

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
(Norway)** 4315369

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| 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 |

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| 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

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| 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 |

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| 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 |