



# SLIM

## 957910170

**SL4-14-0720-E**

**SLIM SAFETY LIGHT CURTAIN FOR FINGER AND HAND PROTECTION**

## OVERVIEW

- Highest mechanical flexibility for a perfect fit into machine structures
- Simple commissioning and maintenance
- High functional performance
- SLIM profile: 15 x 32 mm
- Pigtail cable with 5-pole M12 connectors
- Same cable for Emitter and Receiver
- No Dead Zone
- 14, 24 and 34 mm resolution
- 34 different protection lengths, with 30 mm modularity
- 3 different brackets shapes
- Cascadable up to 3 units
- Auto/Manual restart and EDM function configuration by wiring
- LED display messages diagnosis

## TECHNICAL FEATURES

### Detection properties

|                          |             |
|--------------------------|-------------|
| Nominal sensing distance | 0,2 ... 6 m |
|--------------------------|-------------|

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

|                   |        |
|-------------------|--------|
| controlled height | 720 mm |
|-------------------|--------|

|                |    |
|----------------|----|
| number of rays | 72 |
|----------------|----|

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

#### Application

|                     |                               |
|---------------------|-------------------------------|
| Function Principle  | Emitter + Receiver            |
| Available functions | Manual/Automatic Restart, EDM |
| Description         | SLIM no-dead-zone cascable    |
| Functions           | Finger protection res. 14 mm  |

#### Safety parameters

|       |                                   |
|-------|-----------------------------------|
| Type  | Type 4 safety light curtain (A/M) |
| SIL   | 3                                 |
| SILCL | 3                                 |
| PL    | e                                 |
| MTTFd | 444 years                         |

#### Outputs

|                                  |                                          |
|----------------------------------|------------------------------------------|
| Output type                      | 2 x PNP-NO (OSSD safety output) with EDM |
| Response time                    | 12,4 ms                                  |
| Response Time (Master + Slave)   | 18 ms                                    |
| Response Time (Master + 2 Slave) | 20 ms                                    |

#### Electrical data

|                                                |                                  |
|------------------------------------------------|----------------------------------|
| Operating Voltage                              | 24 Vdc $\pm$ 20%                 |
| Load current                                   | $\leq$ 500mA each output         |
| Emission                                       | Infrared LED (850 nm wavelength) |
| Interference to external light                 | According to IEC 61496-2         |
| Power Consumption - Receiver                   | $\leq$ 4,2W (no load)            |
| Power Consumption - Emitter                    | $\leq$ 1,6W                      |
| Cabel Length (Power Supply/Output)             | $\leq$ 20m                       |
| Cable Length for Master Slave Interconnections | $\leq$ 1m (Master-Slave Cable)   |

#### Mechanical data

|                     |                                                                                     |
|---------------------|-------------------------------------------------------------------------------------|
| Dimensions          | 15x33x720                                                                           |
| Material            | Metal - Aluminium / PMMA / Painted Zamak                                            |
| Connections         | M12-5 poles pig-tail (emitter) M12-5 poles pig-tail (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

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

## Accessories

|                      |                                                                                   |
|----------------------|-----------------------------------------------------------------------------------|
| Supplied Accessories | C-shaped Brackets (included): 2 pcs kit + O-shaped Brackets (included): 4 pcs kit |
|----------------------|-----------------------------------------------------------------------------------|

## Generical Data

|            |                  |
|------------|------------------|
| Dimensions | 15,4x32,6x720 mm |
|------------|------------------|

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

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

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

## UNASSIGNED

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

## Datasensing S.r.l.

Strada S.Caterina, 235  
41122 Modena (MO)  
Tel. 059 420411  
Fax 059 253973  
E-mail  
[info@datasensing.com](mailto:info@datasensing.com)

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