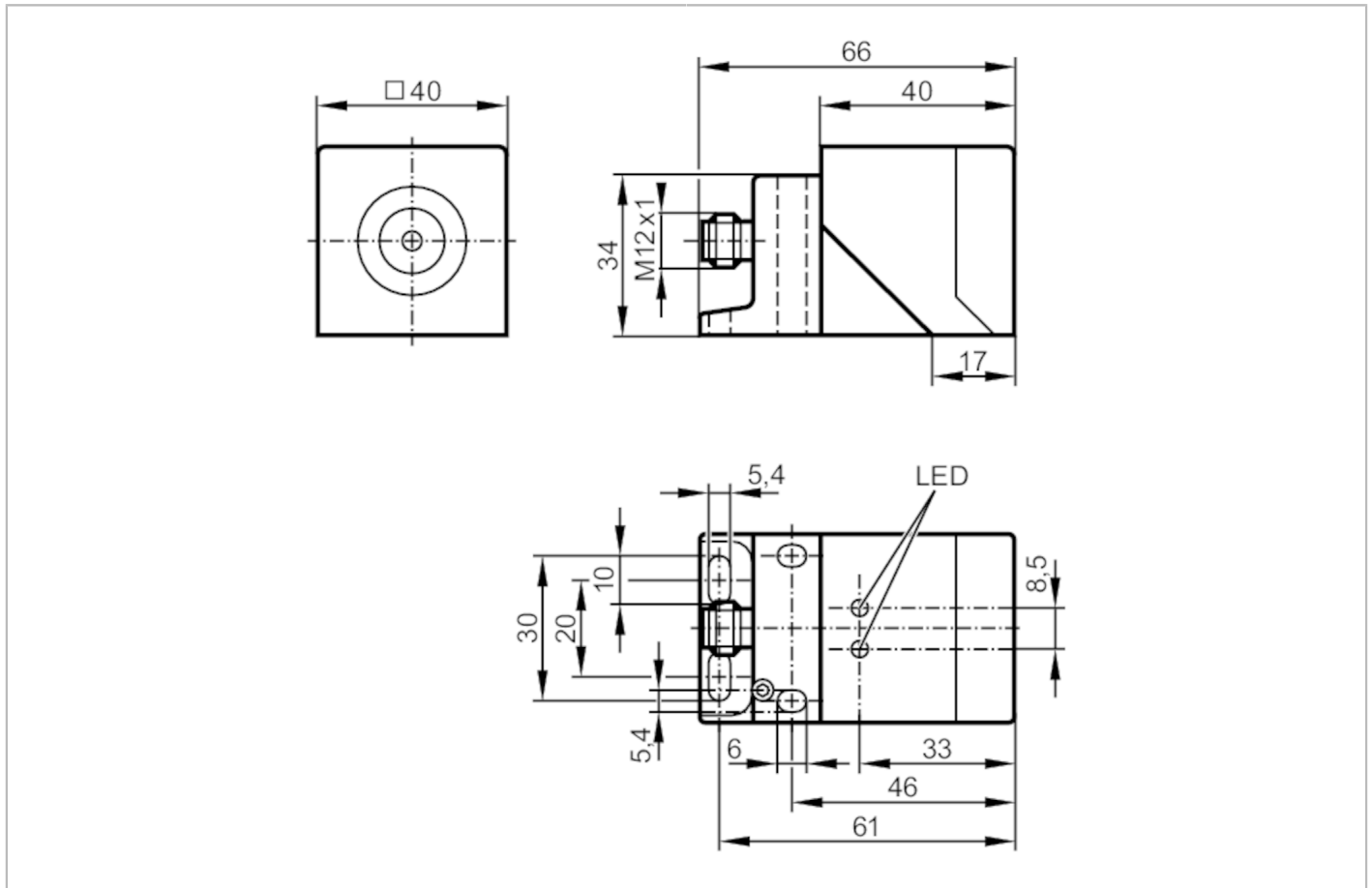


GM705S



Fail-safe inductive sensor

GIMC-4045-US/2OSSD



Product characteristics		
Electrical design		PNP
Output function		2 x OSSD (A1 and A2)
Enable zone	[mm]	4...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 function		safe state when undamped
Application		industrial application
Electrical data		
Operating voltage	[V]	19.2...30 DC
Rated insulation voltage	[V]	30
Current consumption	[mA]	< 30
Protection class		III
Reverse polarity protection		yes
Max. power-on delay time	[ms]	5000

GM705S



Fail-safe inductive sensor

GIMC-4045-US/2OSSD

Outputs		
Electrical design	PNP	
Output function	2 x OSSD (A1 and A2)	
Max. voltage drop switching output DC [V]	2.5; (100 mA)	
Output data	Interface type C class 0	
Output voltage at 24 V	compatible with EN 61131-2 inputs type 1, 2, 3	
Short-circuit protection	yes	
Max. capacitive load CL_max [nF]	20	
Detection zone		
Enable zone [mm]	4...20	
Safe switching-off distance s(ar) [mm]	45	
Response times		
Response time to safety request [ms]	50	
Response time when approaching the enable zone [ms]	200	
Risk time (response time for safety-related faults) [ms]	100	
Operating conditions		
Applications	class C to EN 60654-1 weatherproof application	
Ambient temperature [°C]	-25...60	
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	
Max. height above sea level [m]	2000	
Ionising radiation	not permissible	
Salt spray	no	
Protection	IP 65; IP 67	
Tests / approvals		
EMC	IEC 60947-5-2	
	IEC 60947-5-3	
	EN 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	

GM705S



Fail-safe inductive sensor

GIMC-4045-US/2OSSD

Safety classification	
Complies with the requirements	ISO 13849-1: 2015 category 3, PL e IEC 61508 SIL 3 IEC 62061 SIL 3
Mission time TM [h]	≤ 175200
Mission time TM (additional indication)	20 years
PFH [1/h]	1E-08

Mechanical data	
Weight [g]	355
Housing	rectangular
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

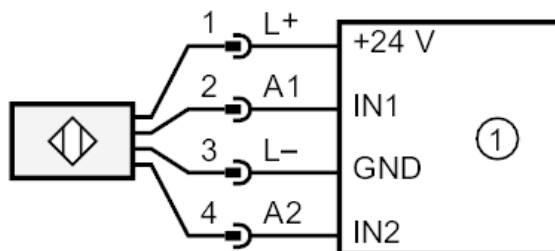
Remarks	
Remarks	Unless stated otherwise, all data refer to the reference target plate to IEC 60947-5-2 over the whole temperature range. (FE360 = ST37K) 60x60x1 mm
Pack quantity	1 pcs.

Electrical connection - plug

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



Connection



1: safety-related logic unit