



Proximity Sensor, M12, analog,  $S_n=0.5-4\text{mm}$ , 15-30VDC, 4-20mA, M12

**Part no.** E59-A12A104D01-C1  
**Catalog No.** 166833  
**Alternate Catalog No.** E59-A12A104D01-C1

### Delivery program

Basic function			Inductive Sensors
Product range			E59 AccuProx Series
Description			Current output (4 - 20 mA)
Connection			3-wire/4-wire
Design (outer dimensions)		mm	M12 x 1
Rated operational voltage	$U_e$		15 - 30 V DC
Rated switching distance	$S_n$	mm	0.5 - 4
Type of mounting			Flush
Switching type			Analog
For connection of:			Plug-in connection M12 x 1
Material			Stainless steel
Degree 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 $S_n$		%	3
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			
Design (outer dimensions)		mm	M12 x 1
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@ss10.0.1-27-01-01 [AGZ376015])			
Width sensor		mm	0
Height of sensor		mm	0
Length of sensor		mm	77.5
Diameter sensor		mm	12
Mechanical mounting condition for sensor			Concise
Switching distance		mm	4

Suitable for safety functions			No
Type of switch function			Other
Type of switching output			Other
Type of electric connection			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 interface			None
Type of interface for safety communication			None
Construction type housing			Cylinder, screw-thread
Coating housing			Other
Cascadable			No
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 50HZ		V	0 - 0
Rated control supply voltage Us at AC 60HZ		V	0 - 0
Rated control supply voltage Us at DC		V	15 - 30
Voltage type			DC
Switching frequency		Hz	200
With monitoring function downstream switching devices			No
Material housing			Metal
Compression-resistant			No
Explosion safety category for gas			None
Explosion safety category for dust			None
Interference resistance to magnetic fields			

## Approvals

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 Sensors [ftp://ftp.moeller.net/DOCUMENTATION/AWA\\_INSTRUCTIONS/IL05301010Z2018\\_05.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL05301010Z2018_05.pdf)