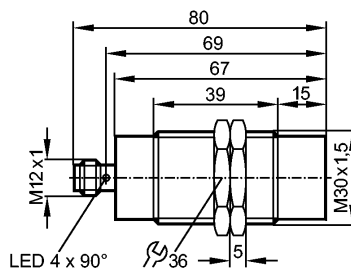


GI505S

GIIA-4030-US /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

Application

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

Electrical design	DC
Operating voltage [V]	24 DC (19.2...30 DC)
Current consumption [mA]	< 15
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	5

Outputs

Output function	Clock signal
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]	≤ 20
Response time when approaching the enable zone (enable time) [ms]	≤ 200; typ. 100

Environment

Applications	Class C to EN 60654-1 weatherproof application
Ambient temperature [°C]	0...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
Protection	IP 68 / IP 69K; to EN 60529

Tests / approvals

EMC	IEC 60947-5-2
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GI505S

GIIA-4030-US /V4A

Inductive sensors

Shock resistance	IEC 60947-5-2
Vibration resistance	IEC 60947-5-2

Safety classification

Mission time T_M [h]	≤ 175200 , (20 years)
Safety-related reliability PFHd [1/h]	1.1E-09
MTTFd [Years]	2500
DC/CCF/Cat.	99 % / 65 % / 4

Mechanical data

Mounting	non-flush mountable
Housing materials	PEEK (polyether ether ketone); high-grade stainless steel; O-ring: EPDM
Weight [kg]	0.265

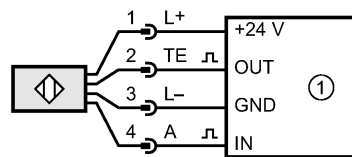
Displays / operating elements

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

Accessories

Accessories (included)	2 lock nuts
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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.
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Pack quantity [piece]	1
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