DATASHEET - E53KAL18A2

Proximity switch, capacitive, Sn=8mm, 1N/O, 2L, 20-250VAC, M18, insulated material, line 2m

Powering Business Worldwide

Part no.	**E53KAL18A2**
Catalog No.	**134517**
Alternate Catalog No.	**E53KAL18A2**

Delivery program

Basic function			Capacitive sensors
Product range			E53 Capacitive Series
Connection			2-wire
Design (outer dimensions)		mm	M18 x 1
Rated operational voltage	U_e		20 - 250 V AC
Rated switching distance	S_n	mm	8
Type of mounting			Flush
For connection of:			2 m connection cable
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	8
Repetition accuracy of S_n		%	10
Temperature drift of S_n		%	10
Switching hysteresis of S_n		%	20
Rated operational voltage	U_e		20 - 250 V AC
Supply frequency			50 - 60
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	2.5
Voltage drop at I_e	U_d	V	9
Switching Frequency		Hz	15
Min. load current	I_e	mA	5
Short-time current (10 ms, 5 Hz)		A	5
Residual current through the load in the blocked state at 230 V AC and 24 V DC	I_r	mA	2.5
Switching state display		LED	Red
Connection			2-wire
Contacts			
N/O = Normally open			1 N/O
Style			
Design (outer dimensions)		mm	M18 x 1
For connection of:			2 m connection cable
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)

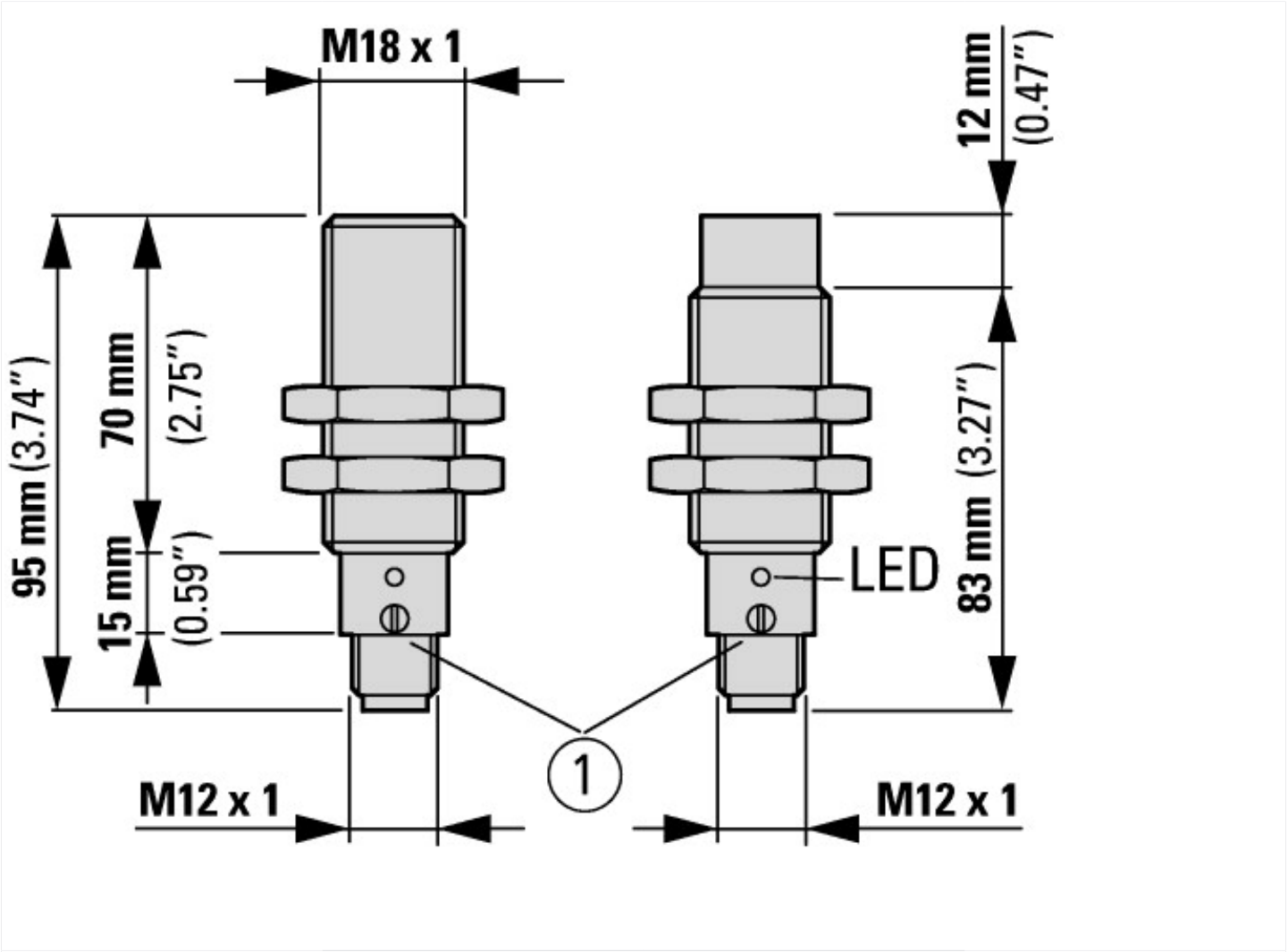
Electric engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology / Proximity switch / Capacitive proximity switch (ecl@ss10.0.1-27-27-01-02 [AGZ377015])

Width sensor	mm	0
Height of sensor	mm	0
Length of sensor	mm	80
Diameter sensor	mm	18
Mechanical mounting condition for sensor		Concise
Switching distance	mm	8
Suitable for safety functions		No
Type of switch function		Normally open contact
Type of switching output		Two-wire
Type of electric connection		Cable
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	20 - 250
Rated control supply voltage Us at AC 50HZ	V	20 - 250
Rated control supply voltage Us at AC 60HZ	V	20 - 250
Rated control supply voltage Us at DC	V	0 - 0
Voltage type		AC
Switching frequency	Hz	15
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

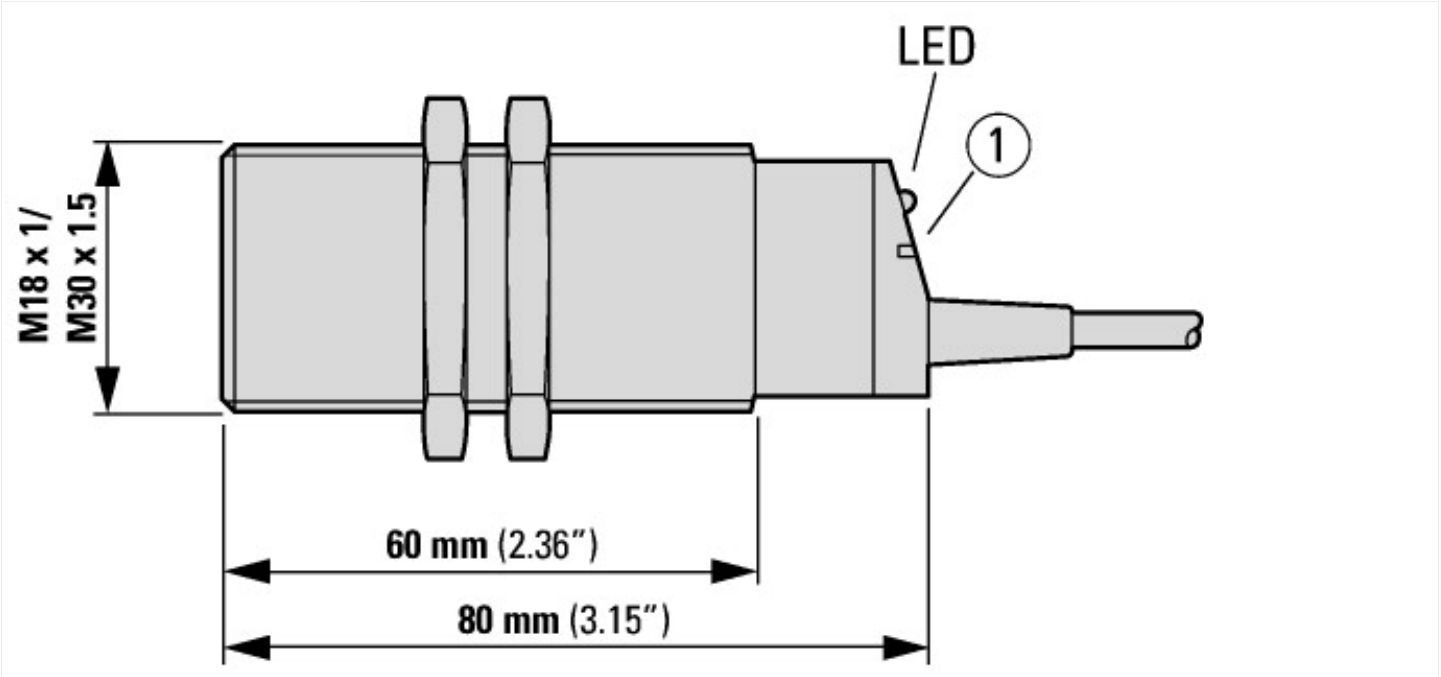
Approvals

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