

## DATALOGIC - SG2-B 30 HAND

SG2-30-015-OO-X

SG2-30-015-OO-X 30mm Res Type

- Hand protection (R 30), Type 2, PL d
- Range up to 19 m
- Protective height 150-1800 mm



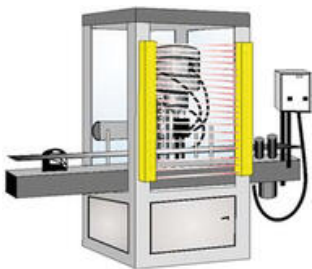
### PRODUCT DESCRIPTION

Datalogic safety light curtain SG2-B Hand is made for hand detection with a range of up to 19 metres. The safety light curtain is available as type 2, and maintains level PL d according to the latest safety standards, EN ISO 13849-1 and EN 62061. SG2-B Hand has basic functions as two safe electronic short-circuit detection outputs (PNP) + test input. If potential free contacts are needed we can offer for example Duelco NST-2004 safety relay. Safety light curtain supplied complete with standard bracket.

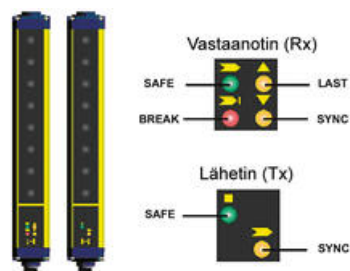
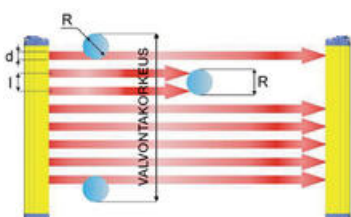
Datalogic has a 3 year warranty for safety light curtains.


### Application

Hand protection ( $R \leq 40$  mm)



### TECHNICAL DATA



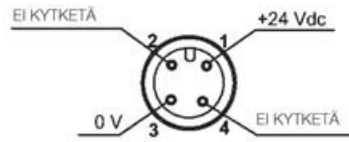
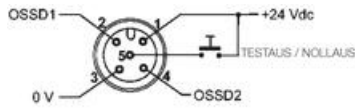
|   |   |
|---|---|
| <b>Supply voltage</b>                         | 24 V DC, stabilised   |
| <b>Tolerance</b>                              | ± 20 %  |
| <b>Max. current consumption / transmitter</b> | 2 W   |
| <b>Max. current consumption / receiver</b>    | 3.5 W   |
| <b>Safe outputs (OSSD)</b>                    | Transistor 2 x PNP  |
| <b>Max. current (OSSD)</b>                    | 0.5 A/each PNP  |
| <b>Response time</b>                          | 8-24 ms (depending on model, refer table "Order number")                            |
| <b>Type of light</b>                          | IR LED 950 nm   |
| <b>Operating distance</b>                     | 0.2-19 m  |
| <b>Protective height</b>                      | 150-1800 mm   |
| <b>Extra functions</b>                        | test input  |
| <b>Status indication</b>                      | 6 x LED   |
| <b>Resolution R</b>                           | 30 mm   |
| <b>Cable connection</b>                       | Transmitter M12, 4-pole<br>Receiver M12, 5-pole                                     |
| <b>Max. cable length</b>                      | 50 m  |
| <b>Material housing</b>                       | Aluminium profile (RAL 1003), end caps PC makrolon                                  |
| <b>Weight</b>                                 | 1.0 kg/m  |
| <b>Protection class</b>                       | IP65  |
| <b>Operating temperature</b>                  | 0 °C to +55 °C  |
| <b>Storage temperature</b>                    | -25 °C to +70 °C  |
| <b>Safety category</b>                        | 2 according to EN 954-1   |
| <b>PL</b>                                     | d according to EN ISO 13849-1   |
| <b>SIL</b>                                    | 2 according to EN IEC 62061   |
| <b>PFHd</b>                                   | 1.04E-08  |
| <b>T1 (Life time in years)</b>                | 20  |
| <b>MTTFd (years)</b>                          | 273   |
| <b>DC</b>                                     | 97.50 %   |
| <b>SFF</b>                                    | 98.40 %   |
| <b>Approvals</b>                              |  |

## CONNECTION

Connection of SG2-B safety light curtain

Receiver

Transmitter



#### Receiver (Rx), 5-pole, M12-connector

|   |         |                           |
|---|---------|---------------------------|
| 1 | = brown | = +24 V DC (power supply) |
| 2 | = white | = OSSD1 (PNP)             |
| 3 | = blue  | = 0 V (power supply)      |
| 4 | = black | = OSSD2 (PNP)             |
| 5 | = grey  | = test                    |

#### Transmitter (Tx), 4-pole, M12-connector

|   |         |                          |
|---|---------|--------------------------|
| 1 | = brown | = 24 V DC (power supply) |
| 2 | = white | = not used               |
| 3 | = blue  | = 0 V (power supply)     |
| 4 | = black | = not used               |

## MANUAL

### SG2-B Hand

[SG2-B & SG2-E, eng](#)

## ORDER NUMBERS & DIMENSIONS

### Dimensions

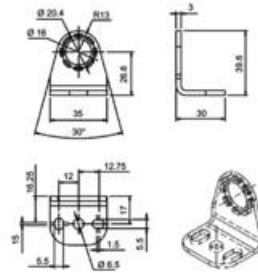
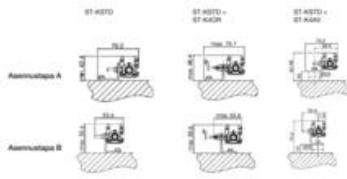


| Order no.               | Resolution (mm) | Protective height (mm) | Number of beams | Length housing L1 / L2 (mm) | Response time (ms) | Range (m) |
|-------------------------|-----------------|------------------------|-----------------|-----------------------------|--------------------|-----------|
| <b>Standard version</b> |                 |                        |                 |                             |                    |           |
| SG2-30-015-OO-X         | 30              | 150                    | 8               | 233.3 / 153.3               | 8                  | 0.2 - 19  |
| SG2-30-030-OO-X         | 30              | 300                    | 16              | 383.2 / 303.2               | 9                  | 0.2 - 19  |
| SG2-30-045-OO-X         | 30              | 450                    | 24              | 533.2 / 453.3               | 11                 | 0.2 - 19  |
| SG2-30-060-OO-X         | 30              | 600                    | 32              | 683.2 / 603.2               | 12                 | 0.2 - 19  |
| SG2-30-075-OO-X         | 30              | 750                    | 40              | 833.2 / 753.3               | 14                 | 0.2 - 19  |
| SG2-30-090-OO-X         | 30              | 900                    | 48              | 983.2 / 903.2               | 15                 | 0.2 - 19  |
| SG2-30-105-OO-X         | 30              | 1050                   | 56              | 1133.2 / 1053.2             | 17                 | 0.2 - 19  |
| SG2-30-120-OO-X         | 30              | 1200                   | 64              | 1283.3 / 1203.3             | 18                 | 0.2 - 19  |
| SG2-30-135-OO-X         | 30              | 1350                   | 72              | 1433.2 / 1353.2             | 20                 | 0.2 - 19  |
| SG2-30-150-OO-X         | 30              | 1500                   | 80              | 1583.3 / 1503.3             | 21                 | 0.2 - 19  |
| SG2-30-165-OO-X         | 30              | 1650                   | 88              | 1733.3 / 1653.3             | 22                 | 0.2 - 19  |
| SG2-30-180-OO-X         | 30              | 1800                   | 96              | 1883.3 / 1803.3             | 24                 | 0.2 - 19  |

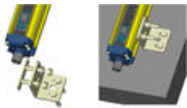
All SG2-B safety light curtains are supplied with brackets (ST-K4ROT).

## ACCESSORIES

### Mounting brackets



ST-K4ROT brackets. 1 kit (4 pcs.) supplied in the package



ST-KSTD brackets



ST-K4AV antivibration support  
use with ST-brackets



SG-LP laser pointer

All SG2-B safety light curtains are supplied with brackets (ST-K4ROT) .

| Order no.   | Description   |
|---|---|
| <b>Cables</b>   |   |
| CS-A1-02-U-05   | Cable, M12, straight, 5 metres, female, 4-pole                      |
| CS-A1-02-U-10   | Cable, M12, straight, 10 metres, female, 4-pole                     |
| CS-A1-02-U-15   | Cable, M12, straight, 15 metres, female, 4-pole                     |
| CS-A1-02-U-25   | Cable, M12, straight, 25 metres, female, 4-pole                     |
| CS-A1-03-U-05   | Cable, M12, straight, 5 metres, female, 5-pole                      |
| CS-A1-03-U-10   | Cable, M12, straight, 10 metres, female, 5-pole                     |
| CS-A1-03-U-15   | Cable, M12, straight, 15 metres, female, 5-pole                     |
| CS-A1-03-U-25   | Cable, M12, straight, 25 metres, female, 5-pole                     |
| <b>Safety relays</b>  |   |
| 42010204  | Safety relay Duelco NST-2004, 3 NO + 1 NC, 24 V DC                  |
| <b>Brackets (extra). All SG2-B safety light curtains are supplied with standard brackets (ST-K4ROT)</b> |   |
| ST-K4ROT  | Mounting bracket, rotatable (4 pcs. / kit)                          |
| ST-KSTD   | Mounting bracket, standard (4 pcs. / kit)                           |
| ST-K4OR   | Angle adjustment kit $\pm 5^\circ$ (4 pcs. / kit), use with ST-KSTD |
| ST-K6OR   | Angle adjustment kit $\pm 5^\circ$ (6 pcs. / kit), use with ST-KSTD |
| ST-K4AV   | Antivibration support (4 pcs. / kit)                                |
| ST-K6AV   | Antivibration support (6 pcs. / kit)                                |
| SG-LP   | Laser pointer   |

## SPECIFICATIONS

|                            |                   |
|----------------------------|-------------------|
| <b>Approvals</b>           | CE, cULus, TÜV    |
| <b>Cable Length Max</b>    | 50 m              |
| <b>Conforming To</b>       | EMC, LVD, MD      |
| <b>Contact Current Max</b> | 0.5 A             |
| <b>DC</b>                  | 97,50%            |
| <b>Function</b>            | Automatic restart |
| <b>IP Class</b>            | IP65              |

|                                |                    |
|--------------------------------|--------------------|
| <b>Material of body</b>        | Aluminium          |
| <b>Mttfd</b>                   | 273 year           |
| <b>Number Of Beams</b>         | 8                  |
| <b>PL</b>                      | c (EN ISO 13849-1) |
| <b>Protection height</b>       | 150 mm             |
| <b>Reaction time</b>           | 8 ms               |
| <b>Scope</b>                   | 0,2-19 m           |
| <b>Sensing distance</b>        | 0,2-19 m           |
| <b>SIL</b>                     | 1 (EN IEC 61508)   |
| <b>Supply voltage</b>          | 24 V DC            |
| <b>T1 (Life Time In Years)</b> | 20                 |
| <b>Temperature range from</b>  | -10 °C             |
| <b>Temperature range to</b>    | 55 °C              |
| <b>Voltage Tolerance</b>       | ±20 %              |

