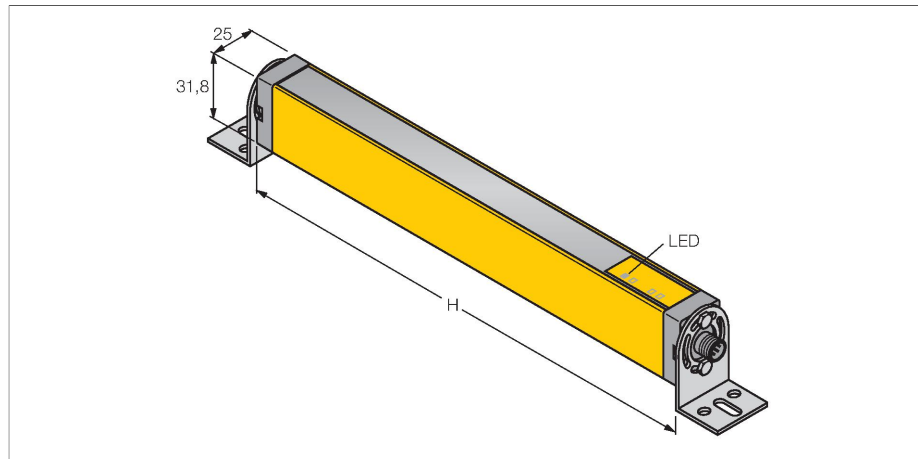


# LS2LP30-300Q88

## Light Screen for Machine Safety Applications – Emitter/Receiver Pair



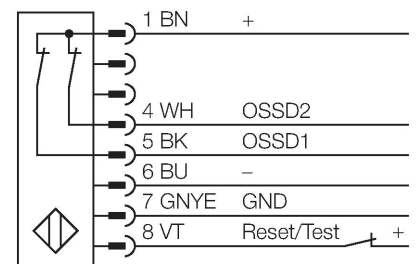
### Features

- Male M12 × 1, 8-pin
- Protection class IP65
- Scan field 300 mm
- Resolution 30 mm
- Internal testing in 500 ms cycle
- Range 15 m
- Operating voltage 24 VDC ±15 %
- Switching output with LATCH
- Muting is not supported
- Type 2 acc. to IEC 61496-1,-2; category 2
- PLd acc. to EN ISO 13849-1; SIL2 acc. to IEC 61508

### Technical data

|                                      |                                   |
|--------------------------------------|-----------------------------------|
| Type                                 | LS2LP30-300Q88                    |
| ID                                   | 3073565                           |
| <b>Optical data</b>                  |                                   |
| Function                             | Light screen                      |
| Light type                           | IR                                |
| Wavelength                           | 950 nm                            |
| Optical resolution                   | 30 mm                             |
| Range                                | 200...15000 mm                    |
| Scan field                           | 300 mm                            |
| Number of beams                      | 16                                |
| With muting function                 | no                                |
| Scan Code                            | None                              |
| <b>Electrical data</b>               |                                   |
| Operating voltage                    | 20...28 VDC                       |
| Residual ripple                      | < 15 % U <sub>ss</sub>            |
| DC rated operational current         | ≤ 140 mA                          |
| No-load current                      | ≤ 90 mA                           |
| Max. current safe output             | 0.5 mA                            |
| Output function                      | 2 x NC (normally closed), 2 x PNP |
| Current output                       | 500 mA                            |
| Number of safe semiconductor outputs | 2                                 |
| Response time typical                | < 13 ms                           |
| With restart interlock               | yes                               |
| Blanking function                    | no                                |
| <b>Mechanical data</b>               |                                   |
| Design                               | Rectangular, EZ-Screen            |

### Wiring diagram



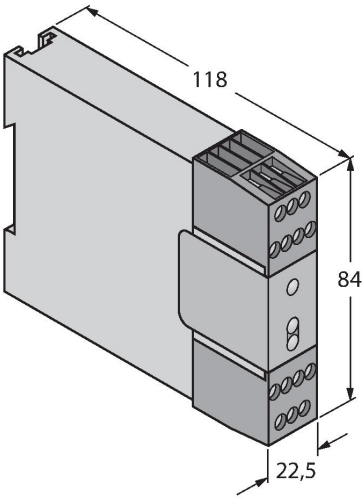
### Functional principle

The safety light curtain consists of an emitter and a receiver. The system is optically synchronized, making the wiring between emitter and receiver redundant. The receiver's safety switching outputs are directly connected to a load relay and trigger an immediate stop of the dangerous machine cycle. Due to the dual-channel design of the switching device, personal safety degree type 2 acc. to IEC 61496 and category 2 acc. to EN 9541 are fulfilled.

Technical data

|                       |                             |
|-----------------------|-----------------------------|
| Dimensions            | 31.8 x 25.2 x 365 mm        |
| Housing material      | Metal, AL, Yellow polyester |
| Lens                  | plastic, Acrylic            |
| Cascadable            | No                          |
| Electrical connection | Connector, M12 × 1          |
| Number of cores       | 8                           |
| Ambient temperature   | 0...+55 °C                  |
| Protection class      | IP65                        |
| Power-on indication   | LED, Green                  |
| Switching state       | 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 listed            |

Accessories

| Dimension drawing                                                                   | Type    | ID      |                                                                                                                                 |
|-------------------------------------------------------------------------------------|---------|---------|---------------------------------------------------------------------------------------------------------------------------------|
|  | IM-T-9A | 3061425 | Safety relay, category 4 acc. to ISO 13849-1 (EN 954.1), 2 inputs, 3 NO outputs, 24 VDC, supplies max. 6 A, 20 ms response time |