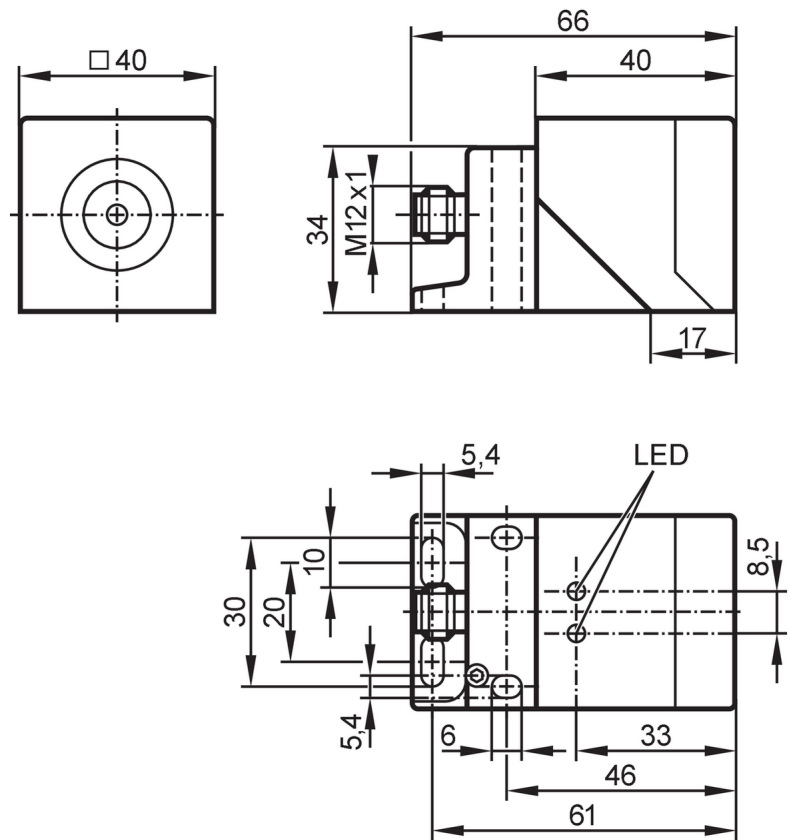


GM505S



Fail-safe inductive sensor

GIMC-4035-US



Product characteristics

Output function	clock signal
Enable zone [mm]	10...20
Housing	rectangular
Dimensions [mm]	40 x 40 x 66

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 / factory automation

Electrical data

Operating voltage [V]	19.2...30 DC
Rated insulation voltage [V]	30
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	



Fail-safe inductive sensor

GIMC-4035-US

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]		10...20
Safe switch-off distance s(ar) [mm]		35
Response 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 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 65; IP 67; (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]		358
Housing		rectangular

GM505S



Fail-safe inductive sensor

GIMC-4035-US

Mounting	non-flush mountable
Dimensions [mm]	40 x 40 x 66
Materials	PPE; diecast zinc

Displays / operating elements

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

Remarks

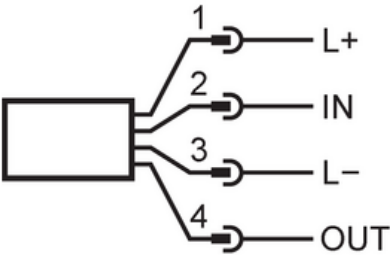
Remarks	Unless stated otherwise, all data refer to the reference target plate to IEC 60947-5-2 over the whole temperature range. (FE360 = ST37K) 60x60x1 mm
Pack quantity	1 pcs.

Electrical connection - plug

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



Connection



1	L+
2	IN
3	L-
4	OUT

IN: input; OUT: Output