

**Description**

- 5 m sensing range
- 16 to 64 parallel beams
- 28 or 56 mm beam spacing
- Active height of 425 mm to 1770 mm
- Length of 570 mm to 2105 mm
- Flexible cable
- Plug connection to controller
- Slim line (10x28 mm) or leading edge (37,5x13 mm) housing
- Power indicator
- Static and dynamic applications



The SpaceGuard SG 11 light curtain series, which consists of a transmitter SGT and receiver SGR, is made to operate in conjunction with a controller SGC 11. The light curtains are housed in an aluminium profile available in a slim line design (10 x 28 mm) or a leading edge design (37,5 x 13 mm). The system can be used both in static and dynamic installations.

**Technical Data**

|  |  | 28 mm channel spacing   |                      | 56 mm channel spacing |                      |
|--|--|---|----------------------|-----------------------|----------------------|
|  |  | SGT   | SGR                  | SGT                   | SGR                  |
| Light source                             |  | Infrared (940 nm)   | -                    | Infrared (940 nm)     | -                    |
| Number of channels (diodes per detector) |  | 16, 24, 32, 48, 56 or 64                                      |                      | 16, 24 or 32          |                      |
| Number of parallel beams                 |  | 16, 24, 32, 48, 56 or 64                                      |                      | 16, 24 or 32          |                      |
| Active height                            |  | 425, 650, 875, 1100, 1320, 1545 or 1770 mm                    |                      | 845, 1295 or 1740 mm  |                      |
| Channel spacing                          |  | 28 mm   |                      | 56 mm                 |                      |
| Bottom spacing to Ch 1                   |  | 22 mm   |                      |                       |                      |
| Power on indicator                       |  | Red LED   |                      |                       |                      |
| Housing dimensions (w x d)               |  | Slim Line A<br>10 x 28 mm                                     |                      |                       |                      |
|  |  | Leading Edge B<br>37,5 x 13 mm                                |                      |                       |                      |
| Housing material                         |  | Profile<br>Aluminium (black anodised)                         |                      |                       |                      |
|  |  | Lens cover<br>Acrylic (A housing) / Polycarbonate (B housing) |                      |                       |                      |
| Connection                               |  | 5 pin, 240° DIN plug  | 5 pin, 180° DIN plug | 5 pin, 240° DIN plug  | 5 pin, 180° DIN plug |
| Cable, PUR Ø 5,2 mm                      |  | 5 x 0,14 mm <sup>2</sup>                                      |                      |                       |                      |

**Environmental Data**

|                                |  | SGT           | SGR        |
|--------------------------------|--|---------------|------------|
| Light immunity @ 20° incidence |  | -             | 10 000 lux |
| Temperature, operation         |  | -20 to +55 °C |            |
| Temperature, storage           |  | -40 to +80 °C |            |
| Sealing class A / B housing    |  | IP 54         |            |
| Approvals                      |  | CE            |            |

Available Types

Slim Line A

|             | Housing Length | Active Height | Connection  |                     | 4 m flexible cable    | 0.5 m flexible cable  | Range |
|-------------|----------------|---------------|-------------|---------------------|-----------------------|-----------------------|-------|
|             |                |               | No of Beams | Beam Spacing        | Order Reference       |                       |       |
|             |                |               |             |                     |                       |                       |       |
| Transmitter | 570 mm         | 425 mm        | 16          | 28 mm               | SGT 057-016-A1-A-4F   | SGT 057-016-A1-A-0.5F | 5 m   |
|             | 795 mm         | 650 mm        | 24          |                     | SGT 080-024-A1-A-4F   | SGT 080-024-A1-A-0.5F |       |
|             | 1020 mm        | 845 mm        | 16          | 28 mm               | SGT 102-016-B1-A-4F   | SGT 102-016-B1-A-0.5F |       |
|             |                | 875 mm        | 32          |                     | SGT 102-032-A1-A-4F   | SGT 102-032-A1-A-0.5F |       |
|             | 1245 mm        | 1100 mm       | 40          | SGT 125-040-A1-A-4F | SGT 125-040-A1-A-0.5F |                       |       |
|             | 1470 mm        | 1295 mm       | 24          | 28 mm               | SGT 147-024-B1-A-4F   | SGT 147-024-B1-A-0.5F |       |
|             |                | 1320 mm       | 48          |                     | SGT 147-048-A1-A-4F   | SGT 147-048-A1-A-0.5F |       |
|             | 1695 mm        | 1545 mm       | 56          | SGT 170-056-A1-A-4F | SGT 170-056-A1-A-0.5F |                       |       |
|             | 1995 mm        | 1740 mm       | 32          | 28 mm               | SGT 200-032-B1-A-4F   | SGT 200-032-B1-A-0.5F |       |
|             |                | 1770 mm       | 64          |                     | SGT 200-064-A1-A-4F   | SGT 200-064-A1-A-0.5F |       |
|             | 2105 mm        | 1740 mm       | 32          | 28 mm               | SGT 210-032-B1-A-4F   | SGT 210-032-B1-A-0.5F |       |
|             |                | 1770 mm       | 64          |                     | SGT 210-064-A1-A-4F   | SGT 210-064-A1-A-0.5F |       |

|          |         |         |    |                     |                       |                       |     |
|----------|---------|---------|----|---------------------|-----------------------|-----------------------|-----|
| Receiver | 570 mm  | 425 mm  | 16 | 28 mm               | SGR 057-016-A1-A-4F   | SGR 057-016-A1-A-0.5F | 5 m |
|          | 795 mm  | 650 mm  | 24 |                     | SGR 080-024-A1-A-4F   | SGR 080-024-A1-A-0.5F |     |
|          | 1020 mm | 845 mm  | 16 | 28 mm               | SGR 102-016-B1-A-4F   | SGR 102-016-B1-A-0.5F |     |
|          |         | 875 mm  | 32 |                     | SGR 102-032-A1-A-4F   | SGR 102-032-A1-A-0.5F |     |
|          | 1245 mm | 1100 mm | 40 | SGR 125-040-A1-A-4F | SGR 125-040-A1-A-0.5F |                       |     |
|          | 1470 mm | 1295 mm | 24 | 28 mm               | SGR 147-024-B1-A-4F   | SGR 147-024-B1-A-0.5F |     |
|          |         | 1320 mm | 48 |                     | SGR 147-048-A1-A-4F   | SGR 147-048-A1-A-0.5F |     |
|          | 1695 mm | 1545 mm | 56 | SGR 170-056-A1-A-4F | SGR 170-056-A1-A-0.5F |                       |     |
|          | 1995 mm | 1740 mm | 32 | 28 mm               | SGR 200-032-B1-A-4F   | SGR 200-032-B1-A-0.5F |     |
|          |         | 1770 mm | 64 |                     | SGR 200-064-A1-A-4F   | SGR 200-064-A1-A-0.5F |     |
|          | 2105 mm | 1740 mm | 32 | 28 mm               | SGR 210-032-B1-A-4F   | SGR 210-032-B1-A-0.5F |     |
|          |         | 1770 mm | 64 |                     | SGR 210-064-A1-A-4F   | SGR 210-064-A1-A-0.5F |     |

Leading Edge B

|             |         |         |    |                     |                       |                       |       |
|-------------|---------|---------|----|---------------------|-----------------------|-----------------------|-------|
| Transmitter | 570 mm  | 425 mm  | 16 | 28 mm               | SGT 057-016-A1-B-4F   | SGT 057-016-A1-B-0.5F | 3.5 m |
|             | 795 mm  | 650 mm  | 24 |                     | SGT 080-024-A1-B-4F   | SGT 080-024-A1-B-0.5F |       |
|             | 1020 mm | 845 mm  | 16 | 28 mm               | SGT 102-016-B1-B-4F   | SGT 102-016-B1-B-0.5F |       |
|             |         | 875 mm  | 32 |                     | SGT 102-032-A1-B-4F   | SGT 102-032-A1-B-0.5F |       |
|             | 1245 mm | 1100 mm | 40 | SGT 125-040-A1-B-4F | SGT 125-040-A1-B-0.5F |                       |       |
|             | 1470 mm | 1295 mm | 24 | 28 mm               | SGT 147-024-B1-B-4F   | SGT 147-024-B1-B-0.5F |       |
|             |         | 1320 mm | 48 |                     | SGT 147-048-A1-B-4F   | SGT 147-048-A1-B-0.5F |       |
|             | 1695 mm | 1545 mm | 56 | SGT 170-056-A1-B-4F | SGT 170-056-A1-B-0.5F |                       |       |
|             | 1995 mm | 1740 mm | 32 | 28 mm               | SGT 200-032-B1-B-4F   | SGT 200-032-B1-B-0.5F |       |
|             |         | 1770 mm | 64 |                     | SGT 200-064-A1-B-4F   | SGT 200-064-A1-B-0.5F |       |
|             | 2105 mm | 1740 mm | 32 | 28 mm               | SGT 210-032-B1-B-4F   | SGT 210-032-B1-B-0.5F |       |
|             |         | 1770 mm | 64 |                     | SGT 210-064-A1-B-4F   | SGT 210-064-A1-B-0.5F |       |

|          |         |         |    |                     |                       |                       |       |
|----------|---------|---------|----|---------------------|-----------------------|-----------------------|-------|
| Receiver | 570 mm  | 425 mm  | 16 | 28 mm               | SGR 057-016-A1-B-4F   | SGR 057-016-A1-B-0.5F | 3.5 m |
|          | 795 mm  | 650 mm  | 24 |                     | SGR 080-024-A1-B-4F   | SGR 080-024-A1-B-0.5F |       |
|          | 1020 mm | 845 mm  | 16 | 28 mm               | SGR 102-016-B1-B-4F   | SGR 102-016-B1-B-0.5F |       |
|          |         | 875 mm  | 32 |                     | SGR 102-032-A1-B-4F   | SGR 102-032-A1-B-0.5F |       |
|          | 1245 mm | 1100 mm | 40 | SGR 125-040-A1-B-4F | SGR 125-040-A1-B-0.5F |                       |       |
|          | 1470 mm | 1295 mm | 24 | 28 mm               | SGR 147-024-B1-B-4F   | SGR 147-024-B1-B-0.5F |       |
|          |         | 1320 mm | 48 |                     | SGR 147-048-A1-B-4F   | SGR 147-048-A1-B-0.5F |       |
|          | 1695 mm | 1545 mm | 56 | SGR 170-056-A1-B-4F | SGR 170-056-A1-B-0.5F |                       |       |
|          | 1995 mm | 1740 mm | 32 | 28 mm               | SGR 200-032-B1-B-4F   | SGR 200-032-B1-B-0.5F |       |
|          |         | 1770 mm | 64 |                     | SGR 200-064-A1-B-4F   | SGR 200-064-A1-B-0.5F |       |
|          | 2105 mm | 1740 mm | 32 | 28 mm               | SGR 210-032-B1-B-4F   | SGR 210-032-B1-B-0.5F |       |
|          |         | 1770 mm | 64 |                     | SGR 210-064-A1-B-4F   | SGR 210-064-A1-B-0.5F |       |

- Note: 1. The transmitter SGT and the receiver SGR set must always have the same number of light beams and the same beam spacing.  
 2. Special lengths are available upon request.  
 3. Special epoxy moulding for IP 65 rating, in Slim Line A-profile, is available upon request.

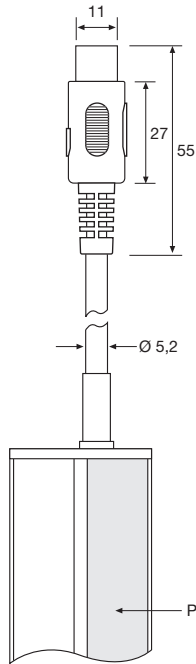


Dimensions and Descriptions

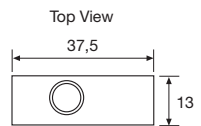
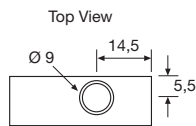
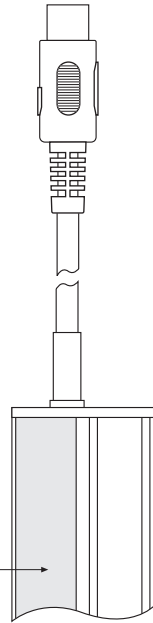
Leading Edge B

Details

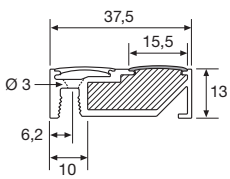
SGT  
Top Front View  
(shown with screw cover strip)



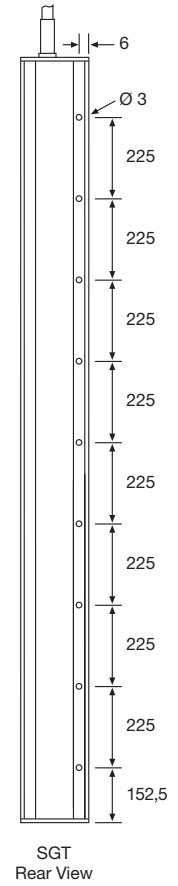
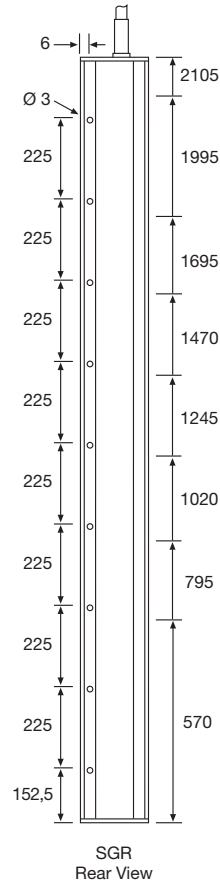
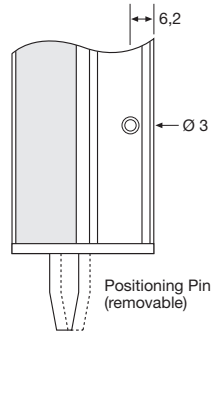
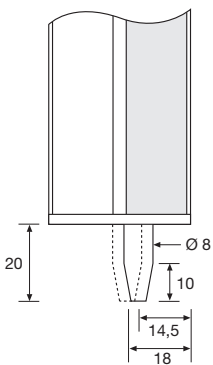
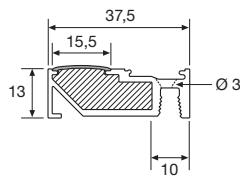
SGR  
Top Front View  
(shown without screw cover strip)



Bottom View  
Cross Section



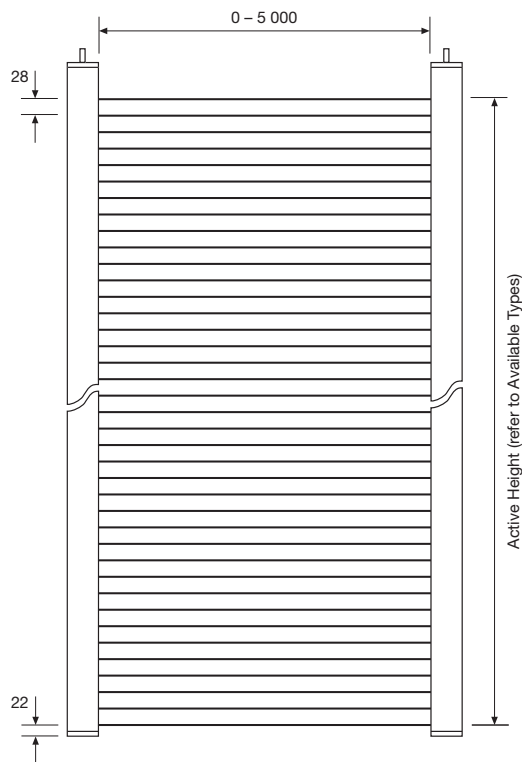
Bottom View  
Cross Section



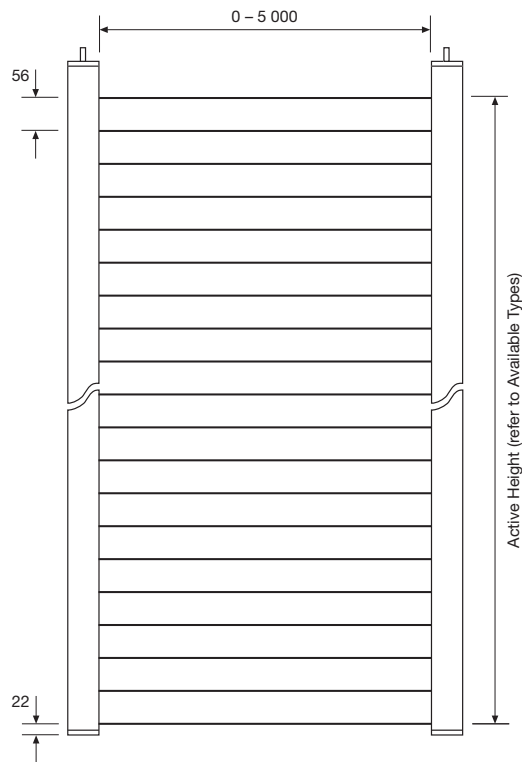
SGT/SGR 057 to 210

(Units in mm)

**Beam Patterns**



28 mm channel spacing

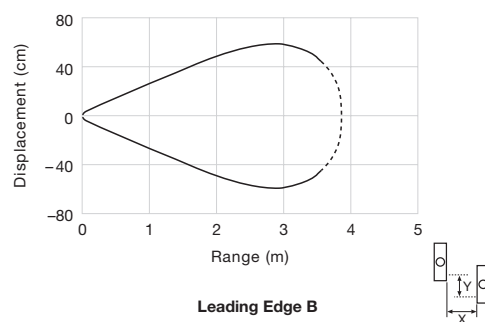
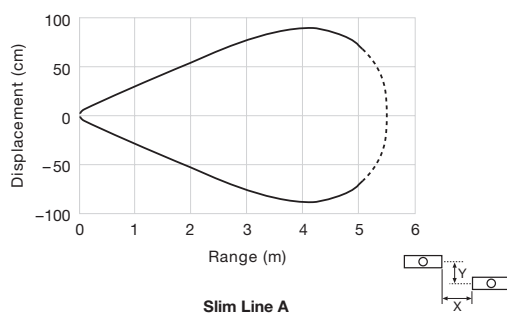


56 mm channel spacing

(Units in mm)

**Sensing Characteristics**

**Parallel Displacement**



**Extension Cables**

| Dimension Drawing<br>(Units in mm) | Cable Type | Installation       | Sealing Class | Length | Connector | Transmitter          | Receiver             |
|------------------------------------|------------|--------------------|---------------|--------|-----------|----------------------|----------------------|
|                                    |            |                    |               |        |           | 5 pin, 240° DIN plug | 5 pin, 180° DIN plug |
| Material                           |            |                    |               |        |           | Order Reference      |                      |
| <p>Male Female</p>                 | Flexible   | Dynamic and Static | IP 67         | 4 m    | PUR       | <b>CBG 5 S 4</b>     | <b>CBH 5 S 4</b>     |

Telco reserves the right to change specifications without notice.