DATASHEET - E59-A18C115D01-C1



Proximity Sensor, M18, analog, Sn=1-15mm, 15-30VDC, 4-20mA, M12



E59-A18C115D01-C1 Part no. 166808 Catalog No. Alternate Catalog E59-A18C115D01-C1 No.

Delivery program

71 0			
asic function			Inductive Sensors
roduct range			E59 AccuProx Series
escription			Current output (4 - 20 mA)
onnection			3-wire/4-wire
esign (outer dimensions)		mm	M18 x 1
ated operational voltage	U _e		15 - 30 V DC
ated switching distance	S_n	mm	1 - 15
ype of mounting			Non-flush
witching type			Analog
or connection of:			Plug-in connection M12 x 1
1aterial			Stainless steel
egree of Protection			IP67

Technical data

General

Standards			IEC/EN 60947-5-2
Ambient temperature			-40 - +70
Mechanical shock resistance		g	30 Shock duration 11 ms
Degree of Protection			IP67
Characteristics			
Repetition accuracy of S_n		%	1
Temperature drift of S _n		%	10
Rated operational voltage	U _e		15 - 30 V DC
Switching state display		LED	Red

Operating voltage display	LED	Green
Connection		3-wire/4-wire
Style		

M18 x 1 Design (outer dimensions) For connection of: Plug-in connection M12 x 1

Material Stainless steel

Design verification as per IEC/EN 61439

Technical data for design verification		
Operating ambient temperature min.	°C	-40
Operating ambient temperature max.	°C	70

Technical data ETIM 7.0

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@ss10.0.1-27-27-01-01 [AGZ376015])				
Width sensor	mm	0		
Height of sensor	mm	0		
Length of sensor	mm	69.3		
Diameter sensor	mm	18		
Mechanical mounting condition for sensor Not flat				
Switching distance	mm	15		

Skindahle for safety functions Mo Other Type of switch function Cheege of Switching output Other Type of electric connection Cheege of Switching output with signalling function Cheege of Switching outputs with signalling function			
Type of switching output Chter Type of electric connection Other Number of semiconductor outputs with signalling function O Number of protected contact energized outputs with signalling function O Number of protected contact energized outputs with signalling function O Number of protected contact energized outputs O Type of actuation Metallic Target Type of interface None Obstraction type housing O Coating housing O Category a coording to EN 954-1 None SIL according to EN 954-1 B SIL according to EN 954-1 None SIL according to EX 954-1 None SUPPLY VORTING ARCHITECTURE	Suitable for safety functions		No
Type of electric connection Other Number of semiconductor outputs with signalling function O Number of protected semiconductor outputs O Number of protected semiconductor outputs O Number of protected contact energized outputs O Type of interface for protected contact energized outputs Metallic Target Type of interface None Type of interface for safety communication None Construction type housing Other Coascadable Other Category according to EN 954-1 B SIL according to ELC 91508 None Performance level acc. EN ISO 13849-1 None Max. output current at protected output mA 20 Supply voltage Y 15-30 Rated control supply voltage Us at AC 50HZ Y 0-0 Rated control supply voltage Us at AC 60HZ Y 0-0 Rated control supply voltage Us at AC 60HZ Y 0-0 Rated control supply voltage Us at AC 60HZ Y 0-0 Rated control supply voltage Us at AC 60HZ Y 0-0 <t< td=""><td>Type of switch function</td><td></td><td>Other</td></t<>	Type of switch function		Other
Number of semiconductor outputs with signalling function 0 Number of contact energized outputs with signalling function 0 Number of protected semiconductor outputs 0 Number of protected contact energized outputs 0 Type of actuation Metallic Target Type of actuation None Construction type of interface for safety communication None Construction type housing Civilider, screw-thread Cassadable None Category according to EN 954-1 None St. according to EC 61508 None Performance level acc. EN ISO 13849-1 None Max. output current at protected output MA 20 Supply voltage Y 15-30 Rated control supply voltage Us at AC 50HZ Y 0-0 Rated control supply voltage Us at AC 50HZ Y 15-30 Rated control supply voltage Us at AC 50HZ Y 15-30 Rated control supply voltage Us at AC 50HZ Y 15-30 With monitoring function downstream switching devices ME 10 With monitoring function downstream switching devices	Type of switching output		Other
Number of contact energized outputs with signalling function 0 Number of protected semiconductor outputs 0 Number of protected contact energized outputs 0 Type of actuation Metallic Target Type of actuation None Construction of protected consect energized outputs Cylinder, screw-thread Construction of protected contact energized outputs Cylinder, screw-thread Construction of protected safety communication Cylinder, screw-thread Coating housing Other Cascadable None Catagory according to EN 954-1 B St. according to EC 61508 None Performance level acc. EN 180 13849-1 None Max. output current at protected output mA 2 Supply voltage V 15-30 Rated control supply voltage Us at AC 50HZ V 0-0 Rated control supply voltage Us at AC 50HZ V 15-30 Rated control supply voltage Us at AC 50HZ V 15-30 Voltage type D D Voltage type D D With monitorin	Type of electric connection		Other
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 Cylinder, screw-thread Coating housing Cylinder, screw-thread Category according to EN 954-1 None SLI according to IEC 61508 None Performance level acc. EN ISO 13849-1 None Max. output current at protected output MA 20 Supply voltage V 15 - 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 AC 60HZ V 0 - 0 Rated control supply voltage Us at AC 60HZ V 0 - 0 Switching frequency MA 10 With monitoring function downstream switching devices Material housing Metal Compression-resistant None None Explosion safety category for dust None None	Number of semiconductor outputs with signalling function		0
Number of protected contact energized outputs Type of actuation Type of interface Type of interface Type of interface Type of interface for safety communication Type of interface for safety communication Type of interface for safety communication Type of interface for safety communication Type of interface for safety communication Type of interface for safety category for dust Type of interface for safety communication Ty	Number of contact energized outputs with signalling function		0
Type of actuation Metallic Target Type of interface None Type of interface for safety communication None Construction type housing Cylinder, screw-thread Coating housing Other Cascadable None Category according to EN 954-1 B SIL according to EN 954-1 None SIL according to EN 150 13849-1 None Max. output current at protected output MA 20 Max. output current at protected output MA 20 Supply voltage V 15 - 30 Rated control supply voltage Us at AC 50HZ V 0 Rated control supply voltage Us at AC 60HZ V 15 - 30 Rated control supply voltage Us at AC 60HZ V 15 - 30 Voltage type D 0 Voltage type D 0 Witching frequency HZ 100 Witch monitoring function downstream switching devices None Material housing Material housing None Compression-resistant None	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 Other Cascadable None Category according to EN 954-1 B SIL according to IEC 61508 None Performance level acc. EN ISO 13849-1 None Max. output current at protected output mA 20 Supply voltage V 15 - 30 Rated control supply voltage Us at AC 60HZ V 0 - 0 Rated control supply voltage Us at AC 60HZ 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 100 With monitoring function downstream switching devices Metal Material housing Metal Compression-resistant None Explosion safety category for gas None Explosion safety category for dust None	Number of protected contact energized outputs		0
Type of interface for safety communication None Construction type housing Cylinder, screw-thread Caseadable Other Caseadable None Category according to EN 954-1 B SIL according to IEC 61508 None Performance level acc. EN ISO 13849-1 None Max. output current at protected output M None Supply voltage V 15 - 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 AC 60HZ V 0 - 0 Rated control supply voltage Us at DC V 0 - 0 Voltage type DC DC Switching frequency ME Mo With monitoring function downstream switching devices ME No Material housing Metal Metal Compression-resistant None None Explosion safety category for gas None None	Type of actuation		Metallic Target
Costruction type housing Coating housing Coating housing Cascadable Category according to EN 954-1 SIL according to EN 954	Type of interface		None
Coating housing Cascadable Category according to EN 954-1 SIL accordin	Type of interface for safety communication		None
Cascadable Category according to EN 954-1 SIL according to IEC 61508 Performance level acc. EN ISO 13849-1 Max. output current at protected output Mate ontrol 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 AC 60HZ V 0 - 0 Voltage type DC Switching frequency With monitoring function downstream switching devices Material housing Material housing Compression-resistant Compression-resistant Explosion safety category for gas Explosion safety category for dust None	Construction type housing		Cylinder, screw-thread
Category according to EN 954-1 SIL according to IEC 61508 Performance level acc. EN ISO 13849-1 Max. output current at protected output Max. output current at protected output Max. output current at protected output Name 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 Rated control supply voltage Us at DC Voltage type Voltage type Voltage type With monitoring function downstream switching devices Material housing Compression-resistant Compression-resistant Explosion safety category for dust Mone None None None None None	Coating housing		Other
SIL according to IEC 61508 Performance level acc. EN ISO 13849-1 Max. output current at protected output max Supply voltage 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 0 - 0 Rated control supply voltage Us at AC 60HZ V 0 - 0 Rated control supply voltage Us at AC 60HZ V V 15 - 30 Voltage type DC Switching frequency Hz 100 With monitoring function downstream switching devices Material housing Compression-resistant Explosion safety category for gas Explosion safety category for dust None None	Cascadable		No
Performance level acc. 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 O-0 Rated control supply voltage Us at DC Voltage type Voltage	Category according to EN 954-1		В
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 Roted control supply voltage Us at DC Roted control supply voltage Us at DC Voltage type Voltage type Voltage type Voltage type Voltage type Voltage in perquency With monitoring function downstream switching devices Material housing Compression-resistant Explosion safety category for gas Explosion safety category for dust Voltage type Voltage type Voltage type Voltage type Voltage type Voltage Us at AC 60HZ Voltage	SIL according to IEC 61508		None
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 Rated control supply voltage Us at DC V 15 - 30 V 15 - 30 V 15 - 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 None	Performance level acc. EN ISO 13849-1		None
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 AC 60HZ V 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 Compression-resistant Explosion safety category for dust No No No No No No No No No N	Max. output current at protected output	mA	20
Rated control supply voltage Us at AC 60HZ Rated control supply voltage Us at DC Voltage type Voltage type Switching frequency With monitoring function downstream switching devices Material housing Compression-resistant Explosion safety category for dust V 0 - 0 15 - 30 DC NO Metal NO Metal No Metal No No No No No No No No No N	Supply voltage	V	15 - 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 gas Explosion safety category for dust V 15 - 30 DC 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 Explosion safety category for dust DC Material housing 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 100 Metal No Metal No Switching frequency Metal No No None None	Rated control supply voltage Us at DC	V	15 - 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 housingMetalCompression-resistantNoExplosion safety category for gasNoneExplosion safety category for dustNone	Switching frequency	Hz	100
Compression-resistant No Explosion safety category for gas Explosion safety category for dust None	With monitoring function downstream switching devices		No
Explosion safety category for gas None Explosion safety category for dust 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

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Product Standards	UL 508; CSA-C22.2 No. 14; IEC60947-5-2; CE marking
UL File No.	E166051
UL Category Control No.	NRKH, NRKH7
CSA File No.	50513
CSA Class No.	3211-03
North America Certification	UL listed, CSA certified
Max. Voltage Rating	30 V DC
Degree of Protection	IEC: IP67; UL/CSA Type: 4, 4x, 6, 6P, 12, 13

Assets (links)

Declaration of CE Conformity

00003158

Instruction Leaflets

IL05301010Z2018_05

Additional product information (links)

IL05301010Z AccuProx Series Analog Inductive Sensors

IL05301010Z AccuProx Series Analog Inductive ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL05301010Z2018_05.pdf Sensors