

## 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

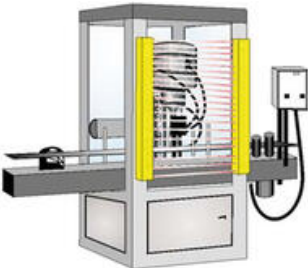



### PRODUCT DESCRIPTION

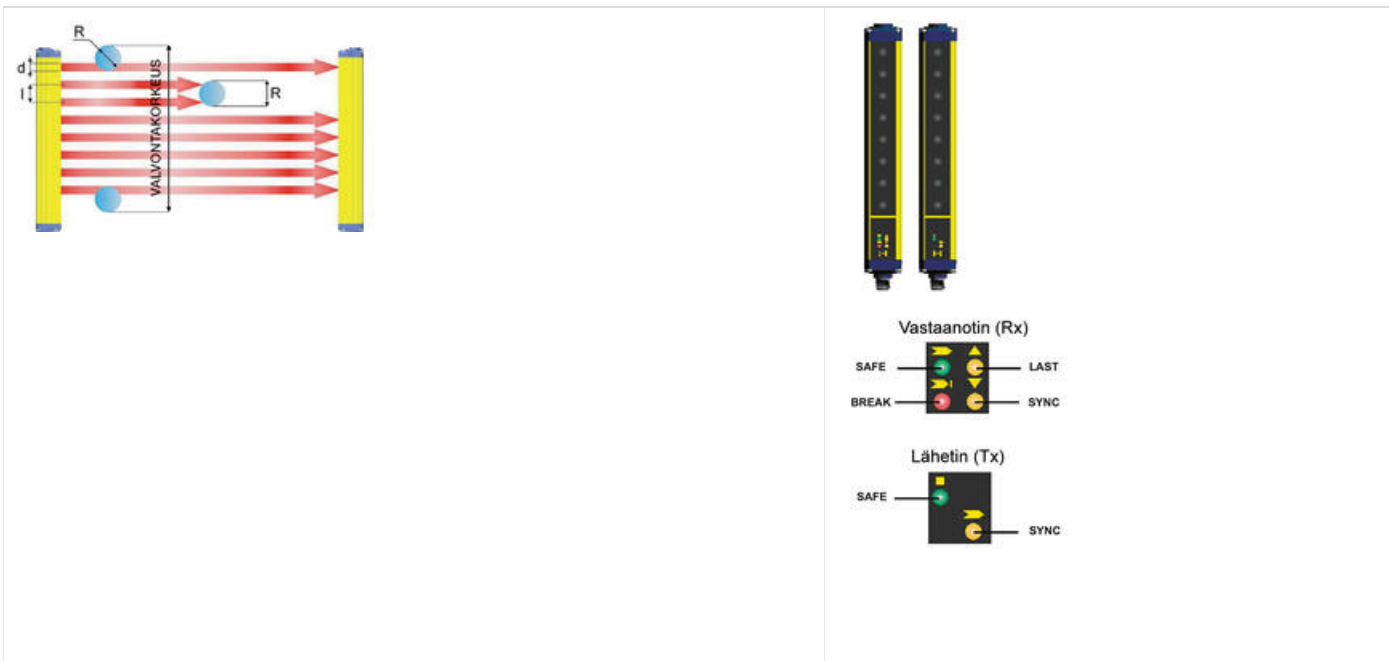
Datalogic safety light curtain SG2-B Hand is made for hand detection with a range of up to 19 metres. The safety light curtain is available as type 2, and maintains level PL d according to the latest safety standards, EN ISO 13849-1 and EN 62061. SG2-B Hand has basic functions as two safe electronic 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 ≤ 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                              |

|                         |                                                                                   |
|-------------------------|-----------------------------------------------------------------------------------|
| PFHd                    | 1.04E-08                                                                          |
| T1 (Life time in years) | 20                                                                                |
| MTTFd (years)           | 273                                                                               |
| DC                      | 97.50 %                                                                           |
| SFF                     | 98.40 %                                                                           |
| Approvals               |  |

## CONNECTION

### Connection of SG2-B safety light curtain



| Receiver (Rx), 5-pole, M12-connector |         |                           | Transmitter (Tx), 4-pole, M12-connector |         |                          |
|--------------------------------------|---------|---------------------------|-----------------------------------------|---------|--------------------------|
| 1                                    | = brown | = +24 V DC (power supply) | 1                                       | = brown | = 24 V DC (power supply) |
| 2                                    | = white | = OSSD1 (PNP)             | 2                                       | = white | = not used               |
| 3                                    | = blue  | = 0 V (power supply)      | 3                                       | = blue  | = 0 V (power supply)     |
| 4                                    | = black | = OSSD2 (PNP)             | 4                                       | = black | = not used               |
| 5                                    | = grey  | = test                    |                                         |         |                          |

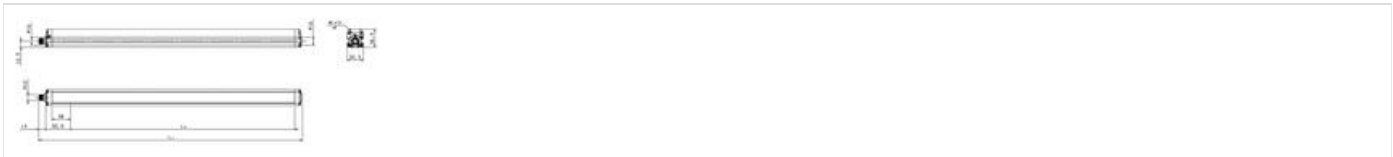
## MANUAL

### SG2-B Hand

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

## ORDER NUMBERS & DIMENSIONS

### Dimensions



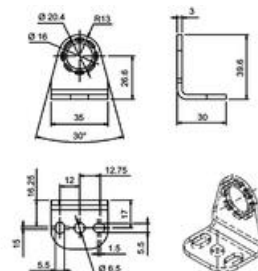
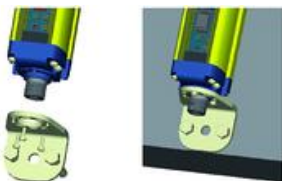
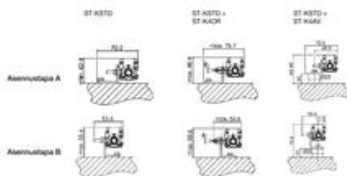
| Order no.               | Resolution (mm) | Protective height (mm) | Number of beams | Length housing L1 / L2 (mm) | Response time (ms) | Range (m) |
|-------------------------|-----------------|------------------------|-----------------|-----------------------------|--------------------|-----------|
| <b>Standard version</b> |                 |                        |                 |                             |                    |           |
| SG2-30-015-00-X         | 30              | 150                    | 8               | 233.3 / 153.3               | 8                  | 0.2 - 19  |
| SG2-30-030-00-X         | 30              | 300                    | 16              | 383.2 / 303.2               | 9                  | 0.2 - 19  |
| SG2-30-045-00-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 |

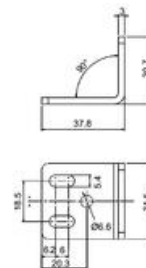
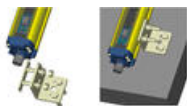
All SG2-B safety light curtains are supplied with brackets (ST-K4ROT).

## ACCESSORIES

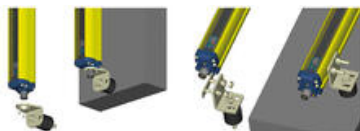
### Mounting brackets



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

|                         |                    |
|-------------------------|--------------------|
| Approvals               | CE, cULus, TÜV     |
| Cable Length Max        | 50 m               |
| Conforming To           | EMC, LVD, MD       |
| Contact Current Max     | 0.5 A              |
| DC                      | 97,50%             |
| Function                | Automatic restart  |
| IP Class                | IP65               |
| Material of body        | Aluminium          |
| Mttfd                   | 273 year           |
| Number Of Beams         | 8                  |
| PL                      | c (EN ISO 13849-1) |
| Protection height       | 150 mm             |
| Reaction time           | 8 ms               |
| Scope                   | 0,2-19 m           |
| Sensing distance        | 0,2-19 m           |
| SIL                     | 1 (EN IEC 61508)   |
| Supply voltage          | 24 V DC            |
| T1 (Life Time In Years) | 20                 |
| Temperature range from  | -10 °C             |
| Temperature range to    | 55 °C              |
| Voltage Tolerance       | ±20 %              |

