



# SG BODY BIG BASE / MUTING

957851290

SG4-B3-080-OO-E

ROBUST TYPE 4 SAFETY LIGHT GRID FOR BODY AND ARM  
DETECTION

## OVERVIEW

- Robust housing for harsh environments
- Long operating range for perimeter control
- Rapid solution for access control with muting
- Easy installation and alignment
- 2, 3, 4 beams for body protection
- 40 mm resolution for arm protection and presence detection
- Controlled heights 500, 800, 900 and 1200 mm
- Long operating distance: up to 60 m
- Simple configuration through DIP switches
- Integrated muting lamp (only muting models)
- Anti-interference coding
- External muting enable signal
- Edged or triggered muting dependent override

## TECHNICAL FEATURES

### Detection properties

|                          |            |
|--------------------------|------------|
| Nominal sensing distance | 6 ... 60 m |
| Resolution               | 400mm      |
| controlled height        | 800 mm     |
| number of rays           | 3          |

|                          |                        |
|--------------------------|------------------------|
| Sensitivity adjustment   | n/a                    |
| Effective Aperture Angle | $\leq \pm 2,5^{\circ}$ |

### Application

|                     |                               |
|---------------------|-------------------------------|
| Function Principle  | Emitter + Receiver            |
| Available functions | Manual/Automatic Restart, EDM |
| Description         | Big for harsh environment     |
| Functions           | Body protection 3 beams       |

### Safety parameters

|       |                                   |
|-------|-----------------------------------|
| Type  | Type 4 safety light curtain (A/M) |
| SIL   | 3                                 |
| SILCL | 3                                 |
| PL    | e                                 |
| PFHd  | 1,10E-08                          |
| Dcavg | 96,40%                            |
| MTTFd | 353 years                         |
| SFF   | 97,90%                            |

### Outputs

|             |                                          |
|-------------|------------------------------------------|
| Output type | 2 x PNP-NO (OSSD safety output) with EDM |
|-------------|------------------------------------------|

|               |       |
|---------------|-------|
| Response time | 13 ms |
|---------------|-------|

Electrical data

|                                    |                                  |
|------------------------------------|----------------------------------|
| Operating Voltage                  | 24 Vdc ± 20%                     |
| Load current                       | ≤ 500mA each output              |
| Emission                           | Infrared LED (950 nm wavelength) |
| Interference to external light     | According to IEC 61496-2         |
| Power Consumption - Receiver       | ≤ 4W (no load)                   |
| Power Consumption - Emitter        | ≤ 2,5W                           |
| Capacitive Load                    | ≥ 2,2μF                          |
| Cabel Length (Power Supply/Output) | ≤ 70m                            |

Mechanical data

|                     |                                                                                     |
|---------------------|-------------------------------------------------------------------------------------|
| Dimensions          | 52x60x906                                                                           |
| Connections         | M12-5 poles pig-tail (emitter) M12-8 poles pig-tail (receiver)                      |
| Storage temperature | -25...+ 70°C                                                                        |
| Material            | Painted aluminum / PMMA / PBT Valox 508                                             |
| Vibrations          | Width 0.35 mm, frequency 10 ... 55Hz; 20 sweep per axis, 1octave/min (EN 60068-2-6) |
| Shocks              | 16 ms (10 G) 1,000 shocks per axis (EN 60068-2-29)                                  |

Test/Approvals

|  |
|--|
|  |
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|           |                |
|-----------|----------------|
| Approvals | CE, cULus, TÜV |
|-----------|----------------|

|                   |                                   |
|-------------------|-----------------------------------|
| EMC compatibility | According to 2014/30/EU Directive |
|-------------------|-----------------------------------|

#### Generical Data

|            |                   |
|------------|-------------------|
| Dimensions | 52x56,9x906,35 mm |
|------------|-------------------|

|                       |           |
|-----------------------|-----------|
| Operating Temperature | 0...+55°C |
|-----------------------|-----------|

|          |                               |
|----------|-------------------------------|
| Humidity | 15 ... 95 % (no condensation) |
|----------|-------------------------------|

|                       |      |
|-----------------------|------|
| Mechanical Protection | IP65 |
|-----------------------|------|

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