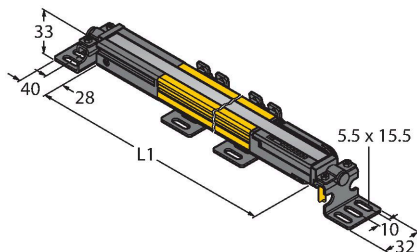


# SLPP14-970

## Personnel Safety, Light Screen – Emitter/Receiver Pair



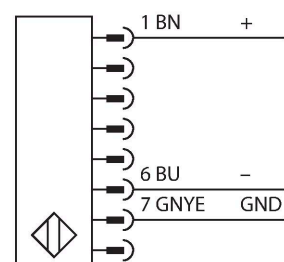
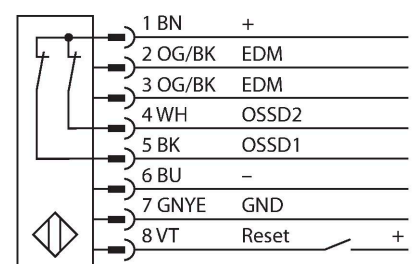
### Technical data

|                                      |                                   |
|--------------------------------------|-----------------------------------|
| Type                                 | SLPP14-970                        |
| ID                                   | 3083775                           |
| <b>Optical data</b>                  |                                   |
| Function                             | Light screen                      |
| Light type                           | IR                                |
| Wavelength                           | 850 nm                            |
| Optical resolution                   | 14 mm                             |
| Range                                | 100...7000 mm                     |
| Scan field                           | 970 mm                            |
| Number of beams                      | 97                                |
| With muting function                 | no                                |
| Scan Code                            | Adjustable                        |
| <b>Electrical data</b>               |                                   |
| Operating voltage                    | 20...28 VDC                       |
| Residual ripple                      | < 10 % U <sub>ss</sub>            |
| DC rated operational current         | ≤ 210 mA                          |
| No-load current                      | ≤ 275 mA                          |
| Max. current safe output             | 500 mA                            |
| Short-circuit protection             | yes                               |
| Reverse polarity protection          | yes                               |
| Output function                      | 2 x NC (normally closed), 2 x PNP |
| Number of safe semiconductor outputs | 2                                 |
| Response time typical                | < 25.5 ms                         |
| With restart interlock               | yes                               |
| Blanking function                    | yes                               |
| <b>Mechanical data</b>               |                                   |
| Design                               | Rectangular, EZ-Screen LP         |

### Features

- Electrical connection via RDL8-8 with open end or via DELPE-8 with male M12 × 1, 8-pin
- Protection class IP65
- Flat housing without blind zone
- Adjustment via DIP switch
- Resolution can be reduced
- Blanking function
- Operating voltage: 24 VDC ± 15 %
- Resolution 14 mm
- Scan field 970 mm (L1)
- Personnel safety Cat 4, PL e acc. to EN ISO 13849-1:2008
- Type 4 according to IEC 61496-1,-2
- SIL 3 to IEC 61508

### Wiring diagram



## Technical data

|                        |                                                                      |
|------------------------|----------------------------------------------------------------------|
| Dimensions             | 26 x 28 x 969 mm                                                     |
| Housing material       | Metal, AL, Yellow polyester                                          |
| Lens                   | plastic, Acrylic                                                     |
| 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                                                     |
| <b>Tests/approvals</b> |                                                                      |
| Vibration resistance   | 10-55 Hz at 0.35 mm                                                  |
| Shock test             | 10 g at 16 ms (6000 cycles)                                          |
| Approvals              | CE, cTUVus, PL e acc. to ENISO 13849-1:2008, SIL 3 acc. to IEC 61508 |

## Functional principle

The high-resolution safety light curtain is emitter and receiver in one without blind zone. As the system is synchronized optically, wiring between emitter and receiver is redundant. The safety switching outputs of the receiver are directly connected to a load relay (e.g. IM-TA9A) and trigger an immediate stop of the dangerous machine cycle. The switching device with 2-channel monitoring, diverse redundant designed and mutual processor control, complies with the personnel safety category PLe acc. to ISO 13849-1.

## Accessories

|                                                                                                                                        |         |                                                                                                                              |         |
|----------------------------------------------------------------------------------------------------------------------------------------|---------|------------------------------------------------------------------------------------------------------------------------------|---------|
| LPA-MBK-11                                                                                                                             | 3082841 | LPA-MBK-12                                                                                                                   | 3082842 |
| Mounting bracket, retainer for closure caps, 14-ga. steel, galvanized, black, 360 ° sensor rotation, incl.2 pcs. with screw set        |         | Mounting bracket, side mounting, 14-ga. steel, galvanized, black, +10°/-30° sensor rotation, incl.1 pcs. with screw set      |         |
| LPA-MBK-20                                                                                                                             | 3082853 | LPA-MBK-22                                                                                                                   | 3082844 |
| Mounting bracket, wall mounting, 12-ga. steel, galvanized, black, in combination with LPA-MBK-11/ -12/ -13, incl. 1 pcs. and screw set |         | Mounting bracket, wall mounting, 14-ga. steel, galvanized, black, in combination with LPA-MBK-11, incl. 2 pcs. and screw set |         |

## Accessories

| Dimension drawing | Type       | ID      |                                                                                                           |
|-------------------|------------|---------|-----------------------------------------------------------------------------------------------------------|
|                   | RDLP-815D  | 3080792 | Connection cable, PVC, yellow, length: 4.57 m, RD connector for direct connection to the light screen     |
|                   | RDLP-825D  | 3080793 | Connection cable, PVC, yellow, length: 7.62 m, RD connector for direct connection to the light screen     |
|                   | RDLP-850D  | 3080794 | Connection cable, PVC, yellow, length: 15.2 m, RD connector for direct connection to the light screen     |
|                   | RDLP-875D  | 3080795 | Connection cable, PVC, yellow, length: 22.9 m, RD connector for direct connection to the light screen     |
|                   | DELPE-81D  | 3080811 | Connection cable, PVC, yellow, length: 0.31 m, RD connector for direct connection on male M12 x 1, 8-pin, |
|                   | DELPE-83D  | 3080812 | Connection cable, PVC, yellow, length: 0.91 m, RD connector for direct connection on male M12 x 1, 8-pin, |
|                   | DELPE-88D  | 3080813 | Connection cable, PVC, yellow, length: 2.44 m, RD connector for direct connection on male M12 x 1, 8-pin, |
|                   | DELPE-815D | 3080814 | Connection cable, PVC, yellow, length: 4.57 m, RD connector for direct connection on male M12 x 1, 8-pin, |

| Dimension drawing | Type            | ID      |                                                                                                                            |
|-------------------|-----------------|---------|----------------------------------------------------------------------------------------------------------------------------|
|                   | DELPE-825D      | 3080815 | Connection cable, PVC, yellow, length: 7.62 m, RD connector for direct connection on male M12 x 1, 8-pin,                  |
|                   | DELPE-850D      | 3080816 | Connection cable, PVC, yellow, length: 15.2 m, RD connector for direct connection on male M12 x 1, 8-pin,                  |
|                   | DELPE-875D      | 3080817 | Connection cable, PVC, yellow, length: 22.9 m, RD connector for direct connection on male M12 x 1, 8-pin,                  |
|                   | DELPE-8100D     | 3080818 | Connection cable, PVC, yellow, length: 30.5 m, RD connector for direct connection on male M12 x 1, 8-pin,                  |
|                   | CSB-M1280M1280  | 3075375 | Y-piece, PVC, yellow, with male M12 x 1, 8-pin on 2 x 0.3 m cable, PVC, yellow, with female M12 x 1, 8-pin                 |
|                   | CSB-M1281M1281  | 3073252 | Y-piece, PVC, yellow, length: 0.3 m with male, M12 x 1, 8-pin on 2 x 0.3 m cable, PVC, yellow, with female, M12 x 1, 8-pin |
|                   | CSB-M1288M1281  | 3073253 | Y-piece, PVC, yellow, length: 2.5 m with male, M12 x 1, 8-pin on 2 x 0.3 m cable, PVC, yellow, with female, M12 x 1, 8-pin |
|                   | CSB-M12815M1281 | 3073254 | Y-piece, PVC, yellow, length: 4.6 m with male, M12 x 1, 8-pin on 2 x 0.3 m cable, PVC, yellow, with female, M12 x 1, 8-pin |
|                   | CSB-M12825M1281 | 3073255 | Y-piece, PVC, yellow, length: 7.6 m with male, M12 x 1, 8-pin on 2 x 0.3 m cable, PVC, yellow, with female, M12 x 1, 8-pin |