



Proximity switch, inductive, 1N/O, Sn=10mm, 3L, 10-30VDC, PNP, M12, metal, M12

Part no. E57-12GE10-GDB
Catalog No. 135878
Eaton Catalog No. E57-12GE10-GDB
EL-Nummer 0004315370
(Norway)

Delivery program

Basic function			Inductive Sensors
Product range			E57 Global Series
Connection			3-wire
Design (outer dimensions)		mm	M12 x 1
Rated operational voltage	U_e		10 - 30 V DC
Rated switching distance	S_n	mm	10
Type of mounting			Non-flush
Switching type			PNP
For connection of:			Plug-in connection M12 x 1
Contacts			
N/O = Normally open			1 N/O
Material			Metal
Degree of Protection			IP67, IP69K

Technical data

General

Standards			IEC/EN 60947-5-2
Ambient temperature			0 - +60
Mechanical shock resistance		g	30 Shock duration 11 ms
Degree of Protection			IP67, IP69K

Characteristics

Rated switching distance			
Rated switching distance	S_n	mm	10
Repetition accuracy of S_n		%	1
Temperature drift of S_n		%	10
Switching hysteresis of S_n		%	15
Rated operational voltage	U_e		10 - 30 V DC
Residual ripple of U_e		%	10
Maximum load current	I_e	mA	< 100
Operating current in the switched state at 24 V DC	I_b	mA	10
Voltage drop at I_e	U_d	V	1.5
Switching Frequency		Hz	1000
Residual current through the load in the blocked state at 230 V AC and 24 V DC	I_r	mA	0.01
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	M12 x 1
For connection of:			Plug-in connection M12 x 1
Material			Metal

Design verification as per IEC/EN 61439

Technical data for design verification			
Operating ambient temperature min.		°C	0
Operating ambient temperature max.		°C	60

Technical data ETIM 7.0

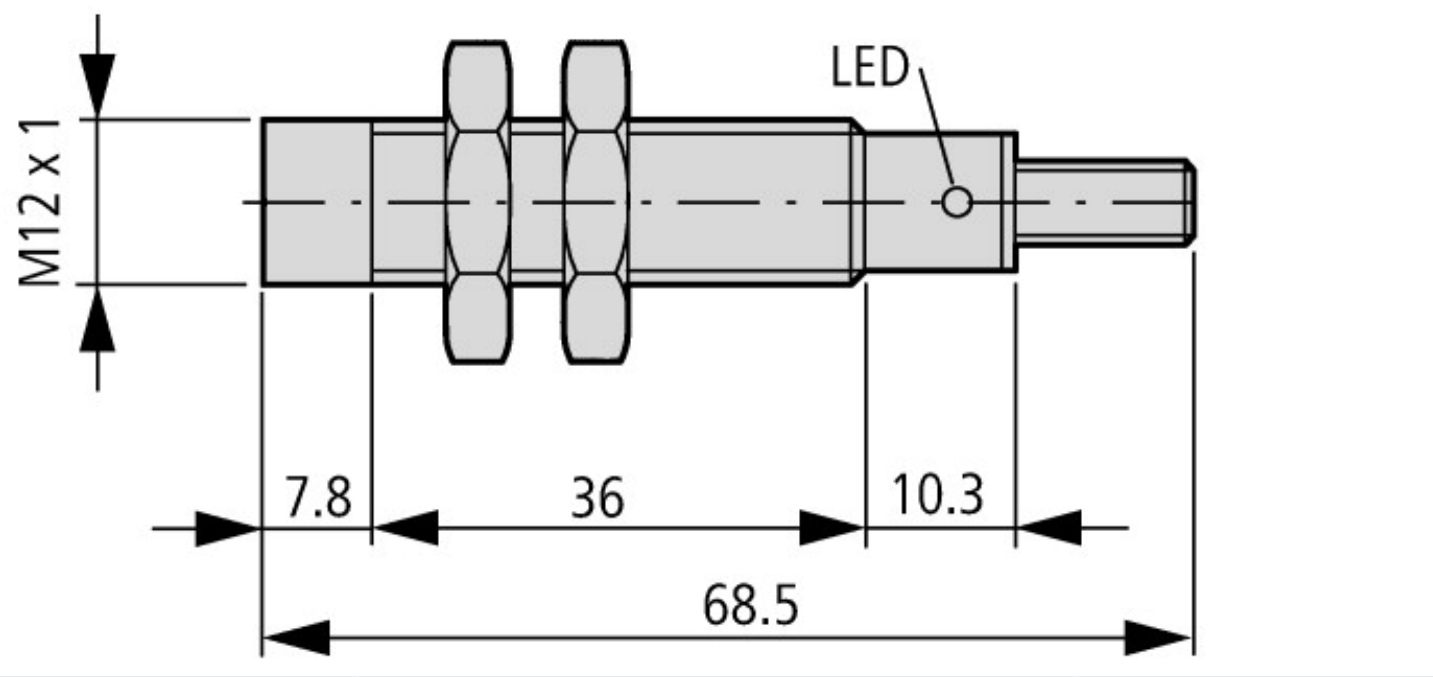
Sensors (EG000026) / Inductive proximity switch (EC002714)			
Electric engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology / Proximity switch / Inductive proximity switch (ecI@ss10.0.1-27-27-01-01 [AGZ376015])			
Width sensor		mm	0
Height of sensor		mm	0
Length of sensor		mm	69
Diameter sensor		mm	12
Mechanical mounting condition for sensor			Not flat
Switching distance		mm	10
Suitable for safety functions			No
Type of switch function			Normally open contact
Type of switching output			PNP
Type of electric connection			Connector M12
Type of electric connection			Plug-in connection 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	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
Voltage type			DC
Switching frequency		Hz	2000
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.			CSA report applies to both Canada and US
UL Category Control No.			—
CSA File No.			224447
CSA Class No.			4652-04 / 4652-84
North America Certification			CSA certified, certified by CSA for use in the US

Max. Voltage Rating		30 V DC
Degree of Protection		IEC: IP67, IP69K; UL/CSA Type: -

Dimensions



Assets (links)

[Declaration of CE Conformity](#)
00003158

[Instruction Leaflets](#)
IL05301002Z2018_05

Additional product information (links)

IL05301002Z Global Series Inductive Sensors	
IL05301002Z Global Series Inductive Sensors	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL05301002Z2018_05.pdf