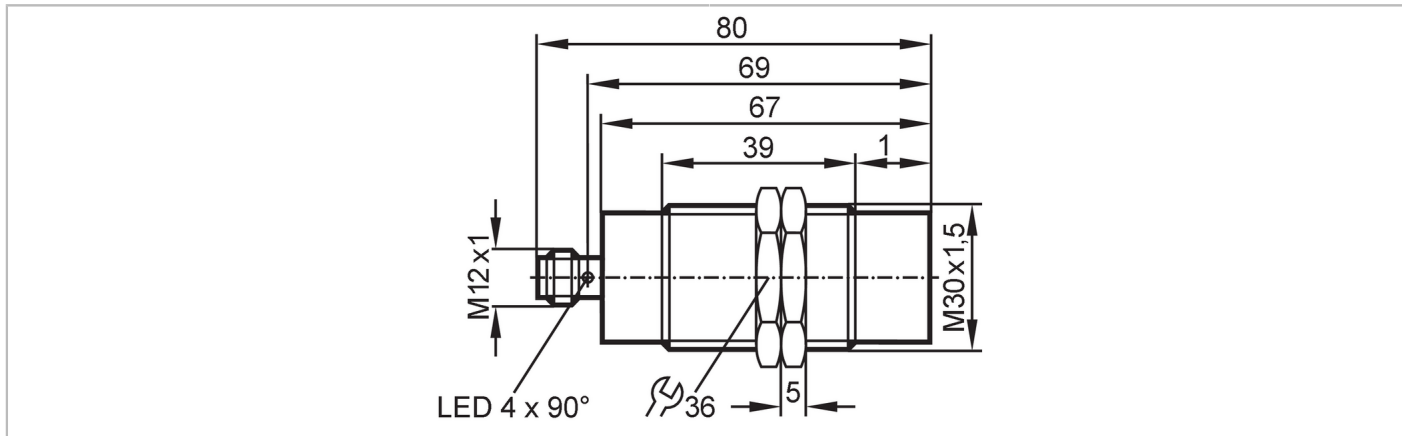


# GI505S



## Fail-safe inductive sensor

GIIA-4030-US /V4A



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 Ci_max [nF]	2
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 s(ar) [mm]	30
Reaction times	
Response time to safety request [ms]	20

# GI505S



## Fail-safe inductive sensor

GIIA-4030-US /V4A

Response time when approaching the enable zone [ms]	200; (typical 100)
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### 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]	253.9
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: EPDM

### Displays / operating elements

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

### Accessories

Items supplied	lock nuts: 2
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# GI505S



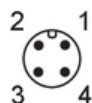
## Fail-safe inductive sensor

GIIA-4030-US /V4A

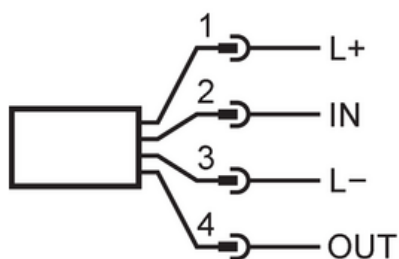
Remarks	
Remarks	Unless stated otherwise, all data refer to the reference target plate to IEC 60947-5-2 over the whole temperature range. (FE360 = ST37K) 45x45x1 mm
Pack quantity	1 pcs.

### 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