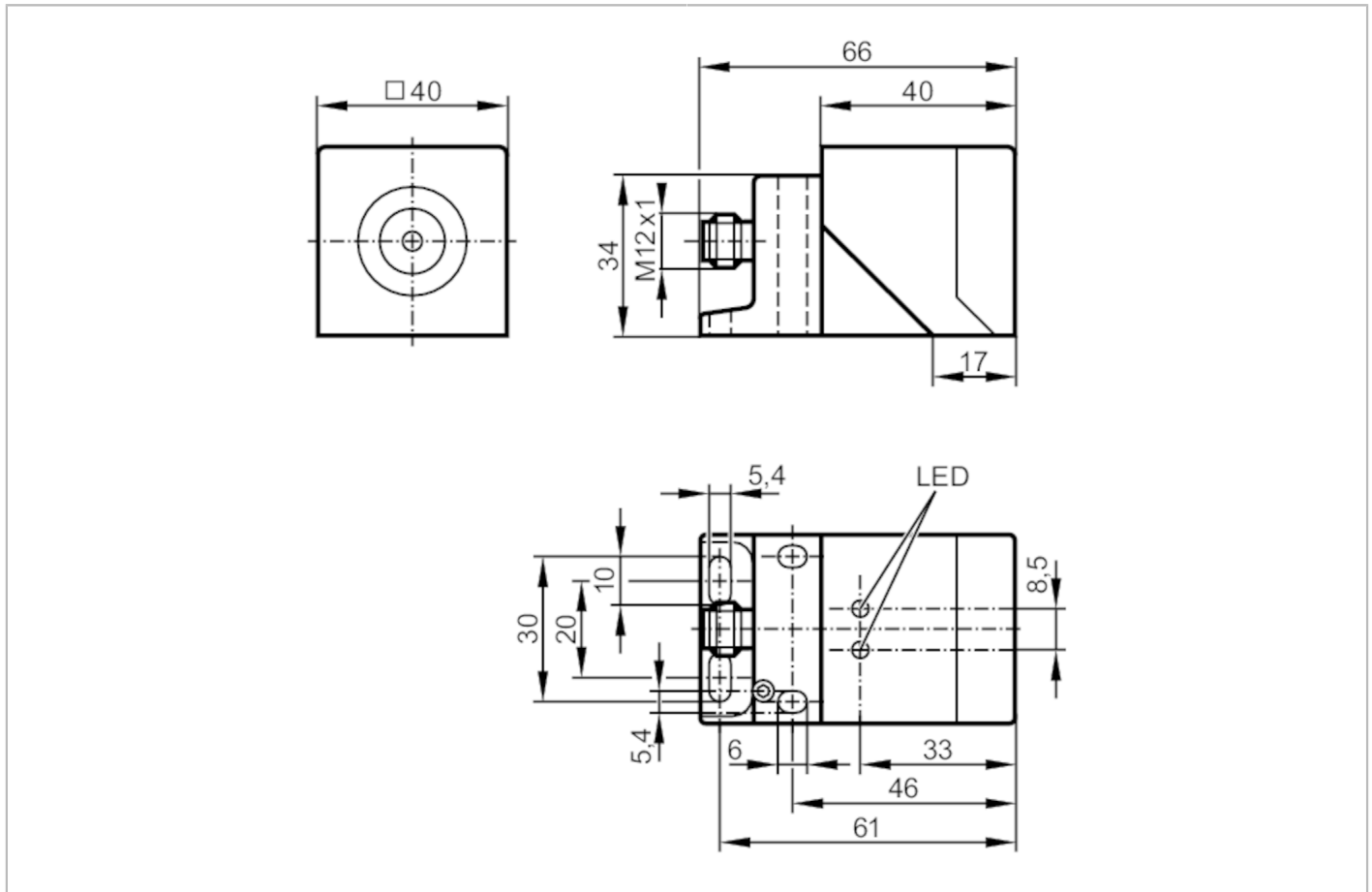


GM705S



Fail-safe inductive sensor

GIMC-4045-US/2OSSD



Application	
Type of operation	continuous operation (maintenance-free)
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
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

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Monitoring range		
Enable zone	[mm]	4...20
Safe switching-off distance s(ar)	[mm]	45
Reaction 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	
UL approval	Ta	-25...70 °C
	Enclosure type	Type 1
	voltage supply	Limited Voltage/Current
	File number UL	E174191

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Safety classification	
ISO 13849-1	Category 3, PL e
IEC 61508	SIL 3
IEC 62061	SILCL 3
Mission time TM [h]	≤ 175200
Mission time TM (additional indication)	20 years
Safety-related reliability PFHD [1/h]	1E-08

Mechanical data	
Weight [g]	355
Housing	rectangular
Mounting	non-flush mountable
Dimensions [mm]	40 x 40 x 66
Material	PPE; diecast zinc

Displays / operating elements		
Display	Power	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; Contacts: gold-plated



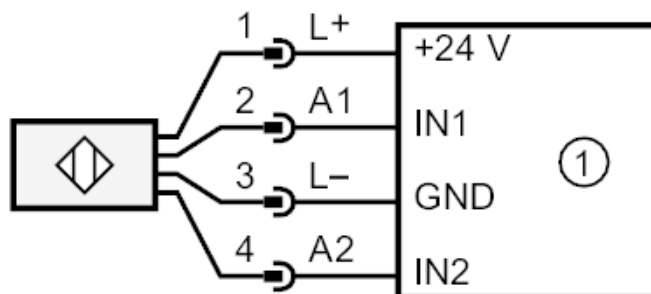
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Connection



1: Safety-related logic unit