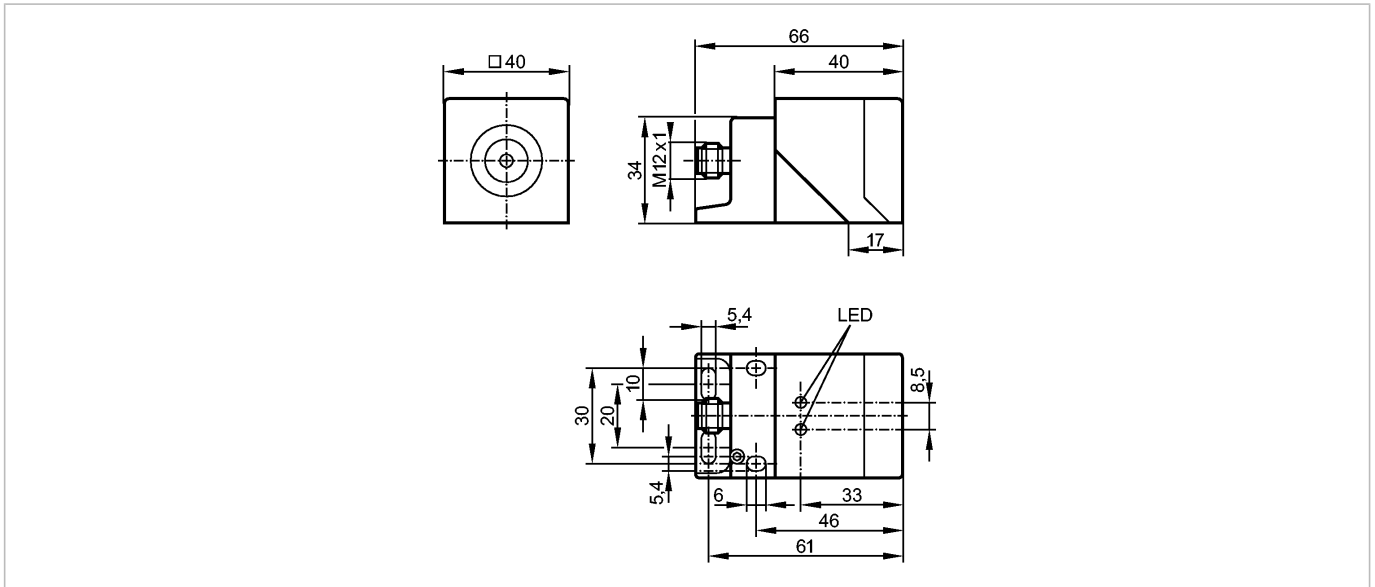


**GM705S**

GIMC-4045-US/2OSSD

Inductive sensors



Made in Germany



**Product characteristics**

Fail-safe inductive sensor
Rectangular, plastics
M12 connector
Enable zone 4...20 mm; [nf] non-flush mountable
Complies with the requirements: EN ISO 13849-1: 2008 category 4 PL e IEC 61508: SIL 3 IEC 62061: SILcl 3

**Application**

Type of operation	continuous operation (maintenance-free)
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**Electrical data**

Electrical design	DC PNP
Operating voltage [V]	24 DC (19.2...30 DC)
Rated insulation voltage [V]	30
Current consumption [mA]	< 30
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	5

**Outputs**

Output function	2 x OSSD (A1 and A2)
Output voltage at 24 V	compatible with EN 61131-2 inputs type 1, 2, 3
Voltage drop [V]	< 2.5; (100 mA)
Short-circuit protection	yes

**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 (enable time) [ms]	≤ 200

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Risk time (response time for safety-related faults) [ms]	≤ 100
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Environment	
Applications	Class C to EN 60654-1 weatherproof application
Ambient temperature [°C]	-25...60, for service life ≤ 87600 h 10...40, for service life ≤ 175200 h
Rate of temperature change [K/min]	0.5
Max. relative air humidity [%]	5...95, briefly 5...70, permanently
Air pressure [kPa]	80...106
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
Shock resistance	IEC 60947-5-2
Vibration resistance	IEC 60947-5-2

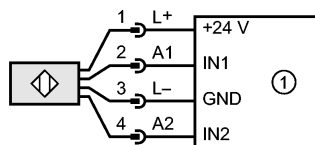
Safety classification	
Mission time TM [h]	≤ 175200, (20 years)
Safety-related reliability PFHd [1/h]	2.5E-09
MTTFd [Years]	1992
DC/CCF/Cat.	99 % / 100 % / 4

Mechanical data	
Mounting	non-flush mountable
Housing materials	PPE; diecast zinc
Weight [kg]	0.355

Displays / operating elements	
Display	LED yellow (signal), LED green (power)

Electrical connection	
Connection	M12 connector; Gold-plated contacts

**Wiring**



1: Safety-related logic unit

**GM705S**

GIMC-4045-US/2OSSD

**Inductive sensors****Remarks**

Remarks

Unless stated otherwise, all data refer to the 60x60x1 mm reference target plate to IEC 60947-5-2 (FE360 = mild steel) over the whole temperature range.

Pack quantity

[piece]

1