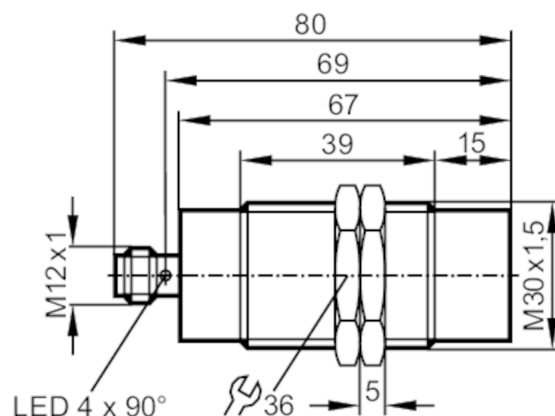


Fail-safe inductive sensor

GI5A-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

System	gold-plated contacts
Type of operation	continuous operation (maintenance-free)
Safety-related function	safe state when undamped
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] Ci_max	2
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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



Fail-safe inductive sensor

GIIA-4030-US /V4A

Reaction times		
Response time to safety request	[ms]	20
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	
UL approval	Ta	-25...70 °C
	Enclosure type	Type 1
	voltage supply	Limited Voltage/Current
	File number UL	E174191
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]	262.5
Housing		Threaded type
Mounting		non-flush mountable
Dimensions	[mm]	M30 x 1.5 / L = 80
Thread designation		M30 x 1.5
Material		PEEK; stainless steel; O-ring: EPDM

GI505S



Fail-safe inductive sensor

GIIA-4030-US /V4A

Displays / operating elements

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

Accessories

Items supplied	lock nuts: 2
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Remarks

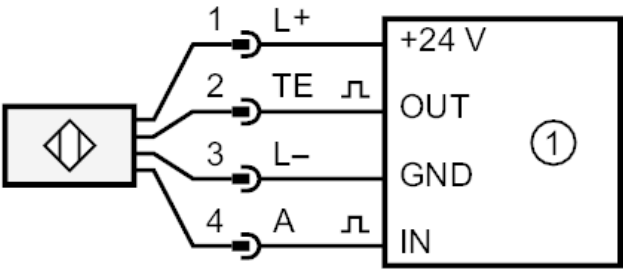
Remarks	Unless stated otherwise, all data refer to the reference target plate to IEC 60947-5-2 over the whole temperature range.
	(FE360 = ST37K) 45x45x1 mm
Pack quantity	1 pcs.

Electrical connection - plug

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



Connection



1 = Safety-related logic unit