



# SH4 Active-Passive

957920563

**SH4-4-0900-SM-AP-8**

**TYPE 4 ACTIVE/PASSIVE SAFETY LIGHT CURTAIN WITH  
2-SIGNALS MUTING CONFIGURABLE WITH DIP-SWITCHES**

## OVERVIEW

- Type 4 safety light curtains with active/passive operating principle
- Passive side doesn't need to be wired
- Body protection with 500, 800, 900, 1200 mm controlled height
- Up to 8 m operating range (depending on model)
- Basic functions: alignment, automatic restart
- Standard functions: manual restart, EDM
- Standard Muting functions: 2-signals mono and bidirectional muting, override
- Configuration of functions with DIP-SW
- Compact profile (35 x 40 mm), common to all SH4 line
- Installation eased by LEDs indications of beam intensity
- IP67 Protection
- -30 ... +55 °C Operating temperature
- Complete couple and angular bracket included in the package
- Anti-interference codes
- Muting accessories available with prewired and preinstalled muting sensors
- Pigtails with M12 connectors with standard not shielded cables
- Integrated LED muting indication

## TECHNICAL FEATURES

### Detection properties

|                          |             |
|--------------------------|-------------|
| Nominal sensing distance | 0.5 ... 8 m |
|--------------------------|-------------|

|            |        |
|------------|--------|
| Resolution | 300 mm |
|------------|--------|

|                          |                      |
|--------------------------|----------------------|
| controlled height        | 900 mm               |
| number of rays           | 4                    |
| Effective Aperture Angle | $\leq \pm 2.5^\circ$ |

Application

|                     |                                                                                                                        |
|---------------------|------------------------------------------------------------------------------------------------------------------------|
| Function Principle  | Active Side and Retroreflective Passive Side                                                                           |
| Available functions | Manual/Automatic Restart, EDM, L/T 2-signals Muting, Partial Muting, Muting Filter, Override, Anti Interference Coding |
| Description         | Compact no-dead-zone STANDARD MUTING                                                                                   |
| Muting lamp output  | Incandescent lamp or LED                                                                                               |
| Functions           | Body protection 4 beams                                                                                                |

Safety parameters

|       |                                   |
|-------|-----------------------------------|
| Type  | Type 4 safety light curtain (A/M) |
| SIL   | 3                                 |
| SILCL | 3                                 |
| PFHd  | 2,62E-08                          |
| PL    | e                                 |
| MTTFd | 43 years                          |
| SFF   | 99,50%                            |

Outputs

||
||
||

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

#### Electrical data

|                                    |                                  |
|------------------------------------|----------------------------------|
| Operating Voltage                  | 24 Vdc ± 20%                     |
| Power consumption                  | Active unit ≤ 2W (no load)       |
| Load current                       | ≤ 250mA each output              |
| Emission                           | Infrared LED (850 nm wavelength) |
| Interference to external light     | According to IEC 61496-2         |
| Capacitive Load                    | ≤ 1μF                            |
| Cabel Length (Power Supply/Output) | ≤ 30 m                           |

#### Mechanical data

|                     |                                                                                 |
|---------------------|---------------------------------------------------------------------------------|
| Material            | Painted aluminum / MAKROLON AR 7099 Clear PC / PBT                              |
| Connections         | M12-8 poles pigtail (active unit)                                               |
| Storage temperature | -30 ...+70 °C                                                                   |
| Vibrations          | 10 mm / 3 g, 5 ... 150 Hz frequency (EN 60068-2-6 / Class 3M7 IEC TR 60721-4-3) |
| Shocks              | 25 g x 6 ms x 600 (EN 60068-2-27 / Class 3M7 IEC TR 60721-4-3)                  |

#### Test/Approvals

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

|                       |                                                                                                                                              |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| EMC compatibility     | According to 2014/30/EU Directive                                                                                                            |
| Shocks and vibrations | 10 mm / 3g, 5 to 150 Hz frequency (EN 60068-2-6 / Class 3M7 IEC TR 60721-4-3); 25g x 6 ms x 600 (EN 60068-2-27 / Class 3M7 IEC TR 60721-4-3) |

#### Accessories

|                                      |                                                  |
|--------------------------------------|--------------------------------------------------|
| Supplied Accessories                 | Standard "L" Mounting Brackets: 4 pcs kit        |
| Accessories to be ordered separately | Top-bottom rotating mounting bracket ST-K4ROT-SH |

#### Generical Data

|                       |                               |
|-----------------------|-------------------------------|
| Dimensions            | 35x40x1126 mm                 |
| Operating Temperature | -30...+55°C                   |
| Humidity              | 15 ... 95 % (no condensation) |
| Mechanical Protection | IP65, IP 67 (EN 60529)        |

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**date of  
printing**  
10/08/2026  
08:22:11