



## SH4 Base

957920010

SH4-14-1650-B-5

TYPE 4 SAFETY LIGHT CURTAIN WITH BASIC FUNCTIONALITY

## OVERVIEW

- Finger protection (14 mm)
- Improved operating range: 10 m
- Basic functions: alignment, automatic restart
- Zero dead zone
- Extended monitored height up to 2250 mm
- Compact profile (35 x 40 mm), common to all SH4 line
- Installation eased by LEDs indications of beam intensity
- Optical synchronization with 2 beams
- IP67 Protection
- -30 ... +55 °C Operating temperature
- Complete couple and angular bracket included in the package
- Alignment eased by integrated laser (finger,hand) or LED (body) aimer
- Pigtailed with M12 connectors with standard not shielded cables

## TECHNICAL FEATURES

### Detection properties

|                          |              |
|--------------------------|--------------|
| Nominal sensing distance | 0.2 ... 10 m |
|--------------------------|--------------|

|            |       |
|------------|-------|
| Resolution | 14 mm |
|------------|-------|

|                   |         |
|-------------------|---------|
| controlled height | 1650 mm |
|-------------------|---------|

|                |     |
|----------------|-----|
| number of rays | 165 |
|----------------|-----|

|                          |                      |
|--------------------------|----------------------|
| Effective Aperture Angle | $\leq \pm 2.5^\circ$ |
|--------------------------|----------------------|

#### Application

|                    |                    |
|--------------------|--------------------|
| Function Principle | Emitter + Receiver |
|--------------------|--------------------|

|                     |                   |
|---------------------|-------------------|
| Available functions | Automatic Restart |
|---------------------|-------------------|

|             |                            |
|-------------|----------------------------|
| Description | Compact no-dead-zone BASIC |
|-------------|----------------------------|

|           |                              |
|-----------|------------------------------|
| Functions | Finger protection res. 14 mm |
|-----------|------------------------------|

#### Safety parameters

|      |                                 |
|------|---------------------------------|
| Type | Type 4 safety light curtain (A) |
|------|---------------------------------|

|     |   |
|-----|---|
| SIL | 3 |
|-----|---|

|       |   |
|-------|---|
| SILCL | 3 |
|-------|---|

|    |   |
|----|---|
| PL | e |
|----|---|

|       |          |
|-------|----------|
| MTTFd | 43 years |
|-------|----------|

|     |        |
|-----|--------|
| SFF | 99,50% |
|-----|--------|

#### Outputs

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

|               |       |
|---------------|-------|
| Response time | 23 ms |
|---------------|-------|

#### Electrical data

|                   |                  |
|-------------------|------------------|
| Operating Voltage | 24 Vdc $\pm$ 20% |
|-------------------|------------------|

|                                    |                                  |
|------------------------------------|----------------------------------|
| Load current                       | ≤ 250mA each output              |
| Emission                           | Infrared LED (850 nm wavelength) |
| Interference to external light     | According to IEC 61496-2         |
| Power Consumption - Receiver       | ≤ 4W (no load)                   |
| Power Consumption - Emitter        | ≤ 3,5W                           |
| Capacitive Load                    | ≤ 1μF                            |
| Cabel Length (Power Supply/Output) | ≤ 30m                            |

#### Mechanical data

|                     |   |
|---------------------|---|
| Material            | Painted aluminum / MAKROLON AR 7099 Clear PC / PBT                              |
| Connections         | M12-5 poles pigtail (emitter) M12-5 poles pigtail (receiver)                    |
| 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: 6 pcs kit        |
| Accessories to be ordered separately | Top-bottom rotating mounting bracket ST-K4ROT-SH |

#### Generical Data

|                       |                               |
|-----------------------|-------------------------------|
| Dimensions            | 35x40x1659 mm                 |
| Operating Temperature | -30...+55°C                   |
| Humidity              | 15 ... 95 % (no condensation) |
| Mechanical Protection | IP65, IP 67 (EN 60529)        |

#### UNASSIGNED

|                |          |
|----------------|----------|
| Disegno 2D PDF | 8,40E-09 |
|----------------|----------|

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