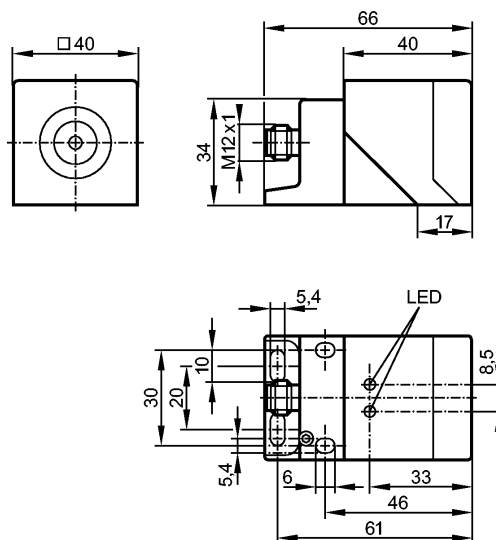


GM701S

GIMC-4030-US/2OSSD

Inductive sensors



Made in Germany

Product characteristics

Fail-safe inductive sensor

Rectangular, plastics

M12 connector

Enable zone 10...15 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)

Electrical data

Electrical design	DC PNP
Operating voltage [V]	24 DC (19.2...30 DC)
Rated insulation voltage [V]	30
Current consumption [mA]	< 15
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]	10...15
Safe switching off distance s(ar)[mm]	30

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...70, 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]	0.346

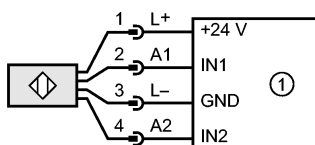
Displays / operating elements

Display		LED yellow (signal), LED green (power)
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Electrical connection

Connection		M12 connector; Gold-plated contacts
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Wiring



1: Safety-related logic unit



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Remarks	
Remarks	Unless stated otherwise, all data refer to the 45x45x1 mm reference target plate to IEC 60947-5-2 (FE360 = mild steel) over the whole temperature range.
Pack quantity [piece]	1