



Proximity Sensor, M12, analog,  $S_n=0.5-4\text{mm}$ , 15-30VDC, 0-20mA, 0-10V, M12

**Part no.** E59-A12A104D01-CV  
**Catalog No.** 166834  
**Alternate Catalog No.** E59-A12A104D01-CV

## Delivery program

Basic function			Inductive Sensors
Product range			E59 AccuProx Series
Description			Current output (0 - 20 mA) and voltage output (0 - 10 V)
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

## Additional product information (links)

<b>IL05301010Z AccuProx Series Analog Inductive Sensors</b>	
IL05301010Z AccuProx Series Analog Inductive Sensors	<a href="https://es-assets.eaton.com/DOCUMENTATION/AWA_INSTRUCTIONS/IL05301010Z2018_05.pdf">https://es-assets.eaton.com/DOCUMENTATION/AWA_INSTRUCTIONS/IL05301010Z2018_05.pdf</a>