

# SLLP14-1680P88

## Safety Technology – Safety Light Curtain Pair



### Technical data

|                                      |                                  |
|--------------------------------------|----------------------------------|
| Type                                 | SLLP14-1680P88                   |
| ID no.                               | 3089686                          |
| <b>Optical data</b>                  |                                  |
| Function                             | Light screen                     |
| Light type                           | IR                               |
| Optical resolution                   | 14 mm                            |
| Range                                | 100...12000 mm                   |
| Scan field                           | 1680 mm                          |
| Number of beams                      | 192                              |
| With muting function                 | no                               |
| Scan Code                            | Adjustable                       |
| <b>Electrical data</b>               |                                  |
| Operating voltage                    | 20.4...27.6 VDC                  |
| DC rated operational current         | ≤ 139 mA                         |
| Max. current safe output             | 0.5 mA                           |
| Short-circuit protection             | yes                              |
| Reverse polarity protection          | yes                              |
| Output function                      | 2 normally open contact, 2 × PNP |
| Voltage output                       | 0...22.5 V                       |
| Current output                       | 0 mA                             |
| Number of safe semiconductor outputs | 2                                |
| Response time typical                | < 45.5 ms                        |
| With restart interlock               | yes                              |
| Blanking function                    | yes                              |
| Max. DC switching capacity           | 12 W                             |

### Features

- Rugged housing
- Protection class IP67
- Diagnosis display for status and error indication
- Scan field L: 1680 mm
- Optical Alignment aid
- No blind zone
- Range: 0.1...12 m
- Resolution: 14 mm
- Operating voltage: 24 VDC
- No restart interlock
- Safety light curtain type 4 acc. to IEC 61496-1 and 61496-2
- Category 4 Ple acc. to EN ISO 13849-1
- SIL 3 acc. to IEC 61508 SIL 3 and CL3 acc. to IEC 62061
- Shock and vibration resistant acc. to IEC 61496-1

### Wiring diagram



## Technical data

| Mechanical data       |                                                                      |
|-----------------------|----------------------------------------------------------------------|
| Design                | Rectangular, EZ-Screen LS                                            |
| Dimensions            | 45 x 36 x 1685 mm                                                    |
| Housing material      | Metal, AL, Yellow polyester                                          |
| Lens                  | acrylic, Plastic                                                     |
| Cascadable            | no                                                                   |
| Electrical connection | Cable with connector, M12 × 1, 0.3 m                                 |
| Number of cores       | 8                                                                    |
| Core cross-section    | 0.25 mm <sup>2</sup>                                                 |
| Ambient temperature   | -20...+55 °C                                                         |
| Protection class      | IP65<br>IP67                                                         |
| Power-on indication   | LED, Yellow                                                          |
| Switching state       | LED, Red                                                             |
| Error indication      | LED, red                                                             |
| Tests/approvals       |                                                                      |
| Vibration resistance  | 10–55 Hz at 0.35 mm                                                  |
| Shock test            | 10 g at 16 ms (6000 cycles)                                          |
| Approvals             | CE, cULus, PL e acc. to EN ISO 13849-1:2008, SIL 3 acc. to IEC 61508 |



## Functional principle

The self-monitoring safety light screens with redundant switching outputs are available in lengths up to 1.8 m and resolutions of 14, 23 or 40 mm. The devices are available individually or in pairs and are synchronized optically - a physical connection between transmitter and receiver is not necessary. For versions with cascading no further configuration is necessary. The setting is made automatically. Up to 4 couples of any length and resolution can be connected together. The dual scan of each receiver provides immunity against EMI, radio wave, ambient or strobe lights and welding sparks. All recipients have no restart interlock – an automatic reset is performed. If required individual beams can be hidden. The robust and sealed housing is ideally suited for industrial use. Status and error code can be read out in case of need via the diagnostic display. For easy mounting, LEDs indicate the proper alignment of each segment.