



Proximity switch, inductive, 1N/O,  $S_n=4\text{mm}$ , 2L, 40-250VAC, 20-250VDC, M12, metal, M12

**EATON**

Powering Business Worldwide™

Part no. **E57SAL12A2EA**  
 Article no. **136092**  
 Catalog No. **E57SAL12A2EA**

## Delivery program

Basic function			Inductive Sensors
Product range			E57 Premium+ Short-Series
Connection			2-wire
Design (outer dimensions)		mm	M12 x 1
Rated operational voltage	$U_e$		40 - 250 V AC 20 - 250 V DC
Rated switching distance	$S_n$	mm	4
Type of mounting			Non-flush
For connection of:			Plug-in connection M12 x 1
<b>Contacts</b>			
N/O = Normally open			1 N/O
Material			Stainless steel
Degree of Protection			IP67

## Technical data

### General

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

### Characteristics

Rated switching distance			
Rated switching distance	$S_n$	mm	4
Repetition accuracy of $S_n$		%	3
Temperature drift of $S_n$		%	10
Switching hysteresis of $S_n$		%	20
Rated operational voltage	$U_e$		40 - 250 V AC 20 - 250 V DC
Operating current in the switched state at 24 V DC	$I_b$	mA	10
Maximum load current	$I_e$	mA	< 250 (25 °C) / 200 (70 °C)
Voltage drop at $I_e$	$U_d$	V	2.5
Switching Frequency		Hz	60
Min. load current	$I_e$	mA	1
Residual current through the load in the blocked state at 230 V AC and 24 V DC	$I_r$	mA	0.1
Switching state display		LED	Red
Connection			2-wire
Contacts			
N/O = Normally open			1 N/O
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	-25
Operating ambient temperature max.		°C	70

## 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		250 V AC, 250 V DC
Degree of Protection		IEC: IP67; UL/CSA Type: 4, 4x, 6, 6P, 12, 13

## Dimensions

 Sensor surface

## Additional product information (links)

### IL05301003Z Premium Plus Series Inductive Sensors +Short, +Miniature

IL05301003Z Premium Plus Series Inductive Sensors +Short, +Miniature [ftp://ftp.moeller.net/DOCUMENTATION/AWA\\_INSTRUCTIONS/IL05301003Z2016\\_07.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL05301003Z2016_07.pdf)