

SG2 BASE / SG2 EXTENDED SG4 BASE



High reliability
Easy installation and alignment
Cost effective

- Finger, hand, arm detection with basic functions
- 90 mm version for presence detection
- Up to 19 m operating distance
- Compact dimensions (32.3 x 36.9 mm section)
- Anti-interference coding
- IP65 Protection; IP69K with optional tube
- Unshielded cables
- Rotating and anti-vibration brackets

APPLICATIONS

- Automatic machines: cutting, packing, material handling and storing.
- Automatic and semi-automatic assembling lines;
- Milling, lathe and shearing machines
- Bending and metal-working machines

INDUSTRIES

- Food & Beverage
- Textile
- Metalworking
- Ceramic
- Metal
- Automotive
- Electronics



| | FINGER | HAND | ARM | BODY |
|--------|--------|------|-----|------|
| Type 2 | | x | x | |
| Type 4 | x | x | | x |

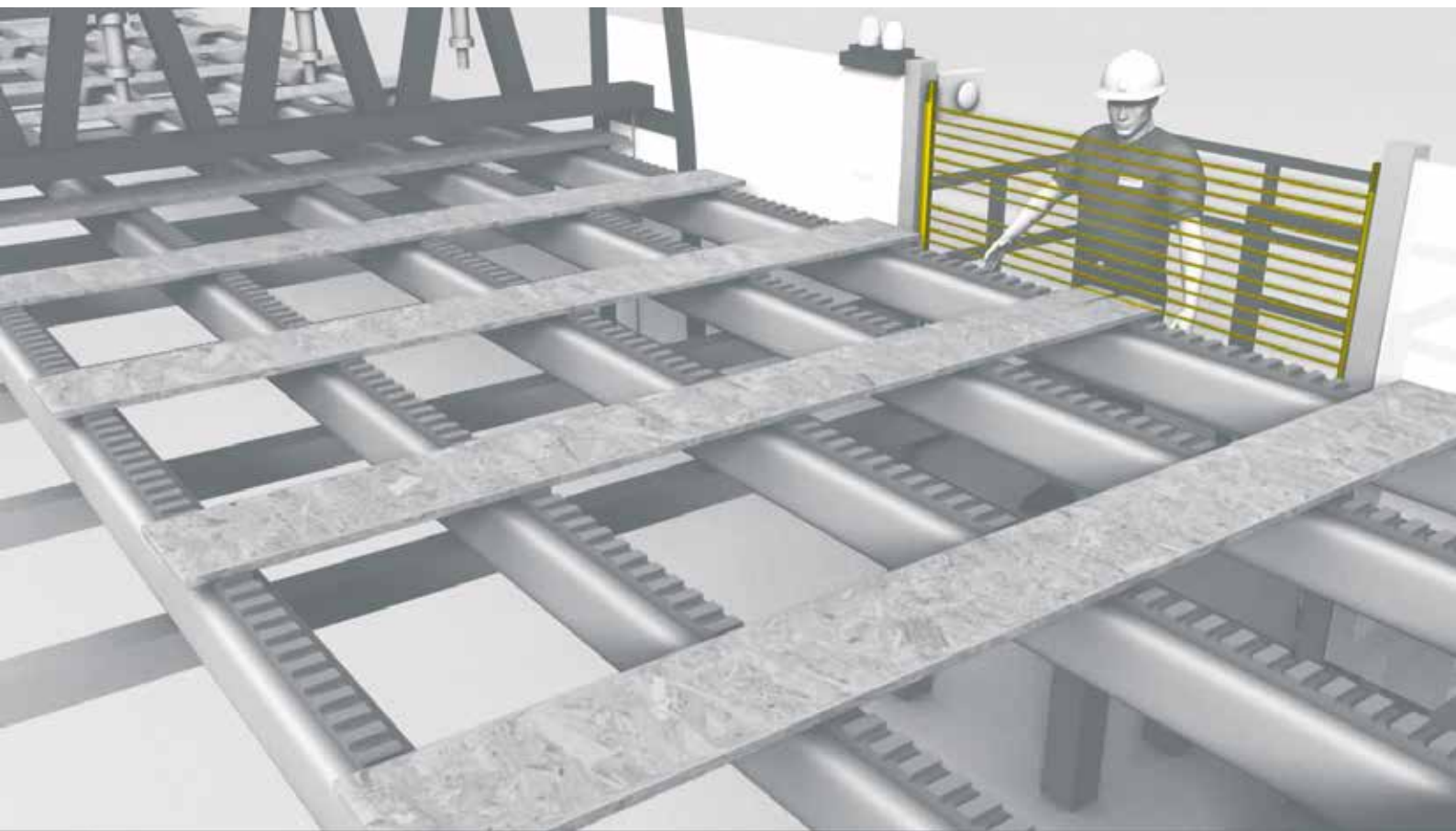
SG **2** - **30** - **015** - **00** - **E**

| TYPE | | RESOLUTION | | MONITORED HEIGHT | | VERSION | |
|------|--------|------------|--------------------------|------------------|--------|---------|-------------------|
| 2 | Type 2 | 14 | Finger: 14 mm | 15 | 150 mm | E | Type4, EDM, Coded |
| 4 | Type 4 | 30 | Hand: 30 mm | 30 | 300 mm | E-C | Type2, EDM, Coded |
| | | 50 | Arm: 50 mm (only Type 2) | ... | ... | X | Basic Function |
| | | 90 | Arm: 90 mm (only Type 2) | 180 | 1800mm | | |

TECHNICAL DATA

| | SG2 BASE [SG2-xx-xxx-00-X] | SG2 EXTENDED [SG2-xx-xxx-00-E-C] | SG4 BASE [SG4-xx-xxx-00-X] | SG4 BASE [SG4-xx-xxx-00-E] |
|--|------------------------------------|-------------------------------------|--|-------------------------------|
| GENERAL DATA | | | | |
| Type (EN61496-1) | 2 | | 4 | |
| PL (EN ISO 13849-1) | c | | e | |
| SIL (IEC 61508) | 1 | | 3 | |
| Resolution | 30 - 50 - 90 mm | | 14 - 30 mm | |
| Protected height | 150 ...1800 mm (with 150 mm steps) | | | |
| Operating distance | 0.2 ...19 m | | 0.2 ... 6 m (resolution 14 mm) 0.2 ...19 m (resolution 30 mm) | |
| ELECTRICAL DATA | | | | |
| Power supply (Vdd) | 24 Vdc ± 20 | | | |
| Outputs | 2 PNP | | | |
| Output current | 0.5 A max / each output | | | |
| Capacitive load | 2.2 uF @ 24Vdc max | | | |
| Response time | 8 ... 19 ms depending on model * | | | |
| Cables length (for power supply) | 50 m max | | | |
| MECHANICAL AND ENVIRONMENTAL DATA | | | | |
| Operating temperature | -10 ...+55 °C | | 0 ...+55 °C | |
| Humidity | 15 ... 95 % (no condensation) | | | |
| Mechanical protection | IP 65 (EN 60529) | | | |
| FUNCTION | | | | |
| Test Input | On Receiver | On Emitter | N/A | On Emitter |
| Restart | Automatic | Manual / Automatic | Automatic | Manual / Automatic |
| EDM (External Device Monitoring) | N/A | On Receiver | N/A | On Receiver |
| Selectable Operating Distance | N/A | On Emitter | N/A | |

* For detailed informations refer to related Manual



CONNECTION

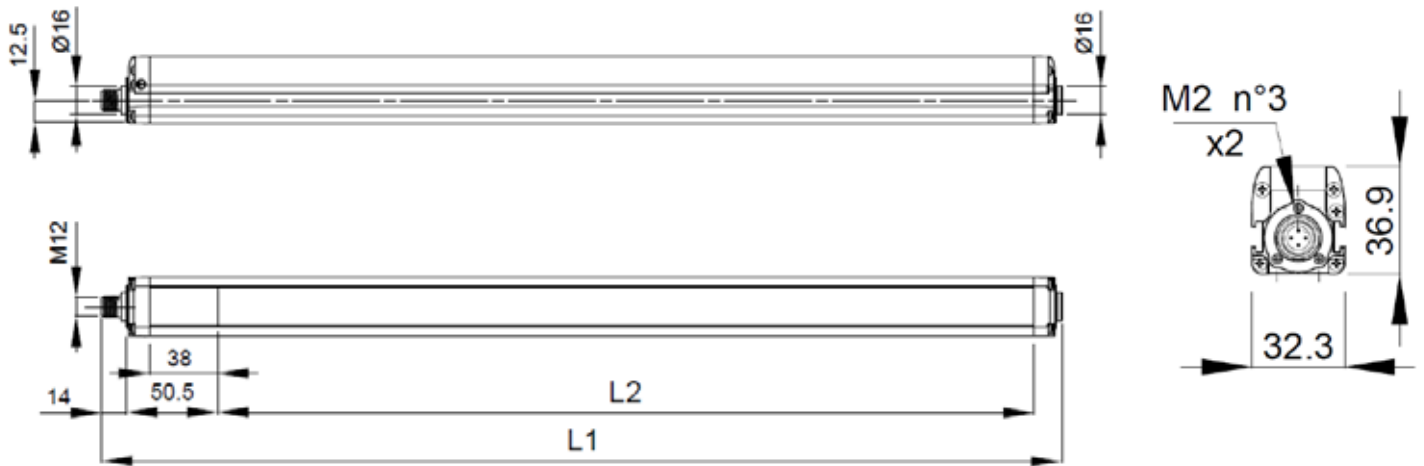
| | SG2 BASE [SG2-XX-XXX-00-X] | SG4 BASE [SG4-XX-XXX-00-X] |
|----------|-------------------------------------|-------------------------------|
| EMITTER | | |
| RECEIVER | | |
| | SG2 EXTENDED [SG2-XX-XXX-00-E-C] | SG4 BASE [SG4-XX-XXX-00-E] |
| EMITTER | | |
| RECEIVER | | |

NOTES

To set manual restart, connect Pin 8 (MAN/AUTO) with Pin 6 (OSSD2)

To deactivate EDM function, connect Rx Pin 3 to 24Vdc on Receiver

DIMENSION



| MODEL | L1 (MM) | L2 (MM) |
|-------------------|---------|---------|
| SGx-yy-150-00-kkk | 233.3 | 153.3 |
| SGx-yy-030-00-kkk | 383.2 | 303.2 |
| SGx-yy-045-00-kkk | 533.2 | 453.3 |
| SGx-yy-060-00-kkk | 683.2 | 603.2 |
| SGx-yy-075-00-kkk | 833.2 | 753.3 |
| SGx-yy-090-00-kkk | 983.2 | 903.2 |
| SGx-yy-105-00-kkk | 1133.2 | 1053.2 |
| SGx-yy-120-00-kkk | 1283.3 | 1203.3 |
| SGx-yy-135-00-kkk | 1433.2 | 1353.2 |
| SGx-yy-150-00-kkk | 1583.3 | 1503.3 |
| SGx-yy-165-00-kkk | 1733.3 | 1653.3 |
| SGx-yy-180-00-kkk | 1883.3 | 1803.3 |

INDICATORS



MODEL SELECTION AND ORDER INFORMATION

| | SG2 BASE [SG2-XX-XXX-00-X] | ORDER CODE | SG2 EXTENDED [SG2-XX-XXX- 00-E-C] | ORDER CODE | SG4-XX-XXX-00-X | ORDER CODE | SG4 BASE [SG4-XX-XXX-00-E] | ORDER CODE |
|--------------------------|-------------------------------|-------------------|---|-----------------|-----------------|-----------------|-------------------------------|---------------|
| FINGER PROTECTION | --- | --- | --- | --- | SG4-14-015-00-X | 957901460 | SG4-14-015-00-E | 957901000 |
| | --- | --- | --- | --- | SG4-14-030-00-X | 957901470 | SG4-14-030-00-E | 957901010 |
| | --- | --- | --- | --- | SG4-14-045-00-X | 957901480 | SG4-14-045-00-E | 957901020 |
| | --- | --- | --- | --- | SG4-14-060-00-X | 957901490 | SG4-14-060-00-E | 957901030 |
| | --- | --- | --- | --- | SG4-14-075-00-X | 957901500 | SG4-14-075-00-E | 957901040 |
| | --- | --- | --- | --- | SG4-14-090-00-X | 957901510 | SG4-14-090-00-E | 957901050 |
| | --- | --- | --- | --- | SG4-14-105-00-X | 957901520 | SG4-14-105-00-E | 957901060 |
| | --- | --- | --- | --- | SG4-14-120-00-X | 957901530 | SG4-14-120-00-E | 957901070 |
| | --- | --- | --- | --- | SG4-14-135-00-X | 957901540 | SG4-14-135-00-E | 957901080 |
| | --- | --- | --- | --- | SG4-14-150-00-X | 957901550 | SG4-14-150-00-E | 957901090 |
| | --- | --- | --- | --- | SG4-14-165-00-X | 957901560 | SG4-14-165-00-E | 957901100 |
| --- | --- | --- | --- | SG4-14-180-00-X | 957901570 | SG4-14-180-00-E | 957901110 | |
| HAND PROTECTION | SG2-30-015-00-X | 957801000 | SG2-30-015-00-E-C | 957801340 | SG4-30-015-00-X | 957901690 | SG4-30-015-00-E | 957901120 |
| | SG2-30-030-00-X | 957801010 | SG2-30-030-00-E-C | 957801350 | SG4-30-030-00-X | 957901580 | SG4-30-030-00-E | 957901130 |
| | SG2-30-045-00-X | 957801020 | SG2-30-045-00-E-C | 957801360 | SG4-30-045-00-X | 957901590 | SG4-30-045-00-E | 957901140 |
| | SG2-30-060-00-X | 957801030 | SG2-30-060-00-E-C | 957801370 | SG4-30-060-00-X | 957901600 | SG4-30-060-00-E | 957901150 |
| | SG2-30-075-00-X | 957801040 | SG2-30-075-00-E-C | 957801380 | SG4-30-075-00-X | 957901610 | SG4-30-075-00-E | 957901160 |
| | SG2-30-090-00-X | 957801050 | SG2-30-090-00-E-C | 957801390 | SG4-30-090-00-X | 957901620 | SG4-30-090-00-E | 957901170 |
| | SG2-30-105-00-X | 957801060 | SG2-30-105-00-E-C | 957801400 | SG4-30-105-00-X | 957901630 | SG4-30-105-00-E | 957901180 |
| | SG2-30-120-00-X | 957801070 | SG2-30-120-00-E-C | 957801410 | SG4-30-120-00-X | 957901640 | SG4-30-120-00-E | 957901190 |
| | SG2-30-135-00-X | 957801080 | SG2-30-135-00-E-C | 957801420 | SG4-30-135-00-X | 957901650 | SG4-30-135-00-E | 957901200 |
| | SG2-30-150-00-X | 957801090 | SG2-30-150-00-E-C | 957801430 | SG4-30-150-00-X | 957901660 | SG4-30-150-00-E | 957901210 |
| | SG2-30-165-00-X | 957801100 | SG2-30-165-00-E-C | 957801440 | SG4-30-165-00-X | 957901670 | SG4-30-165-00-E | 957901220 |
| SG2-30-180-00-X | 957801110 | SG2-30-180-00-E-C | 957801450 | SG4-30-180-00-X | 957901680 | SG4-30-180-00-E | 957901230 | |
| PRESENCE / ARM DETECTION | SG2-50-030-00-X | 957801120 | SG2-50-030-00-E-C | 957801460 | --- | --- | --- | --- |
| | SG2-50-045-00-X | 957801130 | SG2-50-045-00-E-C | 957801470 | --- | --- | --- | --- |
| | SG2-50-060-00-X | 957801140 | SG2-50-060-00-E-C | 957801480 | --- | --- | --- | --- |
| | SG2-50-075-00-X | 957801150 | SG2-50-075-00-E-C | 957801490 | --- | --- | --- | --- |
| | SG2-50-090-00-X | 957801160 | SG2-50-090-00-E-C | 957801500 | --- | --- | --- | --- |
| | SG2-50-105-00-X | 957801170 | SG2-50-105-00-E-C | 957801510 | --- | --- | --- | --- |
| | SG2-50-120-00-X | 957801180 | SG2-50-120-00-E-C | 957801520 | --- | --- | --- | --- |
| | SG2-50-135-00-X | 957801190 | SG2-50-135-00-E-C | 957801530 | --- | --- | --- | --- |
| | SG2-50-150-00-X | 957801200 | SG2-50-150-00-E-C | 957801540 | --- | --- | --- | --- |
| | SG2-50-165-00-X | 957801210 | SG2-50-165-00-E-C | 957801550 | --- | --- | --- | --- |
| | SG2-50-180-00-X | 957801220 | SG2-50-180-00-E-C | 957801560 | --- | --- | --- | --- |
| | SG2-90-030-00-X | 957801230 | SG2-90-030-00-E-C | 957801570 | --- | --- | --- | --- |
| | SG2-90-045-00-X | 957801240 | SG2-90-045-00-E-C | 957801580 | --- | --- | --- | --- |
| | SG2-90-060-00-X | 957801250 | SG2-90-060-00-E-C | 957801590 | --- | --- | --- | --- |
| | SG2-90-075-00-X | 957801260 | SG2-90-075-00-E-C | 957801600 | --- | --- | --- | --- |
| | SG2-90-090-00-X | 957801270 | SG2-90-090-00-E-C | 957801610 | --- | --- | --- | --- |
| | SG2-90-105-00-X | 957801280 | SG2-90-105-00-E-C | 957801620 | --- | --- | --- | --- |
| | SG2-90-120-00-X | 957801290 | SG2-90-120-00-E-C | 957801630 | --- | --- | --- | --- |
| | SG2-90-135-00-X | 957801300 | SG2-90-135-00-E-C | 957801640 | --- | --- | --- | --- |
| | SG2-90-150-00-X | 957801310 | SG2-90-150-00-E-C | 957801650 | --- | --- | --- | --- |
| SG2-90-165-00-X | 957801320 | SG2-90-165-00-E-C | 957801660 | --- | --- | --- | --- | |
| SG2-90-180-00-X | 957801330 | SG2-90-180-00-E-C | 957801670 | --- | --- | --- | --- | |

CABLES

| | POLES | TRANSMITTER CABLE | LENGTH (M) | ORDER CODE |
|--|-------|-------------------|------------|------------|
| SG2 BASE [SG2-xx-xxx-00-X] | 4 | CS-A1-02-U-03 | 3 | 95ASE1120 |
| | | CS-A1-02-U-05 | 5 | 95ASE1130 |
| | | CS-A1-02-U-10 | 10 | 95ASE1140 |
| | | CS-A1-02-U-15 | 15 | 95ASE1150 |
| SG2 EXTENDED [SG2-xx-xxx-00-E-C] | | | | |
| SG4 BASE [SG4-xx-xxx-00-X] [SG4-xx-xxx-00-E] | | CS-A1-02-U-25 | 25 | 95ASE1160 |
| | | RECEIVER CABLE | LENGTH (M) | ORDER CODE |
| SG4 BASE [SG4-xx-xxx-00-X] | 4 | CS-A1-02-U-03 | 3 | 95ASE1120 |
| | | CS-A1-02-U-05 | 5 | 95ASE1130 |
| | | CS-A1-02-U-10 | 10 | 95ASE1140 |
| | | CS-A1-02-U-15 | 15 | 95ASE1150 |
| SG2 BASE [SG2-xx-xxx-00-X] | 5 | CS-A1-03-U-03 | 3 | 95ASE1170 |
| | | CS-A1-03-U-05 | 5 | 95ASE1180 |
| | | CS-A1-03-U-10 | 10 | 95ASE1190 |
| | | CS-A1-03-U-15 | 15 | 95ASE1200 |
| | | CS-A1-03-U-25 | 25 | 95ASE1210 |
| SG2 EXTENDED [SG2-xx-xxx-00-E-C] SG4 BASE [SG4-xx-xxx-00-E] | 8 | CS-A1-06-U-03 | 3 | 95ASE1220 |
| | | CS-A1-06-U-05 | 5 | 95ASE1230 |
| | | CS-A1-06-U-10 | 10 | 95ASE1240 |
| | | CS-A1-06-U-15 | 15 | 95ASE1250 |
| | | CS-A1-06-U-25 | 25 | 95ASE1260 |

NOTE
All cables have axial connectors

ACCESSORIES

| | SG2 BASE [SG2-xx-xxx-00-X] | SG2 EXTENDED [SG2-xx-xxx-00-E-C] | SG4 BASE [SG4-xx-xxx-00-X] | SG4 BASE [SG4-xx-xxx-00-E] |
|---|--|-------------------------------------|-------------------------------|-------------------------------|
| BRACKETS | | | | |
| Standard angled brackets | ST-KSTD (outfit for SG2 Base and SG4 Base) | | | |
| Rotating brackets | ST-K4ROT (outfit for SG2 Extended) | | | |
| Antivibration support (4 pcs / 6 pcs)* | ST-K4AV ST-K6AV | | | |
| Plastic brackets (4 pcs / 6 pcs)* | ST-KP4MP ST-KP6MP | | | |
| PROTECTION TUBES AND STANDS | | | | |
| IP67/IP69K Tubes | SG-IP69K series | | | |
| Protective Stands | SG-PSB series | | | |
| Stand Plate for SG-PSB | SG-P | | | |
| Protective Stands Mounting Brackets (4 pcs / 6 pcs)* | ST-PS4-SG-SE ST-PS6-SG-SE | | | |
| Floor Columns | SE-S Series | | | |
| MIRRORS | | | | |
| Deviating Mirrors | SG-DM Series | | | |
| Deviating Mirrors mounting kit for SG-PSB | ST-PS-DM | | | |
| Mirror Mounting Bracket | ST-DM | | | |
| SAFETY UNITS | | | | |
| Safety Unit | SE-SR2 | | | |
| EDM Relay Box** | ---- | CS ME-03VU24-Y14 | ---- | CS ME-03VU24-Y14 |
| Safety control unit for single beams and SLC | SG-BWS-T4-MT | | | |
| ALIGNMENT TOOL | | | | |
| LASER Pointer | SG-LP | | | |

NOTES

* Use 6 brackets for light curtains with length >= 1200 mm

** When using EDM Relay Box or Muting connection box, connect EDM input, and be sure EDM function is active on the safety light curtain

For accessories part number, please refer to Safety Reference Guide

Rev. 06, 08/2019

DATALOGIC PRODUCT OFFERING



Sensors

Hand Held scanners

Mobile Computers

Laser Marking Systems

Vision Systems

Stationary Industrial Scanners

Safety Laser Scanner

RFID Systems