



Proximity switch, inductive, 1N/O, Sn=4mm, 3L, 6-48VDC, NPN, M12, metal, M12

Part no. E57LAL12T110ED
Catalog No. 136001
Eaton Catalog No. E57LAL12T110ED

Delivery program

Basic function			Inductive Sensors
Product range			E57 Premium+ Series
Connection			3-wire
Design (outer dimensions)		mm	M12 x 1
Rated operational voltage	U_e		6 - 48 V DC
Rated switching distance	S_n	mm	4
Type of mounting			Non-flush
Switching type			NPN
For connection of:			Plug-in connection M12 x 1
Contacts			
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		%	15
Rated operational voltage	U_e		6 - 48 V DC
Maximum load current	I_e	mA	< 5
Maximum load current	I_e	mA	< 500 (6 - 30 V DC)
Voltage drop at I_e	U_d	V	7
Switching Frequency		Hz	800
Min. load current	I_e	mA	5
Residual current through the load in the blocked state at 230 V AC and 24 V DC	I_r	mA	1.7
Switching state display		LED	Red
Connection			3-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

Technical data ETIM 7.0

Sensors (EG000026) / Inductive proximity switch (EC002714)

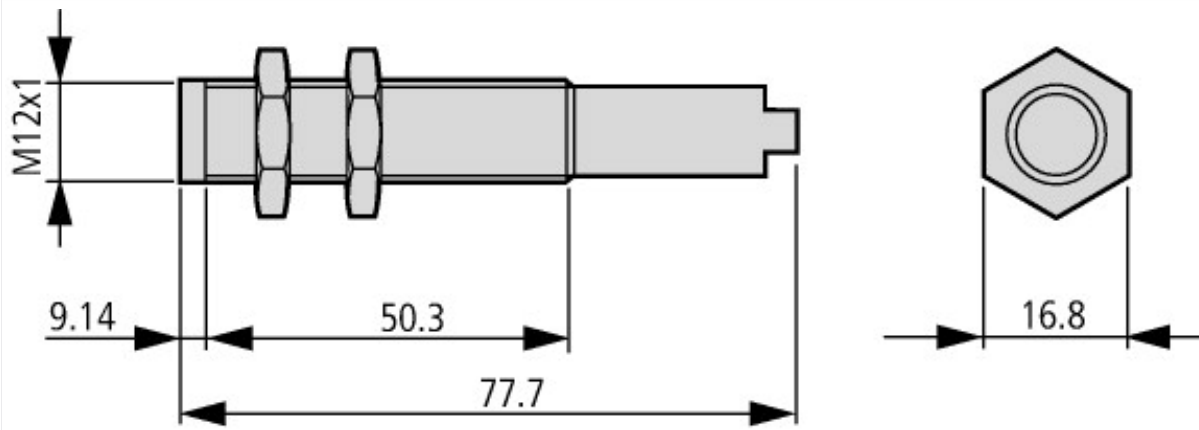
Electric engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology / Proximity switch / Inductive proximity switch (ecl@ss10.0.1-27-27-01-01 [AGZ376015])

Width sensor	mm	0
Height of sensor	mm	0
Length of sensor	mm	78
Diameter sensor	mm	12
Mechanical mounting condition for sensor		Not flat
Switching distance	mm	4
Suitable for safety functions		No
Type of switch function		Normally open contact
Type of switching output		NPN
Type of electric connection		Plug-in connection M12
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		Metallic Target
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	6 - 48
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	6 - 48
Voltage type		DC
Voltage type		DC
Switching frequency	Hz	800
With monitoring function downstream switching devices		No
Material housing		Metal
Compression-resistant		No
Explosion safety category for gas		None
Explosion safety category for dust		None
Interference resistance to magnetic fields		-

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		48 V DC
Degree of Protection		IEC: IP67, IP69K; UL/CSA Type: 4, 4x, 6, 6P, 12, 13

Dimensions



① 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/IL05301003Z2018_05.pdf