

Proximity switch, E57 Global Series, 1 N/O, 3-wire, 10 - 30 V DC, M12 x 1 mm, Sn= 5 mm, Flush, PNP, Metal, Plug-in connection M12 x 1



Powering Business Worldwide™

**Part no.** E57-12GE05-GDB

**135870**

**EL Number**

**4315369**

**(Norway)**

Product name	Eaton Moeller® series E57 Proximity switch
Part no.	E57-12GE05-GDB
EAN	4015081326631
Product Length/Depth	114.3 millimetre
Product height	12.7 millimetre
Product width	25.4 millimetre
Product weight	0.026 kilogram
Certifications	CSA CSA File No.: 224447 CSA Class No.: 4652-04 / 4652-84 IEC/EN 60947-5-2 UL 508 CE UL File No.: CSA report applies to both US and Canada CSA-C22.2 No. 14
Product Tradename	E57
Product Type	Proximity switch
Product Sub Type	None
Actuation type	Metallic Target
Ambient operating temperature - max	60 °C
Ambient operating temperature - min	0 °C
Category (EN 954-1)	B
Connection type	3-wire Plug-in connection M12 x 1
Degree of protection	IP67 IP69 NEMA Other
Diameter sensor	12 mm
Diameter sensor [7EF007111]	mm
EL number	4315369
Electric connection type	Plug-in connection
Enclosure material	Metal
Enclosure material finishing	Other
Enclosure type	Cylinder, screw-thread
Explosion safety category for dust	None
Explosion safety category for gas	None
Functions	Protection against wire breakage Short-circuit protection Protection against polarity reversal
Height of sensor [7EF007283]	mm
Installation type	Concise
Interface type	None
LED indicator	Status indication of Switching state: Red LED
Length of sensor [7EF007334]	mm
Load current	Max. 100 mA (Ie)
Material	Metal
Max. output current at protected output [7EF004035]	mA
Mounting method	Flush mounting
Number of contact energized outputs with signalling function	0
Number of contacts (normally open contacts)	1

Number of outputs (protected contact energized)		0
Number of outputs (protected semiconductor)		0
Number of outputs (semiconductor with signaling function)		1
Operational current (Ib) in the switched state at 24 V DC		10 A
Output current at protected output - max		0 mA
Product category		E57 Global Series
Rated control supply voltage (Us) at AC, 50 Hz - max		0 V
Rated control supply voltage (Us) at AC, 50 Hz - min		0 V
Rated control supply voltage (Us) at AC, 60 Hz - max		0 V
Rated control supply voltage (Us) at AC, 60 Hz - min		0 V
Rated control supply voltage (Us) at DC - max		30 V
Rated control supply voltage (Us) at DC - min		10 V
Rated control supply voltage Us at AC 50HZ [7EF003978]		V
Rated control supply voltage Us at AC 60HZ [7EF003979]		V
Rated control supply voltage Us at DC [7EF003980]		V
Rated switching distance (Sn) - max		5 mm
Repeatability		1 %
Residual current		0.01 mA (through the load in the blocked state at 230 V AC and 24 V DC)
Residual ripple		10 % (U#)
Safety performance level (EN ISO 13849-1)		None
Sensor height		0 mm
Sensor length		69 mm
Shock resistance		30 g, Mechanical, Shock duration 11 ms
SIL (IEC 61508)		None
Supply voltage - max		30 V
Supply voltage - min		10 V
Supply voltage [7EF004127]		V
Switch function type		Normally open contact
Switching distance [7EF003647]		mm
Switching frequency		2000 Hz
Switching frequency [7EF003587]		Hz
Switching hysteresis of Sn		15 %
Switching output type		PNP
Temperature drift of sn		10 %
Type		Inductive sensor
Voltage drop (Ud)		1.5 V
Voltage rating - max		30 V
Voltage type		DC
Width sensor		0 mm
Width sensor [7EF007094]		mm

## Technical data ETIM 8.0

Sensors (EG000026) / Inductive proximity switch (EC002714)		
Electric engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology / Safety-related proximity switch / Safety-related inductive proximity switch (ecl@ss10.0.1-27-27-24-01 [AKE630014])		
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	5
Suitable for safety functions		No
Type of switch function		Normally open contact
Type of switching output		PNP
Type of electric connection		Plug-in connection
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
SIL according to IEC 61508			None
Performance level according to 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	2,000
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			
Degree of protection (NEMA)			Other