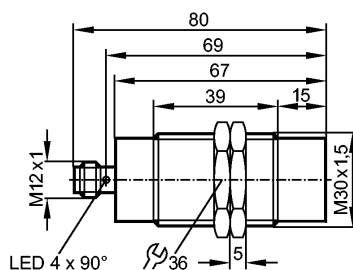


GI701S

GI1A-4030-US/2OSSD/V4A

Inductive sensors



Made in Germany

Product characteristics

Fail-safe inductive sensor

Metal thread M30 x 1.5

M12 connector

Enable zone 6...12 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]	< 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)
Current rating [mA]	100
Short-circuit protection	yes

Range

Enable zone [mm]	6...12
Safe switching off distance s(ar)[mm]	30

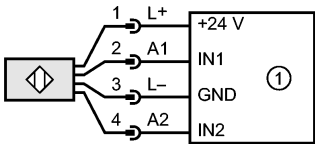
Reaction times

Response time to safety request[ms]	≤ 50
Response time when approaching the enable zone (enable time) [ms]	≤ 200
Risk time (response time for safety-related faults) [ms]	≤ 100

GI701S

GIIA-4030-US/2OSSD/V4A

Inductive sensors

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 68 / IP 69K
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	stainless steel 316L / 1.4404; PBT
Weight [kg]	0.255
Displays / operating elements	
Display	LED yellow (signal), LED green (power)
Electrical connection	
Connection	M12 connector; Gold-plated contacts
Wiring 	
1: Safety-related logic unit	
Accessories	
Accessories (included)	2 lock nuts
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