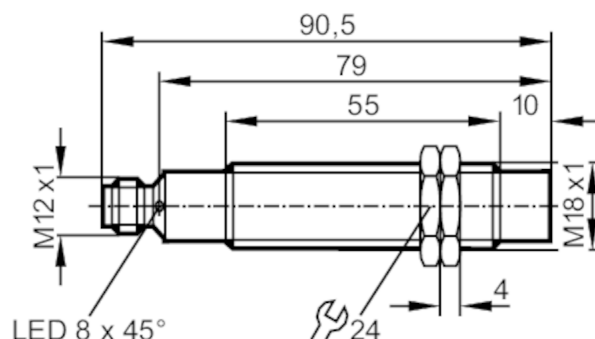


GG505S



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
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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

Detection zone

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

Response times

Response time to safety request [ms]	20
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Fail-safe inductive sensor

GIGA-4015-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]	-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
	power 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

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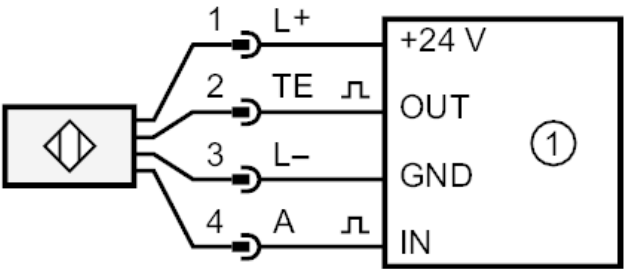
Accessories	
Items supplied	lock nuts: 2
Remarks	
Remarks	Unless stated otherwise, all data refer to the reference target plate to IEC 60947-5-2 over the whole temperature range. (FE360 = ST37K) 24x24x1 mm
Pack quantity	1 pcs.

Electrical connection - plug

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



Connection



1 = safety-related logic unit