

Proximity switch, inductive, 1N/O, Sn=15mm, 3L, 10-30VDC, PNP, M30, metal, M12



Part no. E57-30GU15-GDB 135986 Article no.

Catalog No. E57-30GU15-GDB

Delivery programme

Basic function			Inductive Sensors
Product range			E57 Global Series
Connection			3-wire
Design (outer dimensions)		mm	M30 x 1.5
Rated operational voltage	U _e		10 - 30 V DC
Rated switching distance	S_n	mm	15
Type of mounting			Non-flush
Switching type			PNP
For connection of:			Plug-in connection M12 x 1
Contacts			
N/O = Normally open			1 N/0
Material			Metal
Degree of Protection			IP67, IP69K

Technical data

General

Standards		IEC/EN 60947-5-2
Ambient temperature	°C	-25 - +70
Mechanical shock resistance	g	30 Shock duration 11 ms
Degree of Protection		IP67, IP69K

Characteristics			
Rated switching distance			
Rated switching distance	S_n	mm	15
Repetition accuracy of S_n		%	1
Temperature drift of S _n		%	10
Switching hysteresis of S_n		%	15
Rated operational voltage	U _e		10 - 30 V DC
Residual ripple of U _e		%	10
Maximum load current	I _e	mA	< 100
Operating current in the switched state at 24 V DC	I _b	mA	20
Voltage drop at I _e	U_{d}	V	1.5
Switching Frequency		Hz	200
Residual current through the load in the blocked state at 230 V AC and 24 V DC	I _r	mA	0.01
Switching state display		LED	Red
Protective functions			Short-circuit protective device Protection against polarity reversal Protection against wire breakage
Connection			3-wire
Contacts			
N/O = Normally open			1 N/O
Style			
Design (outer dimensions)		mm	M30 x 1.5
For connection of:			Plug-in connection M12 x 1
Material			Metal

Design verification as per IEC/EN 61439

Technical data for design verification			
Operating ambient temperature min.	°C	С	-25

Technical data ETIM 6.0

Sensors (EG000026) / Inductive proximity switch (EC002714)

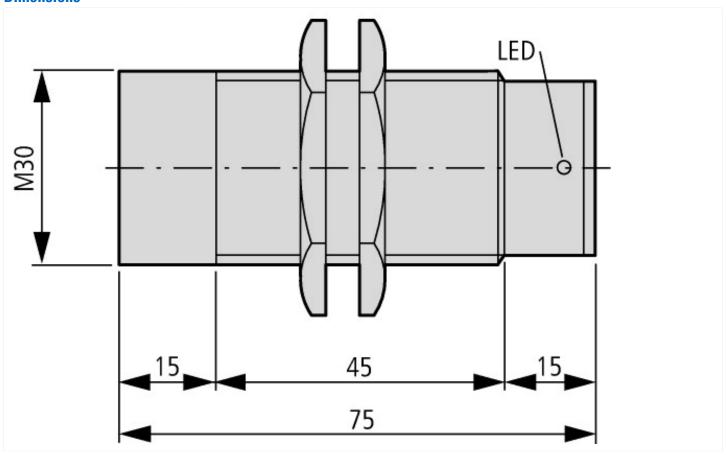
Electric engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology / Proximity switch / Inductive proximity switch (ecl@ss8.1-27-27-01-01 [AGZ376012])

Height of Sensor	(ecl@ss8.1-2/-2/-01-01 [AGZ3/6012])		
Lumptor of sensor mm 9 Diameter sensor mm 90 Mechanical mounting condition for sensor mm 15 Expectation Suitable for safety functions mm 15 Expectation Sype of switching output PNP PNP Type of switching output 10 Connector M12 Connector M12 Number of contact energized outputs with signalling function 1 Connector M12 Connector M12 Number of protected semiconductor outputs 0 Occuration Number of protected semiconductor outputs 0 Moral Type of interface 0 Moral Moral Type of interface 0 None Company Type of interface 0 None Company	Width sensor	mm	0
Diameter sensor mm 30 Mechanical mounting condition for sensor mm 15 Switching distance mm 15 Switching distance mm 10 Switching distance mm 10 Systable for safety functions mm Normally open contact Type of elswitch function mm 10 Type of switching output mm 10 Where of semiconductor outputs with signalling function mm 1 Number of protected semiconductor outputs mm 0 Number of protected contact energized outputs with signalling function mm 0 Number of protected contact energized outputs with signalling function mm 0 Number of protected contact energized outputs with signalling function mm 0 Number of protected contact energized outputs mm 0 Type of interface for safety communication mm 0 Construction type of interface for safety communication mm 0 Construction type of busing mm 0 Catagony according to EN 954-1	Height of sensor	mm	0
Mechanical mounting condition for sansor Mem B 15 Switching distance mm B 15 Suitable for safety functions 10 No Type of switch function 10 Nomally open contact Type of electric connection 10 Connector M12 Number of somiconductor outputs with signalling function 10 1 Number of protected computs with signalling function 10 0 Number of protected contact energized outputs with signalling function 10 0 Number of protected contact energized outputs 10 0 Type of actuation 10 0 Type of interface for safety communication 10 None Constitution type housing 10 None Constitution type housing 10 Vinder, scraw-thread Coatgagery according to EN 954-1 10 No Category according to EN 954-1 10 No Max. output current at protected output 10 No Subject victoring to EN 954-1 10 No Max. output current at protected output 10	Length of sensor	mm	75
Switching distance mm 15 Suitable for safety functions No Type of switch function Mormally open contact Type of switching output Connector M12 Type of switching output Connector M12 Number of some conductor outputs with signalling function Image: Contact energized outputs with signalling function Image: Contact energized outputs with signalling function Number of protected semiconductor outputs Image: Contact energized outputs Image: Contact energized outputs Number of protected contact energized outputs Image: Contact energized outputs Image: Contact energized outputs Number of protected contact energized outputs Image: Contact energized outputs Image: Contact energized outputs Number of protected contact energized outputs Image: Contact energized outputs Image: Contact energized outputs Open distance Image: Contact energized outputs Image: Contact energized outputs Image: Contact energized outputs Coasia plusing Image: Contact energized outputs Image: Contact energized outputs Image: Contact energized outputs Max. output current at protected output Image: Contact energized outputs Image: Contact energized outputs Max. output cu	Diameter sensor	mm	30
Suitable for safety functions No mailly open contact Type of switch function PNP Type of switching output Connect M12 Type of electric connection Connect M12 Number of protection outputs with signalling function Connect M12 Number of protected semiconductor outputs with signalling function Connect M12 Number of protected contact energized outputs Connect M12 Number of protected contact energized outputs Metallic Target Type of interface or protected contact energized outputs Metallic Target Type of interface for safety communication Connect M12 Construction type housing Connect M12 Coastable None Cascadable Polymer, screw-thread Max. output current at protected output MA Supply voltage V 10-30 Rated control supply voltage Us at AC 60HZ V 0 Rated control supply voltage Us at AC 60HZ	Mechanical mounting condition for sensor		Not flat
Type of switch function Normally open contact Type of switching output PNP Type of electric connection Connector M12 Number of semiconductor outputs with signalling function Incompany of semiconductor outputs with signalling function Number of protected semiconductor outputs 0 Number of protected contact energized outputs 0 Type of actuation Metallic Target Type of interface for safety communication None Construction type housing None Construction type housing None Construction type housing None Cascadable No Category according to EN 954-1 B Performance level acc. to EN ISO 13849-1 B Max. output current at protected output mA Max. output current at protected output mA Supply voltage Us at AC 50HZ V Rated control supply voltage Us at AC 50HZ V Rated control supply voltage Us at AC 50HZ V Rated control supply voltage Us at AC 50HZ V Rated control supply voltage Us at AC 50HZ V Rote of control supply	Switching distance	mm	15
Type of switching output PNP Type of electric connection Connector M12 Number of semiconductor outputs with signalling function Po Number of protected semiconductor outputs with signalling function O Number of protected semiconductor outputs O Number of protected contact energized outputs Metallic Target Type of actuation None Type of interface for safety communication None Construction type housing Cyclinder, screw-thread Cascadable None Category according to EN 954-1 B Performance level acc. to EN ISO 13849-1 B Max. output current at protected output mA Supply voltage V Rated control supply voltage Us at AC 50HZ V Rated control supply voltage Us at AC 50HZ V Rated control supply voltage Us at AC 50HZ V Rated control supply voltage Us at AC 50HZ V Rated control supply voltage Us at AC 50HZ V Rated control supply voltage Us at AC 50HZ V Rated control supply voltage Us at AC 50HZ V Rated control su	Suitable for safety functions		No
Type of electric connection Connector M12 Number of semiconductor outputs with signalling function 1 Number of contact energized outputs with signalling function 0 Number of protected semiconductor outputs 0 Number of protected contact energized outputs 0 Number of protected contact energized outputs Metallic Target Type of actuation None Type of interface for safety communication None Construction type housing Cylinder, screw-thread Cascadable No Category according to EN 954-1 B Performance level acc. to EN 180 13849-1 B Max. output current at protected output MA Supply voltage V 10 - 30 Rated control supply voltage Us at AC 50HZ V 0 - 0 Rated control supply voltage Us at AC 50HZ V 0 - 0 Rated control supply voltage Us at AC 50HZ V 0 - 0 Rated control supply voltage Us at AC 50HZ V 0 - 0 Rated control supply voltage Us at AC 50HZ V 0 - 0 With monitoring function downstream switching devices	Type of switch function		Normally open contact
Number of semiconductor outputs with signalling function Number of contact energized outputs with signalling function Number of protected semiconductor outputs Number of protected contact energized outputs None None None None Construction type of interface None Construction type housing Coating housing Cascadable None Cascadable None Category according to EN 954-1 Reformance level act. to EN ISO 13849-1 None Number of protected output Number of protected outp	Type of switching output		PNP
Number of contact energized outputs with signalling function Number of protected semiconductor outputs Number of protected contact energized outputs Type of actuation Type of interface Typ	Type of electric connection		Connector M12
Number of protected semiconductor outputs 0 Number of protected contact energized outputs 0 Type of actuation Metallic Target Type of interface None Type of interface for safety communication Construction type housing Coasting housing Cylinder, screw-thread Cascadable No Category according to EN 954-1 B Performance level acc. to EN ISO 13849-1 A Max. output current at protected output MA Supply voltage Us at AC 50HZ V Rated control supply voltage Us at AC 50HZ V Rated control supply voltage Us at AC 60HZ V Rated control supply voltage Us at AC 60HZ V Rated control supply voltage Us at AC 60HZ V Rated control supply voltage Us at AC 60HZ V Rated control supply voltage Us at AC 60HZ V Ovitage type DC Switching frequency HZ With monitoring function downstream switching devices Metal Material housing Metal Compression-resistant None Explosion safety	Number of semiconductor outputs with signalling function		1
Number of protected contact energized outputs 6 Type of actuation Metallic Target Type of interface None Type of interface for safety communication None Construction type housing Cylinder, screw-thread Cascadable No Category according to EN 954-1 B Performance level acc. to EN ISO 13849-1 Y Max. output current at protected output MA Supply voltage Y Rated control supply voltage Us at AC 50HZ Y Rated control supply voltage Us at AC 60HZ Y Rated control supply voltage Us at AC 60HZ Y Rated control supply voltage Us at AC 60HZ Y Voltage type DC Switching frequency HZ With monitoring function downstream switching devices HZ Material housing Metal Compression-resistant No Explosion safety category for dust None Explosion safety category for dust None	Number of contact energized outputs with signalling function		0
Type of actuation Type of interface Type of interface for safety communication Type of interface for safety category for dust	Number of protected semiconductor outputs		0
Type of interface None Type of interface for safety communication None Construction type housing Cylinder, screw-thread Coating housing - Cascadable No Category according to EN 954-1 B Performance level acc. to EN ISO 13849-1 MAX Max. output current at protected output MA 0 Supply voltage V 10 - 30 Rated control supply voltage Us at AC 50HZ V 0 - 0 Rated control supply voltage Us at AC 60HZ V 0 - 0 Rated control supply voltage Us at DC V 0 - 0 Voltage type DC DC Switching frequency Hz 200 With monitoring function downstream switching devices Hz 200 Material housing Metal Compression-resistant No Metal Explosion safety category for gas None None	Number of protected contact energized outputs		0
Type of interface for safety communication Construction type housing Coating housing Cascadable Category according to EN 954-1 Performance level acc. to EN ISO 13849-1 Max. output current at protected output V 10-30 Rated control supply voltage Us at AC 50HZ Rovitching frequency Voltage type Cowitching frequency With monitoring function downstream switching devices Material housing Compression-resistant Explosion safety category for gas Explosion safety category for dust None	Type of actuation		Metallic Target
Costruction type housing Coating housing Cascadable Category according to EN 954-1 Performance level acc. to EN ISO 13849-1 Max. output current at protected output Max. output current at protected output Max. output current at protected output V 10 - 30 Rated control supply voltage Us at AC 50HZ Rated control supply voltage Us at AC 60HZ V 0 - 0 Rated control supply voltage Us at AC 60HZ Rated control supply	Type of interface		None
Coating housing Cascadable Category according to EN 954-1 Performance level acc. to EN ISO 13849-1 Max. output current at protected output Max. output output at AC 50HZ V 0 - 0 0 -	Type of interface for safety communication		None
Cascadable Category according to EN 954-1 Performance level acc. to EN ISO 13849-1 Max. output current at protected output Max. output output output output Max. output output output Max. output output output Max. output output output Max. ou	Construction type housing		Cylinder, screw-thread
Category according to EN 954-1 Performance level acc. to EN ISO 13849-1 Max. output current at protected output Max. output current at protected output Supply voltage V 10 - 30 Rated control supply voltage Us at AC 50HZ Rated control supply voltage Us at AC 60HZ V 0 - 0 Rated control supply voltage Us at DC Voltage type DC Switching frequency With monitoring function downstream switching devices Material housing Compression-resistant Explosion safety category for dust Explosion safety category for dust	Coating housing		-
Performance level acc. to EN ISO 13849-1 Max. output current at protected output Max. output current at protected output Supply voltage Rated control supply voltage Us at AC 50HZ Rated control supply voltage Us at AC 60HZ Rated control supply voltage Us at AC 60HZ V 0 - 0 Rated control supply voltage Us at DC Voltage type DC Switching frequency With monitoring function downstream switching devices Material housing Compression-resistant Explosion safety category for gas Explosion safety category for dust Max. output Compression— mAx 0 10 - 30 1	Cascadable		No
Max. output current at protected output Supply voltage Rated control supply voltage Us at AC 50HZ Rated control supply voltage Us at AC 60HZ Rated control supply voltage Us at AC 60HZ Roted control supply voltage Us at DC Voltage type Voltage type Voltage type Voltage type Voltage type Voltage in equency With monitoring function downstream switching devices Material housing Compression-resistant Explosion safety category for gas Explosion safety category for dust Max. output Compression-resistant Max. ol Pale All Compression-resistant No None None	Category according to EN 954-1		В
Supply voltage Rated control supply voltage Us at AC 50HZ Rated control supply voltage Us at AC 60HZ Rated control supply voltage Us at AC 60HZ V 0 - 0 Rated control supply voltage Us at AC 60HZ V 10 - 30 Voltage type DC Switching frequency With monitoring function downstream switching devices Material housing Compression-resistant Compression-resistant Explosion safety category for gas Explosion safety category for dust V 10 - 30 V 10 - 30 V 10 - 30 V 10 - 30 N 10 - 3	Performance level acc. to EN ISO 13849-1		-
Rated control supply voltage Us at AC 50HZ Rated control supply voltage Us at AC 60HZ V 0 - 0 Rated control supply voltage Us at AC 60HZ V 10 - 30 Voltage type DC Switching frequency With monitoring function downstream switching devices Material housing Compression-resistant Explosion safety category for dust V 0 - 0 0 -	Max. output current at protected output	mA	0
Rated control supply voltage Us at AC 60HZ Rated control supply voltage Us at DC V 10 - 30 Voltage type DC Switching frequency With monitoring function downstream switching devices Material housing Compression-resistant Explosion safety category for gas Explosion safety category for dust V 0 - 0 10 - 30 NO DC Metal No Metal No No No Noe Noe	Supply voltage	V	10 - 30
Rated control supply voltage Us at DC Voltage type DC Switching frequency With monitoring function downstream switching devices Material housing Compression-resistant Explosion safety category for dust No 10 - 30 10 - 30 No Metal No Metal No No No No No No No No No N	Rated control supply voltage Us at AC 50HZ	V	0 - 0
Voltage type Switching frequency With monitoring function downstream switching devices Material housing Compression-resistant Compression safety category for gas Explosion safety category for dust DC No Metal No No No No No No No No No N	Rated control supply voltage Us at AC 60HZ	V	0 - 0
Switching frequency With monitoring function downstream switching devices Material housing Compression-resistant Explosion safety category for dust Hz 200 No Metal No Metal No No None None	Rated control supply voltage Us at DC	V	10 - 30
With monitoring function downstream switching devices Material housing Compression-resistant Compression safety category for gas Explosion safety category for dust No None	Voltage type		DC
Material housing Compression-resistant Explosion safety category for dust Metal No No No None None	Switching frequency	Hz	200
Compression-resistant Explosion safety category for dust No No None None	With monitoring function downstream switching devices		No
Explosion safety category for gas None None None	Material housing		Metal
Explosion safety category for dust None	Compression-resistant		No
	Explosion safety category for gas		None
Interference resistance to magnetic fields -	Explosion safety category for dust		None
	Interference resistance to magnetic fields		-

Approvals

UL 508; CSA-C22.2 No. 14; IEC60947-5-2; CE marking
CSA report applies to both Canada and US
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224447
4652-04 / 4652-84
CSA certified, certified by CSA for use in the US
30 V DC
IEC: IP67, IP69K; UL/CSA Type: -

Dimensions



Additional product information (links)

IL05301002Z Global Series Inductive Sensors

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ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL05301002Z2012_08.pdf