

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
Contacts			
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

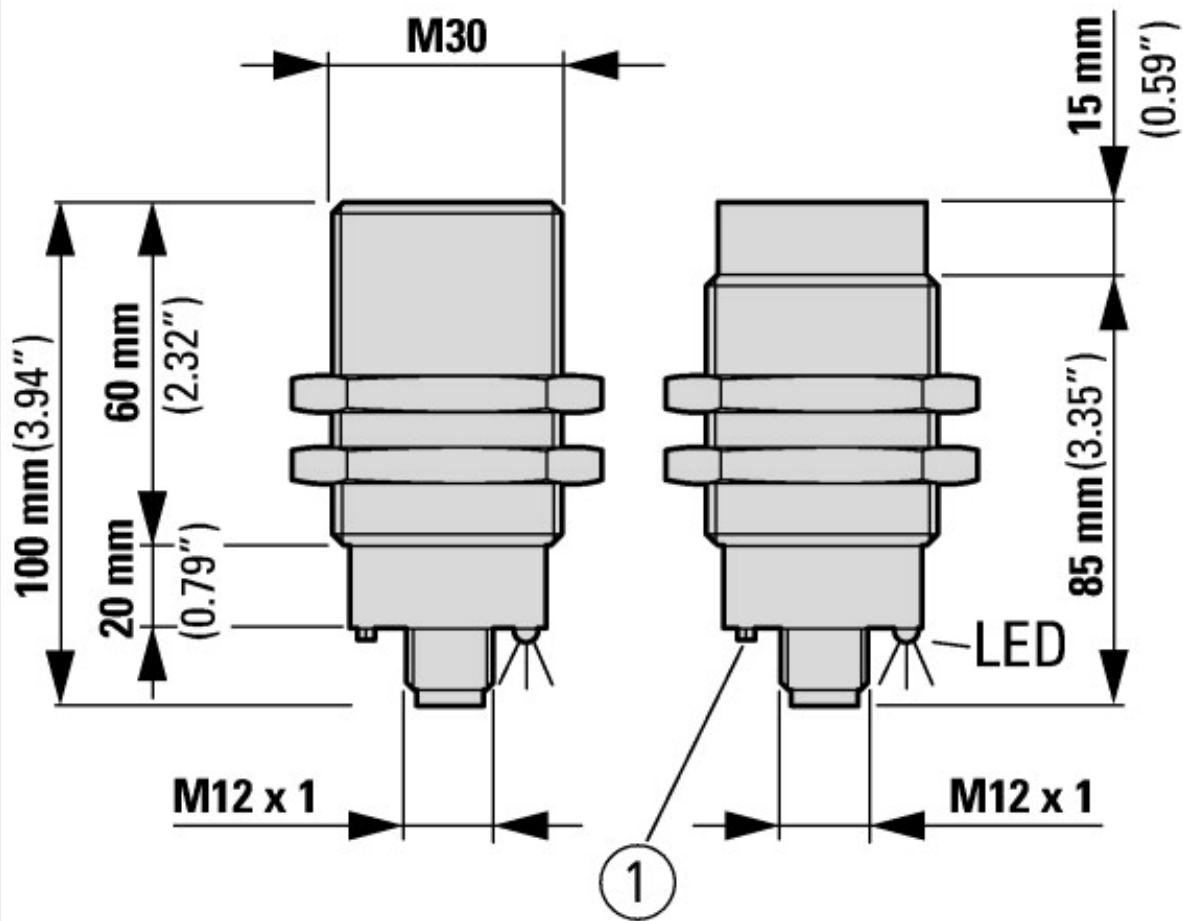
Technical data for design verification			
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	70

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 (ecI@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



① Sensitivity setting

