

Thru-beam photoelectric sensor, receiver, Sn=6m, 4L, 10-30VDC, light/dark, NPN, PNP, M18, insulated material



**Part no. 12100A6517
135567**

| General specifications | | |
|--|--|--|
| Product name | | Eaton Moeller® series E58 Thru-beam photoelectric sensor |
| Part no. | | 12100A6517 |
| EAN | | 4015081323609 |
| Product Length/Depth | | 55.88 millimetre |
| Product height | | 16.51 millimetre |
| Product width | | 11.938 millimetre |
| Product weight | | 0.225 kilogram |
| Certifications | | UL File No.: E117028 UL CSA-C22.2 No. 14 CSA Class No.: 3211-07 IEC/EN 60947-5-2 CE CSA UL 508 CSA File No.: 50513 UL Category Control No.: NRKH, NRKH7 |
| Product Tradename | | E58 |
| Product Type | | Thru-beam photoelectric sensor |
| Product Sub Type | | None |
| Product Specification Details | | |
| Adjustment type | | Manual adjustment |
| Ambient operating temperature - max | | 70 °C |
| Ambient operating temperature - min | | -20 °C |
| Cable sheath material | | Polyurethane (PUR) |
| Connection type | | 2 m connection cable 4-wire |
| Degree of protection | | NEMA 4 IP67 |
| Device type | | Receiver |
| Diameter sensor | | 18 mm |
| Electric connection type | | Cable |
| Enclosure material | | Plastic |
| Enclosure type | | Cylinder, screw-thread |
| Explosion safety category for dust | | None |
| Explosion safety category for gas | | None |
| Features | | Straight beam |
| Functions | | Short-circuit protection Protection against polarity reversal Thru-light beam Detector (for combination with source) |
| Interface type | | Other |
| Laser protection class | | None |
| LED indicator | | Status indication of Switching state: Red LED |
| Light dot size | | 0 mm ² |
| Light type | | Polarity free red light |
| Load current | | Max. 250 mA (Ie, NPN, 120 > 50°C) Max. 100 mA (Ie, PNP) |
| Number of contact energized outputs with signalling function | | 0 |
| Number of outputs (protected contact energized) | | 0 |
| Number of outputs (protected semiconductor) | | 0 |
| Number of outputs (semiconductor with signaling function) | | 0 |
| Opening angle | | 0 ° |

| | | |
|---|--|---|
| Operating mode | | Switching principle: Adjustable bright/dark switching |
| Operation agent-safety class | | Safety class 2 |
| Operational current (Ib) in the switched state at 24 V DC | | 30 A |
| Optical surface material | | Plastic |
| Output current (mA) - max | | 30 mA |
| Output current at protected output - max | | 0 mA |
| Product category | | Comet 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 switching distance (Sn) | | 6000 mm |
| Reflector distance - min | | 0 mm |
| Response time | | 7 ms |
| Safety type (IEC 61496-1) | | 1 |
| Sensing mode | | Light-/dark switching |
| Sensor height | | 0 mm |
| Sensor length | | 56 mm |
| Sensor material | | Insulated material |
| Shock resistance | | 100 g, Mechanical, Shock duration 3 ms |
| Switch function type | | Other |
| Switching distance - max | | 6000 mm |
| Switching frequency | | 142 Hz |
| Switching output type | | PNP |
| Switching voltage of OSSD at state "high" | | 0 V |
| Transmission range of the safety field | | 0 m |
| Type | | Optical sensors |
| Voltage rating - max | | 30 V |
| Voltage type | | DC |
| Wavelength of the sensor | | 0 nm |
| Width sensor | | 0 mm |
| Wire size | | 0 |

Technical data ETIM 9.0

| | | |
|--|----|-------------------|
| Sensors (EG000026) / Through beam photoelectric sensor (EC002716) | | |
| Electric engineering, automation, process control engineering / Sensor technology, safety-related sensor technology / Optoelectronic sensor / One-way light barrier (ecl@ss13-27-27-09-01 [AKP250018]) | | |
| Scope of delivery of the one-way system | | Receiver |
| Max. opening angle | ° | 0 |
| Pre failure notice | | No |
| With time function | | No |
| Rated switching distance | mm | 6000 |
| Max. switching distance | mm | 6000 |
| Max. output current | mA | 30 |
| With reflector | | No |
| Analogue output 0 V ... 10 V | | No |
| Analogue output 0 mA ... 20 mA | | No |
| Analogue output 4 mA ... 20 mA | | No |
| Analogue output -10 V ... +10 V | | No |
| With other analogue output | | No |
| Setting procedure | | Manual adjustment |
| With communication interface analogue | | No |
| With communication interface AS-Interface | | No |
| With communication interface CANOpen | | No |

| | | |
|--|-----------------|-------------------------|
| With communication interface DeviceNet | | No |
| With communication interface Ethernet | | No |
| With communication interface INTERBUS | | No |
| With communication interface PROFIBUS | | No |
| With communication interface RS-232 | | No |
| With communication interface RS-422 | | No |
| With communication interface RS-485 | | No |
| With communication interface SSD | | No |
| With communication interface SSI | | No |
| Number of semiconductor outputs with signalling function | | 0 |
| Number of contact energized outputs with signalling function | | 0 |
| Number of protected semiconductor outputs | | 0 |
| Number of protected contact energized outputs | | 0 |
| Type of interface for safety communication | | Other |
| Type of electric connection | | Cable |
| Type of switching output | | PNP |
| Type of switch function | | Other |
| Operation agent-safety class | | Safety class 2 |
| Explosion safety category for gas | | None |
| Explosion safety category for dust | | None |
| Construction type housing | | Cylinder, screw-thread |
| Width sensor | mm | 0 |
| Diameter sensor | mm | 18 |
| Height of sensor | mm | 0 |
| Length of sensor | mm | 56 |
| Sensing mode | | Light-/dark switching |
| Material of optical surface | | Plastic |
| Housing material | | Plastic |
| Max. output current at protected output | mA | 0 |
| Min. reflector distance | mm | 0 |
| Ambient temperature | °C | -20 - 70 |
| Response time | ms | 7 |
| Transmission range of the safety field | m | 0 |
| Switching frequency | Hz | 142 |
| Type of safety according to IEC 61496-1 | | 1 |
| Switching voltage of OSSD at state "high" | V | 0 |
| Rated control supply voltage AC 50 Hz | V | 0 - 0 |
| Rated control supply voltage AC 60 Hz | V | 0 - 0 |
| Rated control supply voltage DC | V | 10 - 30 |
| Voltage type | | DC |
| With monitoring function downstream switching devices | | No |
| Laser protection class | | None |
| Wavelength of the sensor | nm | 0 |
| Type of light | | Polarity free red light |
| Light dot | mm ² | 0 |
| AWG-number | | 0 |
| Material of cable sheath | | Polyurethane (PUR) |
| With restart blockage | | No |
| Suitable for safety functions | | No |
| Degree of protection (IP) | | IP67 |
| Degree of protection (NEMA) | | 4 |