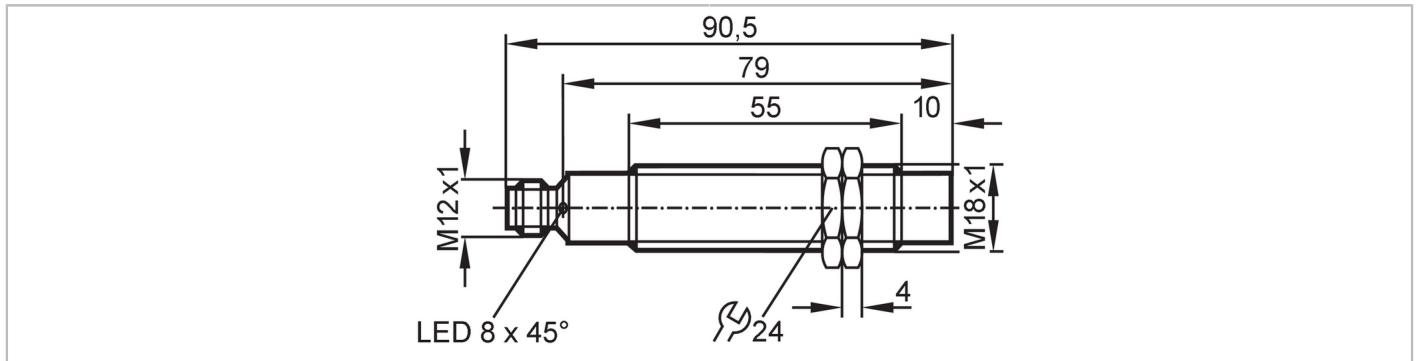


GG505S



Fail-safe inductive sensor

GIGA-4015-US /V4A



Product characteristics

Output function		clock signal
Enable zone	[mm]	3...6
Housing		threaded type
Dimensions	[mm]	M18 x 1 / L = 90

Application

Special feature		Gold-plated contacts
Type of operation		continuous operation (maintenance-free)
Safety-related function		safe state when undamped
Application		industrial application

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

Detection zone

Enable zone	[mm]	3...6
Safe switch-off distance s(ar)	[mm]	15

Response times

Response time to safety request	[ms]	20
Response time when approaching the enable zone	[ms]	200; (typical 100)



Fail-safe inductive sensor

GIGA-4015-US /V4A

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	
Ionising 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]	190	
Housing	threaded type	
Mounting	non-flush mountable	
Dimensions [mm]	M18 x 1 / L = 90	
Thread designation	M18 x 1	
Materials	stainless steel; PBT	
Displays / operating elements		
Display	operation	1 x LED, green
	signal	1 x LED, yellow
Accessories		
Items supplied	lock nuts: 2	

GG505S



Fail-safe inductive sensor

GIGA-4015-US /V4A

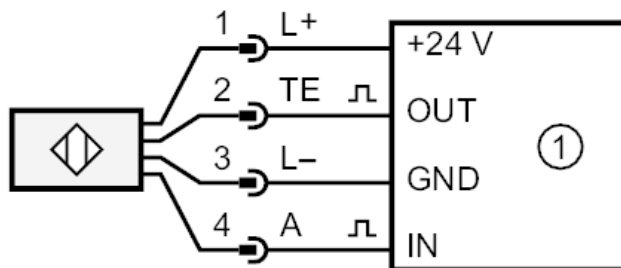
Remarks	
Remarks	Unless stated otherwise, all data refer to the reference target plate to IEC 60947-5-2 over the whole temperature range. (FE360 = ST37K) 24x24x1 mm
Pack quantity	1 pcs.

Electrical connection - plug

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



Connection



1 = safety-related logic unit