



## Switching automation light grids SLG, SAS

SAS4-F044P3TS2T00



**Model Name** > SAS4-F044P3TS2T00  
**Part No.** > 1212690

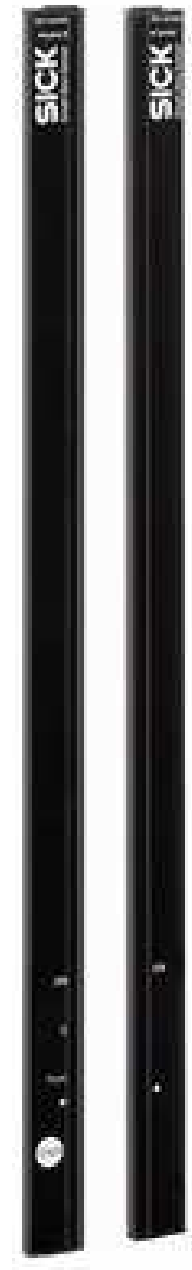


#### At a glance

- Variable monitoring lengths from 120 mm up to 1,400 mm (in 160 mm increments)
- Maximum range 10 m
- Response time 18 ms
- 25 mm or 45 mm detection resolution with 40 mm or 80 mm beam spacing possible
- Order-picking with extra-bright job LEDs on the sender and receiver sides
- IP 65 protection for various environmental conditions
- Highly immune to sunlight at 150,000 lx

#### Your benefits

- Small, slim and sleek design enables easy integration into applications
- Capacitive teach-in button and LEDs make commissioning easier for complex solutions
- Slim and flat models offer flexible mounting options
- User-defined factory preset configuration or flexible configuration with teach-in button
- Optical synchronization eliminates the need to lay cables, saving time
- Stealth detection in public places - at only 8 mm x 25 mm, it fits just about anywhere and can be imbedded inside walls, doors, conveyors, and machines, reducing damage
- Auto-teach and auto-muting enable Plug & Play. And, an alignment aid and "Click & Go" provide faster installation.



#### Features

|                                  |                      |
|----------------------------------|----------------------|
| Technology:                      | Sender/receiver      |
| Minimum detectable object (MDO): | Parallel beam, 45 mm |
| Beam separation:                 | 40 mm                |
| Number of beams:                 | 12                   |
| Detection height:                | 440 mm               |

|                           |                                            |
|---------------------------|--------------------------------------------|
| Optical light exit:       | Flat                                       |
| Configuration:            | Teach button with configuration software   |
| Cross beam/parallel beam: | Parallel beam active                       |
| Output 1:                 | Output 1 active, if light beam interrupted |
| Automatic teach:          | Automatic teach inactive                   |
| Alignment aid:            | Without alignment aid                      |
| Muting function:          | Muting function inactive                   |

## Performance

|                |                      |
|----------------|----------------------|
| Maximum range: | 4 m <sup>1)</sup>    |
| Minimum range: | Parallel beam: ≥0 mm |
| Working range: | 3 m                  |
| Response time: | Parallel beam 19 ms  |

<sup>1)</sup> No reserve for environmental issue and deterioration of the diode

## Interfaces

|                        |                                       |
|------------------------|---------------------------------------|
| Output type:           | 1 x PNP                               |
| Electrical connection: | Short cable with connector M12, 4-pin |
| Inputs:                | Teach input                           |

## Mechanics/electronics

|                                            |                                                                                                           |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| Wave length:                               | IR 950 nm                                                                                                 |
| Supply voltage Vs:                         | DC 24 V, ± 20 %                                                                                           |
| Power consumption sender <sup>1)</sup> :   | 112 mA                                                                                                    |
| Power consumption receiver <sup>2)</sup> : | 70 mA                                                                                                     |
| Output current I <sub>max</sub> :          | 100 mA                                                                                                    |
| Output load capacitive:                    | 100 nF                                                                                                    |
| Output load inductive:                     | 1 H                                                                                                       |
| Initialization time:                       | 1 s                                                                                                       |
| Dimensions (W x H x D):                    | 25 mm x 512.4 mm x 8 mm                                                                                   |
| Housing material:                          | PMMA                                                                                                      |
| Indication:                                | LED                                                                                                       |
| Circuit protection:                        | Output Q short-circuit protected<br>Interference suppression<br>VS connections reverse-polarity protected |
| Weight:                                    | 60 g                                                                                                      |
| Switching frequency:                       | 500 kHz                                                                                                   |
| Aluminum stabilizer:                       | With stabilizer                                                                                           |
| Synchronization:                           | Optical                                                                                                   |

<sup>1)</sup> <sup>2)</sup> Without load

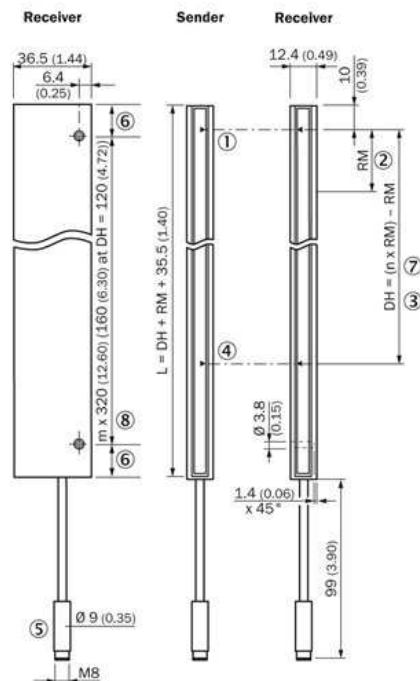
## Ambient data

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

1) Sunlight

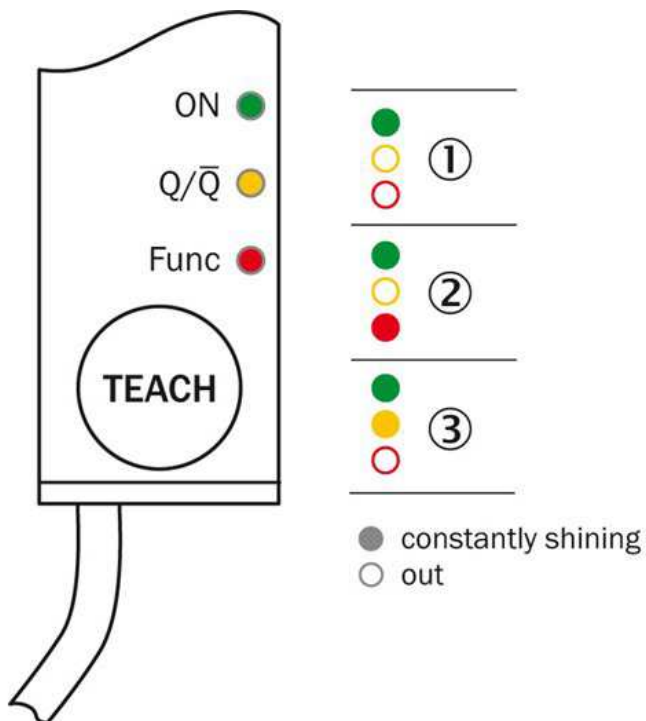
## Dimensional drawing

Flat, with stabilizer



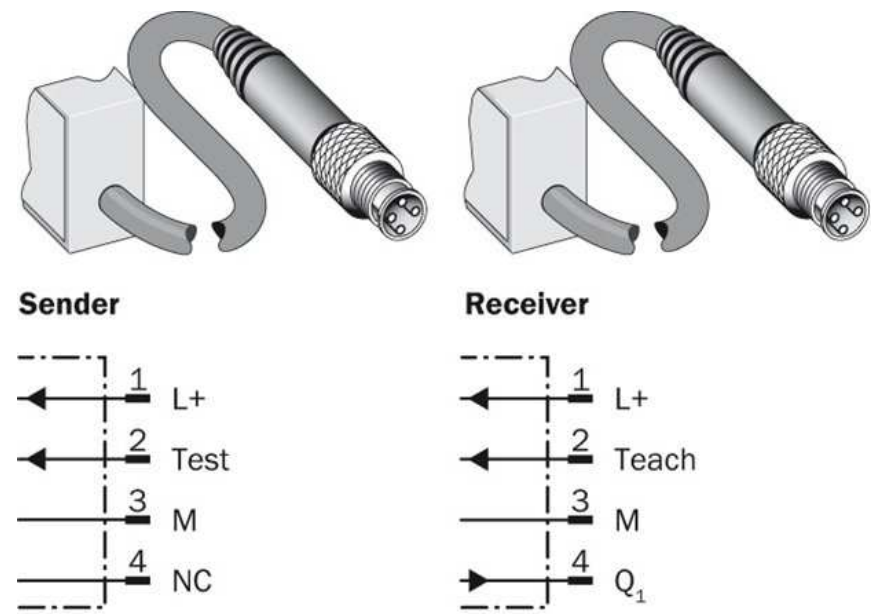
- |1| Last beam
- |2| Beam separation RM
- |3| DH - Detection height (n x 40 mm) - RM
- |4| First beam
- |5| Connection
- |6| Same distance
- |7| n = beam
- |8| m = mounting hole

## Receiver, LED indication



- |1| Supply voltage
- |2| Active, if teach-in button is pressed
- |3| No object in the light path

Connection type and diagram



Special functions

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