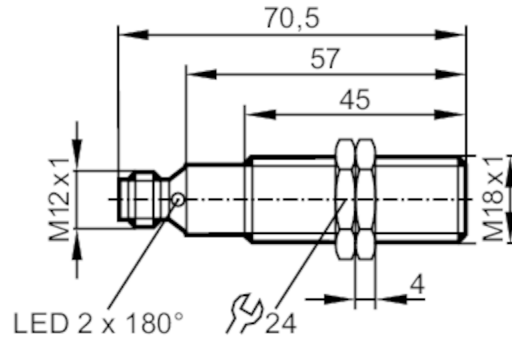


# GG712S



## Fail-safe inductive sensor

GIGA4005-2PS/SIL2/US



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]	1000
Outputs		
Electrical design		PNP
Output function		2 x OSSD (A1 and A2)
Max. voltage drop switching output DC	[V]	2.5; (30 mA)
Permanent current rating of switching output DC	[mA]	100
Output data		Interface type C class 1
Output voltage at 24 V		compatible with EN 61131-2 inputs type 1, 2
Short-circuit protection		yes
Overload protection		no
Max. capacitive load CL_max	[nF]	20
Monitoring range		
Enable zone	[mm]	1...5
Safe switching-off distance s(ar)	[mm]	7
Reaction times		
Response time to safety request	[ms]	1
Response time when approaching the enable zone	[ms]	1
Risk time (response time for safety-related faults)	[ms]	20

# GG712S



## Fail-safe inductive sensor

GIGA4005-2PS/SIL2/US

Operating conditions		
Applications	Class C to EN 60654-1 weatherproof application	
Ambient temperature [°C]	-25...70	
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
Safety classification		
ISO 13849-1	Category 2, PL d	
IEC 61508	SIL 2	
IEC 62061	SILCL 2	
Mission time TM [h]	≤ 175200	
Mission time TM (additional indication)	20 years	
Safety-related reliability PFHD [1/h]	1.0E-07	
Mechanical data		
Weight [g]	133	
Housing	Threaded type	
Mounting	flush mountable	
Dimensions [mm]	M18 x 1 / L = 70	
Thread designation	M18 x 1	
Material	brass white bronze coated; PBT	

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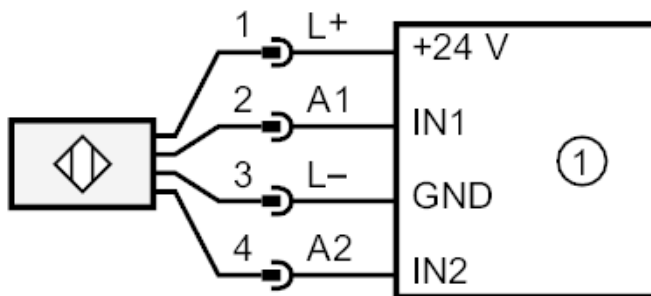
Displays / operating elements		
Display	Power	1 x LED, green
	signal	1 x LED, yellow
Accessories		
Accessories (supplied)	lock nuts: 2	
Remarks		
Remarks	Unless stated otherwise, all data refer to the reference target plate to IEC 60947-5-2 over the whole temperature range. (FE360 = ST37K) 18x18x1 mm	
Pack quantity	1 pcs.	

### Electrical connection - plug

Connector: 1 x M12; Contacts: gold-plated



### Connection



1: Safety-related logic unit