



# SG2 Extended

957801390

SG2-30-090-OO-E-C  
TYPE 2 SAFETY LIGHT CURTAIN WITH STANDARD  
FUNCTIONALITY

## OVERVIEW

- High reliability
- Easy installation and alignment
- Cost effective Finger, hand, arm detection with standard functions
- 90 mm version for presence detection
- Up to 19 m operating distance
- Compact dimensions (32.3 x 36.9 mm section)
- Anti-interference coding
- IP65 Protection; IP69K with optional tube
- Unshielded cables
- Rotating and anti-vibration brackets

## TECHNICAL FEATURES

### Detection properties

|                          |              |
|--------------------------|--------------|
| Nominal sensing distance | 0,2 ... 19 m |
| Resolution               | 30mm         |
| controlled height        | 900 mm       |
| number of rays           | 48           |
| Sensitivity adjustment   | n/a          |

|                          |                    |
|--------------------------|--------------------|
| Effective Aperture Angle | $\leq \pm 5^\circ$ |
|--------------------------|--------------------|

Application

|                     |                                                        |
|---------------------|--------------------------------------------------------|
| Function Principle  | Emitter + Receiver                                     |
| Available functions | Manual/Automatic Restart, EDM, Range Reduction (on TX) |
| Description         | Compact standard                                       |
| Functions           | Hand protection res. 30 mm                             |

Safety parameters

|       |                                   |
|-------|-----------------------------------|
| Type  | Type 2 safety light curtain (A/M) |
| SIL   | 1                                 |
| SILCL | 1                                 |
| PL    | c                                 |
| MTTFd | 273 years                         |
| Dcavg | 97,50%                            |
| SFF   | 98,40%                            |

Outputs

|               |                                          |
|---------------|------------------------------------------|
| Output type   | 2 x PNP-NO (OSSD safety output) with EDM |
| Response time | 15,2 ms                                  |

Electrical data

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|                                    |                                  |
|------------------------------------|----------------------------------|
| Operating Voltage                  | 24 Vdc ± 20%                     |
| Load current                       | ≤ 500mA each output              |
| Emission                           | Infrared LED (850 nm wavelength) |
| Interference to external light     | According to IEC 61496-2         |
| Power Consumption - Receiver       | ≤ 3W (no load)                   |
| Power Consumption - Emitter        | ≤ 2W                             |
| Capacitive Load                    | ≥ 2,2μF                          |
| Cabel Length (Power Supply/Output) | ≤ 50m                            |

Mechanical data

|                     |                                                                                     |
|---------------------|-------------------------------------------------------------------------------------|
| Dimensions          | 33x37x983                                                                           |
| Material            | Painted aluminum / PMMA / PC MAKROLON                                               |
| Connections         | M12-4 poles (emitter) M12-8 poles (receiver)                                        |
| Storage temperature | -25...+ 70°C                                                                        |
| 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

|                   |                                   |
|-------------------|-----------------------------------|
| Approvals         | CE, cULus, TÜV                    |
| EMC compatibility | According to 2014/30/EU Directive |

## Accessories

|                      |                              |
|----------------------|------------------------------|
| Supplied Accessories | Rotating Brackets: 4 pcs kit |
|----------------------|------------------------------|

## Generical Data

|            |                    |
|------------|--------------------|
| Dimensions | 32,3x36,9x983,2 mm |
|------------|--------------------|

|                       |             |
|-----------------------|-------------|
| Operating Temperature | -10...+55°C |
|-----------------------|-------------|

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

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

## UNASSIGNED

|                |          |
|----------------|----------|
| Disegno 2D PDF | 1,04E-08 |
|----------------|----------|

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**date of  
printing**  
10/08/2026  
07:27:37