

# SPL-S280PTS1W04

SICK Sensor Intelligence.

**SWITCHING AUTOMATION LIGHT GRIDS** 

## SPL-S280PTS1W04 | SLG

SWITCHING AUTOMATION LIGHT GRIDS



#### Ordering information

| Туре            | Part no. |
|-----------------|----------|
| SPL-S280PTS1W04 | 1213544  |

Other models and accessories -> www.sick.com/SLG



## CE

#### Detailed technical data

#### Features

| Sensor principle                | Sender/receiver                            |
|---------------------------------|--------------------------------------------|
| Minimum detectable object (MDO) | Parallel beam, 45 mm                       |
| Beam separation                 | 40 mm                                      |
| Optical light exit              | Slim                                       |
| Number of beams                 | 8                                          |
| Detection height                | 280 mm                                     |
| Parameterization                | None                                       |
| Cross beam/parallel beam        | Parallel beam active                       |
| Output 1                        | Output 1 active, if light beam interrupted |
| Muting function                 | Muting function deactivated                |
| Automatic teach                 | Automatic teach active                     |
| Alignment aid                   | Without alignment aid                      |

#### Mechanics/electronics

| Light source                     | Infrared light                       |
|----------------------------------|--------------------------------------|
| Wave length                      | 950 nm                               |
| Supply voltage V <sub>s</sub>    | DC24 V, ± 20 %                       |
| Power consumption receiver       | ≤ 50 mA                              |
| Output current I <sub>max.</sub> | ≤ 100 mA                             |
| Output load, capacitive          | 100 nF                               |
| Output load, Inductive           | 1 H                                  |
| Initialization time              | 1 s                                  |
| Switching output                 | PNP                                  |
| Inputs                           | Job-LED                              |
| Dimensions (W x H x D)           | 25 mm x 352.4 mm x 8.2 mm            |
| Connection type                  | Cable with M12 male connector, 4-pin |

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| Housing material    | РММА                                                                                                                         |
|---------------------|------------------------------------------------------------------------------------------------------------------------------|
| Indication          | LED                                                                                                                          |
| Synchronization     | Optical                                                                                                                      |
| Enclosure rating    | IP65                                                                                                                         |
| Circuit protection  | U <sub>V</sub> connections, reverse polarity protected<br>Output Q short-circuit protected<br>Interference pulse suppression |
| Protection class    | III                                                                                                                          |
| Weight              | 40 g                                                                                                                         |
| Pulse frequency     | 500 kHz                                                                                                                      |
| Aluminum stabilizer | Without stabilizer                                                                                                           |
| Performance         |                                                                                                                              |
| Maximum range       | 3 m <sup>1)</sup>                                                                                                            |

| -               |                      |
|-----------------|----------------------|
| Minimum range   | Parallel beam: ≥ 0 m |
| Operating range | 1.5 m                |
| Response time   | Parallel beam, 19 ms |

 $^{\left( 1\right) }$  No reserve for environmental issue and deterioration of the diode.

#### Ambient data

| Shock resistance              | 10 g / DIN EN 60068-2-29 / 16 ms                         |
|-------------------------------|----------------------------------------------------------|
| Vibration resistance          | 5 g, 10 Hz 55 Hz (IEC 68-2-6)                            |
| EMC                           | EN 60947-5-2                                             |
| Ambient light immunity        | Direct: 100,000 lx <sup>1)</sup><br>Indirect: 150,000 lx |
| Ambient operating temperature | -25 °C +55 °C                                            |
| Ambient temperature, storage  | -25 °C +70 °C                                            |

#### <sup>1)</sup> Sunlight.

#### Classifications

| ECLASS 5.0   | 27270910 |
|--------------|----------|
| ECLASS 5.1.4 | 27270910 |
| ECLASS 6.0   | 27270910 |
| ECLASS 6.2   | 27270910 |
| ECLASS 7.0   | 27270910 |
| ECLASS 8.0   | 27270910 |
| ECLASS 8.1   | 27270910 |
| ECLASS 9.0   | 27270910 |
| ECLASS 10.0  | 27270910 |
| ECLASS 11.0  | 27270910 |
| ECLASS 12.0  | 27270910 |
| ETIM 5.0     | EC002549 |
| ETIM 6.0     | EC002549 |
| ETIM 7.0     | EC002549 |

### SPL-S280PTS1W04 | SLG

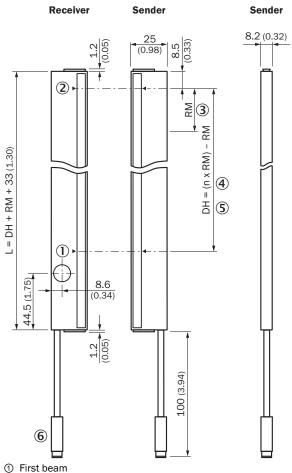
SWITCHING AUTOMATION LIGHT GRIDS

| ETIM 8.0       | EC002549 |
|----------------|----------|
| UNSPSC 16.0901 | 39121528 |

#### Dimensional drawing (Dimensions in mm (inch))

Sxx-Sxxxxxx1xxx

#### Slim, without stabilizer



② Last beam

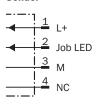
- Beam separation (RM)
- Wind the separation (RM)
  <
- S Detection height (DH)

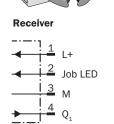
6 Connection

#### Connection type and diagram

Connection type and diagram







#### Functional principle

Slim & Flat



Slim model = light emission on narrow side
 Flat model = light emission on broad side

#### **Recommended accessories**

Other models and accessories -> www.sick.com/SLG

|               | Brief description                                                                                                                                                                                                                                                                                                         | Туре                   | Part no. |  |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|----------|--|
| Mounting brac | Mounting brackets and plates                                                                                                                                                                                                                                                                                              |                        |          |  |
| Düc           | Mounting bracket for light grids from a detection height of 600 mm (with slot, recom-<br>mended for compensation of material extension caused by temperature), mounting po-<br>sition: front, 2x BEF-SLG1, 2x BEF-SLG2                                                                                                    | BEF-SLG-SET1           | 2055427  |  |
| Others        |                                                                                                                                                                                                                                                                                                                           |                        |          |  |
| <b>N</b>      | <ul> <li>Connection type head A: Female connector, M12, 4-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 2 m, 4-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals</li> </ul> | YF2A14-<br>020VB3XLEAX | 2096234  |  |

## SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is "Sensor Intelligence."

## WORLDWIDE PRESENCE:

Contacts and other locations -www.sick.com



Online data sheet

