### **DATASHEET - E57-12GS02-DDB**



Proximity switch, E57 Global Series, 1 N/O, 2-wire, 10 - 30 V DC, M12 x 1 mm, Sn= 2 mm, Flush, NPN/PNP, Metal, Plug-in connection M12 x 1



E57-12GS02-DDB Part no. 135884 Catalog No.

Alternate Catalog E57-12GS02-DDB No.

Delivery program			
Basic function			Inductive Sensors
Product range			E57 Global Series
Connection			2-wire
Design (outer dimensions)		mm	M12 x 1
Rated operational voltage	U <sub>e</sub>		10 - 30 V DC
Rated switching distance	$S_n$	mm	2
Type of mounting			Flush
Switching type			NPN/PNP
For connection of:			Plug-in connection M12 x 1
Contacts			
N/0 = Normally open			1 N/0
Material			Metal
Degree of Protection			IP67, IP69

#### **Technical data** General

Conordi		
Standards		IEC/EN 60947-5-2
Ambient temperature		-25 - +70
Mechanical shock resistance	g	30 Shock duration 11 ms
Degree of Protection		IP67, IP69

Ambient temperature			-25 - +70
Mechanical shock resistance		g	30 Shock duration 11 ms
Degree of Protection			IP67, IP69
Characteristics			
Rated switching distance			
Rated switching distance	$S_n$	mm	2
Repetition accuracy of S <sub>n</sub>		%	2
Temperature drift of S <sub>n</sub>		%	10
Switching hysteresis of $S_n$		%	15
Rated operational voltage	U <sub>e</sub>		10 - 30 V DC
Residual ripple of $U_e$		%	10

Rated switching distance	S <sub>n</sub>	mm	2
Repetition accuracy of S <sub>n</sub>		%	2
Temperature drift of $S_n$		%	10
Switching hysteresis of $S_n$		%	15
Rated operational voltage	U <sub>e</sub>		10 - 30 V DC
Residual ripple of $U_{\rm e}$		%	10
Maximum load current	le	mA	< 100
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	6
Switching Frequency		Hz	1000
Min. load current	l <sub>e</sub>	mA	3
Residual current through the load in the blocked state at 230 V AC and 24 V DC $$	I <sub>r</sub>	mA	0.8
Switching state display		LED	Red
Connection			2-wire
Contacts			
N/O = Normally open			1 N/0
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	-25
Operating ambient temperature max.	°C	70

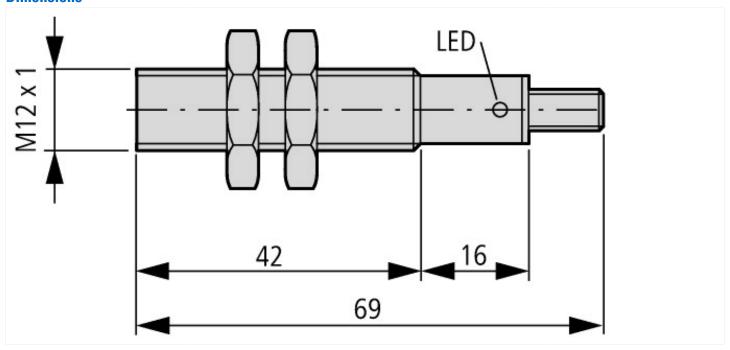
Sensors (EG000026) / Inductive proximity switch (EC002714)  Electric engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology / Proximity switch / Inductive proximity switch (ecl@ss10.0.1-27-27-01-01 [AGZ376015])			
			ensor technology / Proximity switch / Inductive proximity switch
Width sensor		mm	0
Height of sensor		mm	0
Length of sensor		mm	69
Diameter sensor		mm	12
Mechanical mounting condition for sensor			Concise
Switching distance		mm	2
Suitable for safety functions			No
Type of switch function			Normally open contact
Type of switching output			Two-wire
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			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		٧	10 - 30
Rated control supply voltage Us at AC 50HZ		V	0 - 0
Rated control supply voltage Us at AC 60HZ		٧	0 - 0
Rated control supply voltage Us at DC		V	10 - 30
/oltage type			DC
Switching frequency		Hz	2000
Nith monitoring function downstream switching devices			No
Material housing			Metal
Compression-resistant			No
Explosion safety category for gas			None
Explosion safety category for dust			None

# Approvals

Interference resistance to magnetic fields

UL File No.  CSA report applies to both Canada and US  UL Category Control No.  CSA File No.  CSA Class No.  North America Certification  Max. Voltage Rating  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	Product Standards	UL 508; CSA-C22.2 No. 14; IEC60947-5-2; CE marking
CSA File No.  CSA Class No.  CSA Class No.  CSA Certification  CSA certified by CSA for use in the US  Max. Voltage Rating  30 V DC	UL File No.	CSA report applies to both Canada and US
CSA Class No. 4652-04 / 4652-84  North America Certification CSA certified by CSA for use in the US  Max. Voltage Rating 30 V DC	UL Category Control No.	-
North America Certification  CSA certified, certified by CSA for use in the US  30 V DC	CSA File No.	224447
Max. Voltage Rating 30 V DC	CSA Class No.	4652-04 / 4652-84
	North America Certification	CSA certified, certified by CSA for use in the US
Degree of Protection IEC: IP67, IP69K; UL/CSA Type: -	Max. Voltage Rating	30 V DC
	Degree of Protection	IEC: IP67, IP69K; UL/CSA Type: -

# **Dimensions**



# **Assets (links)**

**Declaration of CE Conformity** 

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**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