



Proximity switch, capacitive,  $S_n=20\text{mm}$ , 1N/O, 3L, PNP, 10-30VDC, M30, insulated material, M12

Part no. E53KAL30T111SD  
 Catalog No. 134780  
 Alternate Catalog No. E53KAL30T111SD  
 EL-Nummer (Norway) 0004315325

### Delivery program

Basic function			Capacitive sensors
Product range			E53 Capacitive 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	20
Type of mounting			Flush
Switching type			PNP
For connection of:			Plug-in connection M12 x 1
<b>Contacts</b>			
N/O = Normally open			1 N/O
Material			Insulated material
Degree of Protection			IP65

### Technical data

#### General

Standards			IEC/EN 60947-5-2-EMC
Ambient temperature			-25 - +70
Mechanical shock resistance		g	30 Shock duration 11 ms
Degree of Protection			IP65

#### Characteristics

Rated switching distance			
Rated switching distance	$S_n$	mm	20
Repetition accuracy of $S_n$		%	10
Temperature drift of $S_n$		%	10
Switching hysteresis of $S_n$		%	20
Rated operational voltage	$U_e$		10 - 30 V DC
Residual ripple of $U_e$		%	10
Maximum load current	$I_e$	mA	< 300
Operating current in the switched state at 24 V DC	$I_b$	mA	10
Voltage drop at $I_e$	$U_d$	V	2
Switching Frequency		Hz	250
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
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			Insulated material

## Design verification as per IEC/EN 61439

Technical data for design verification			
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	70

## Technical data ETIM 7.0

Sensors (EG000026) / Capacitive proximity switch (EC002715)			
Electric engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology / Proximity switch / Capacitive proximity switch (ecl@ss10.0.1-27-27-01-02 [AGZ377015])			
Width sensor		mm	0
Height of sensor		mm	0
Length of sensor		mm	80
Diameter sensor		mm	30
Mechanical mounting condition for sensor			Concise
Switching distance		mm	20
Suitable for safety functions			No
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			1
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			Other
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	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	10 - 30
Voltage type			DC
Switching frequency		Hz	250
With monitoring function downstream switching devices			No
With status indication			Yes
Material housing			Plastic
Compression-resistant			No
Explosion safety category for gas			None
Explosion safety category for dust			None

## Approvals

Product Standards			CE marking
Max. Voltage Rating			250 V AC, 30 V DC
Degree of Protection			IEC: IP65; UL/CSA: NEMA 4, 12, 13

## Dimensions



① Sensitivity setting



## Assets (links)

[Declaration of CE Conformity](#)

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[Instruction Leaflets](#)

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## Additional product information (links)

IL05307002Z E53 Series Capacitive Sensors

IL05307002Z E53 Series Capacitive Sensors [ftp://ftp.moeller.net/DOCUMENTATION/AWA\\_INSTRUCTIONS/IL05307002Z2018\\_05.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL05307002Z2018_05.pdf)

