

# SLPMR14-410

## Safety Technology – Receiver

### Integrated Muting Function



#### Features

- Electrical connection via RDLP-8 with open end or via DELPE-8 with male M12 x 1, 8-pin
- Protection class IP65
- Flat housing without blind zone
- Adjustments via DIP switch
- Resolution can be reduced
- Blanking function
- Operating voltage: 24 VDC  $\pm$  15 %
- Resolution 14 mm
- Scan field 410 mm (L1)
- Mounting bracket included in delivery

#### Technical data

|                                      |                                   |
|--------------------------------------|-----------------------------------|
| Type                                 | SLPMR14-410                       |
| ID no.                               | 3084464                           |
| <b>Optical data</b>                  |                                   |
| Function                             | Light screen                      |
| Optical resolution                   | 14 mm                             |
| Range                                | 0...7000 mm                       |
| Scan field                           | 410 mm                            |
| Number of beams                      | 21                                |
| With muting function                 | yes                               |
| Scan Code                            | Adjustable                        |
| <b>Electrical data</b>               |                                   |
| Operating voltage                    | 20...28 VDC                       |
| Residual ripple                      | < 10 % $U_{ss}$                   |
| DC rated operational current         | $\leq$ 150 mA                     |
| Current consumption non-actuated     | $\leq$ 150 mA                     |
| No-load current                      | $\leq$ 275 mA                     |
| Max. current safe output             | 0.5 mA                            |
| Short-circuit protection             | yes                               |
| Reverse polarity protection          | yes                               |
| Output function                      | 2 x NC (normally closed), 2 x PNP |
| Current output                       | 0...500 mA                        |
| Number of safe semiconductor outputs | 2                                 |
| Response time typical                | < 13.5 ms                         |
| With restart interlock               | yes                               |
| Blanking function                    | yes                               |

#### Wiring diagram



#### Functional principle

The high-resolution safety light screen is emitter and receiver in one without blind zone. As the system is optically synchronized, emitter/receiver wiring is superfluous. The receiver's safety switching outputs are directly connected to a load relay (e.g. IM-T-9A) and trigger an immediate stop of dangerous machine cycles. Personnel safety category PLe acc. to ISO 13849-1 is fulfilled through 2-channel monitoring of the switching device and the principle of diverse redundancy by which two processors control each other mutually.

## Technical data

| Mechanical data       |                                |
|-----------------------|--------------------------------|
| Design                | Rectangular, EZ-Screen LP      |
| Dimensions            | 26 x 28 x 410 mm               |
| Housing material      | Metal, AL, Yellow polyester    |
| Lens                  | plastic, Acryl                 |
| Cascadable            | no                             |
| Electrical connection | Cable entry for flat connector |
| Ambient temperature   | 0...+55 °C                     |
| Protection class      | IP65                           |
| Power-on indication   | LED, Green                     |
| Switching state       | 2-color LED, Red               |
| Tests/approvals       |                                |
| Vibration resistance  | 10–55 Hz at 0.35 mm            |
| Shock test            | 10 g at 16 ms (6000 cycles)    |
| Approvals             | CE, cTUVus                     |