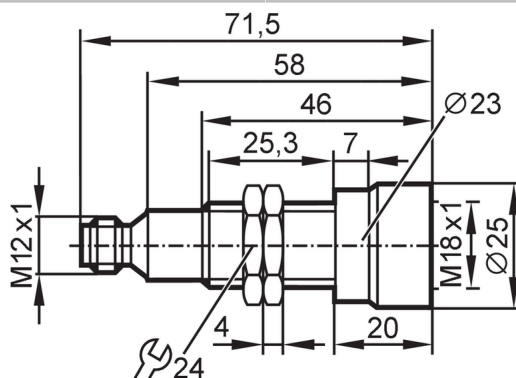


GG714S



Fail-safe inductive sensor

GIGA4008-2PS/SIL2/IV4A/US



Product characteristics

Electrical design	PNP
Output function	2 x OSSD (A1 and A2)
Enable zone [mm]	0...6.5
Housing	Threaded type
Dimensions [mm]	M18 x 1 / L = 71.5

Application

Special feature	gold-plated contacts
Type of operation	continuous operation (maintenance-free)
Safety-related sub-function	safe state when properly undamped
Application	Industrial applications

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]	0...6.5
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Fail-safe inductive sensor

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Safe switching-off distance s(ar)	[mm]	11
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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

Operating conditions

Ambient temperature	[°C]	-40...70
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
Ionizing radiation		not permissible
Salt spray		IEC 60068-2-52
Protection		IP 65; IP 67; IP 69K; (with ifm socket duly screwed on)
UV radiation		DIN ISO 4892-1, DIN ISO 4892-2
Chemical media		test according to ISO 16750-5
	The following media were tested for 22 hours at 75 °C	Liebherr Hydraulik 37
		Liebherr Hydraulik Gear ATF
		Liebherr Hydraulik Plus Arctic
		diesel
		biodiesel
		brake fluid
		urea
	The following media were tested for 22 hours at 25 °C	battery acid
		cold cleaner
		ammonia-based cleaner
	The following media were tested for 2 hours at 25 °C	wheel rim cleaner

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	

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Safety classification		
Complies with the requirements	ISO 13849-1: 2015 Category 2, PL d	
	IEC 61508 SIL 2	
	IEC 62061 SIL 2	
Mission time TM	[h]	≤ 87600
Mission time TM (additional indication)		10 years
PFH	[1/h]	1,0E-07

Mechanical data		
Weight	[g]	130
Housing		Threaded type
Mounting		non-flush mountable
Dimensions	[mm]	M18 x 1 / L = 71.5
Thread designation		M18 x 1
Material		housing: stainless steel (1.4404 / 316L); sensing face: PBT; Protective cover: PPS GF40; LED window: PA; lock nuts: stainless steel (1.4404 / 316L)

Accessories		
Items supplied		lock nuts: 2

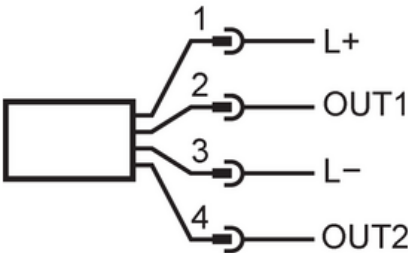
Remarks		
Remarks		Unless stated otherwise, all data refer to the reference target plate to IEC 60947-5-2 over the whole temperature range. (FE360 = ST37K) 24x24x1 mm
Pack quantity		1 pcs.

Electrical connection - plug

Connector: 1 x M12; coding: A; Contacts: 4, gold-plated; Moulded body: PPS GF40



Connection



1	L+	
2	OUT1	OSSD1
3	L-	
4	OUT2	OSSD2
OUT: Output		