### **DATASHEET - E53KAL30T111SD**



Proximity switch, capacitive, Sn=20mm, 1N/0, 3L, PNP, 10-30VDC, M30, insulated material, M12



Part no. E53KAL30T111SD Catalog No. 134780

**Alternate Catalog** 

E53KAL30T111SD

No.

EL-Nummer 0004315325

(Norway)

#### **Delivery program**

		Capacitive sensors
		E53 Capacitive Series
		3-wire
	mm	M30 x 1.5
U <sub>e</sub>		10 - 30 V DC
$S_n$	mm	20
		Flush
		PNP
		Plug-in connection M12 x 1
		1 N/0
		Insulated material
		IP65
		U <sub>e</sub>

#### **Technical data**

#### General

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 <sub>n</sub>		%	10
Temperature drift of S <sub>n</sub>		%	10
Switching hysteresis of $S_n$		%	20
Rated operational voltage	U <sub>e</sub>		10 - 30 V DC
Residual ripple of $U_{\rm e}$		%	10
Maximum load current	l <sub>e</sub>	mA	< 300
Operating current in the switched state at 24 V DC	I <sub>b</sub>	mA	10
Voltage drop at I <sub>e</sub>	$U_{d}$	V	2
Switching Frequency		Hz	250
Residual current through the load in the blocked state at 230 V AC and 24 V DC $$	I <sub>r</sub>	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/0
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

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

### **Technical data ETIM 7.0**

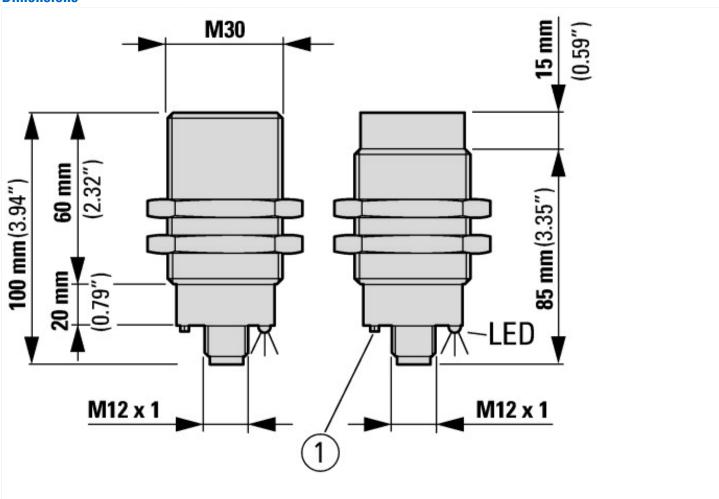
Senso	rs (EG000026) / Capacitive proximity switch (EC002715)
Electri	ic engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology / Proximity switch / Capacitive proximity switch

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		В
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

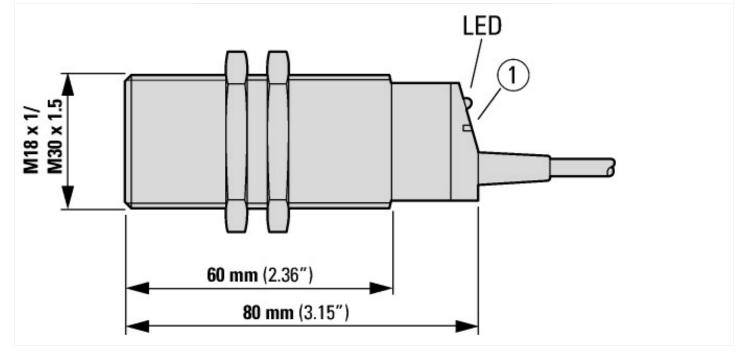
## Approvals

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** 

IL05307002Z2018\_05

### **Additional product information (links)**

IL05307002Z E53 Series Capacitive Sensors

IL05307002Z E53 Series Capacitive Sensors

ftp://ftp.moeller.net/DOCUMENTATION/AWA\_INSTRUCTIONS/IL05307002Z2018\_05.pdf