

## S5-5-G8-62-SG-ST2/ST4 S5-5-F8-92-SG-ST2/ST4 SL5-5-G-82-SG-ST4 SL5-5-F-92-SG-ST4



### INSTRUCTION MANUAL

#### INSTRUCTIONS FOR USE



The emitter/receiver safety sensors are homologated only to be connected to the SG-BWS-T4 safety control units.

Different use is potentially dangerous and not allowed, please take care to follow the instructions of manual Series SG-BWS-T4.

For the connection modalities, please refer to the SG-BWS-T4 instruction manual.

#### CONTROLS

##### S5...SG-ST2/ST4

###### OUTPUT LED (receiver)

The red LED indicates the output status.

###### STABILITY LED (receiver)

The green LED ON indicates that the received signal has a safety margin greater than 30% compared to the output switching value.

###### POWER ON LED (emitter)

The green LED indicates that the sensor is operating.

##### SL5...SG-ST4

###### OUTPUT LED (receiver)

The yellow LED indicates the output status.

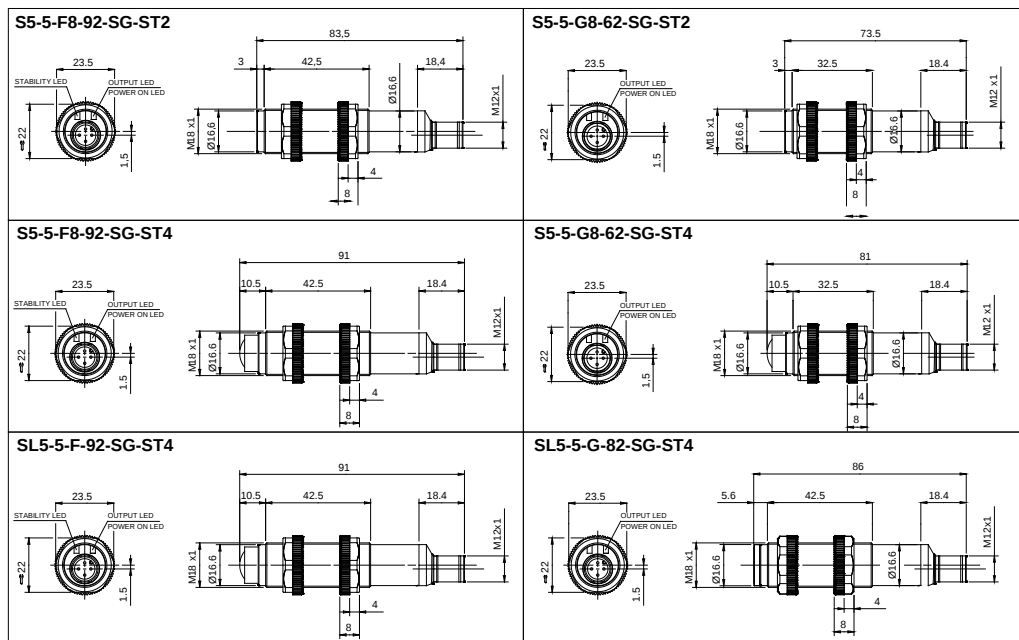
###### STABILITY LED (receiver)

The green LED ON indicates that the received signal has a safety margin greater than 30% compared to the output switching value.

###### POWER ON LED (emitter)

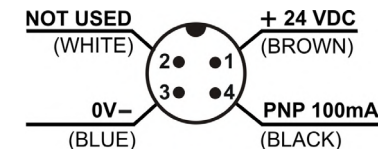
The green LED indicates that the sensor is operating.

#### DIMENSIONS

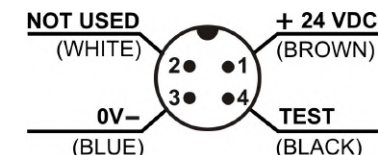


#### CONNECTIONS

##### RECEIVER



##### EMITTER



#### TECHNICAL DATA

|                                                | SL5...SG-ST4                                                           | S5...SG-ST2/ST4     |
|------------------------------------------------|------------------------------------------------------------------------|---------------------|
| Power supply:                                  | 24 VDC $\pm 15\%$                                                      |                     |
| Current consumption (output current excluded): | 35 mA max.                                                             | 30 mA max.          |
| Outputs:                                       | PNP (short-circuit protection)                                         |                     |
| Output current:                                | 100 mA max.                                                            |                     |
| Output saturation voltage:                     | 2 V max.                                                               |                     |
| Output leakage:                                | 50 $\mu$ A a 30 VDC                                                    |                     |
| Response time:                                 | 1 ms max.                                                              |                     |
| Switching frequency:                           | 500 Hz max.                                                            |                     |
| Operating temperature:                         | -10 ... 50 °C                                                          | -25 ... 55 °C       |
| Storage temperature:                           | -25 ... 70 °C                                                          |                     |
| Dielectric strength:                           | 500 Vac / 1 min. between electronic parts and housing                  |                     |
| Insulation resistance:                         | >20 M $\Omega$ / 500 Vdc, between electronic parts and housing         |                     |
| Operating distance (minimum):                  | 0 ... 40 m                                                             | 0...8 m             |
| Emission type:                                 | Red laser (650 nm)<br>Class 1 EN 60825-1 (2014)                        | Infrared LED 880 nm |
| EAA:                                           | xx...ST2 = $\pm 5^\circ$ / xx...ST4 = $\pm 2.5^\circ$                  |                     |
| Ambient light rejection:                       | according to EN 60947-5-2                                              |                     |
| Vibration:                                     | 0.5 mm amplitude, 10 ... 55 Hz frequency, for every axis (EN60068-2-6) |                     |
| Shock resistance:                              | 11 ms (30 G) 6 shock for every axis (EN60068-2-27)                     |                     |
| Housing:                                       | ABS UL 94V-O                                                           |                     |
| Connector/Gland:                               | Polycarbonate                                                          |                     |
| Lenses:                                        | PMMA plastic                                                           |                     |
| Protection class:                              | IP67                                                                   |                     |
| Connections:                                   | M12 4-pole connector                                                   |                     |
| Weight:                                        | 30 g. max.                                                             |                     |

##### Datasensing S.r.l.

Strada S. Caterina 235 - 41122 Modena - Italy  
Tel: +39 059 420411 - Fax: +39 059 253973 - [www.datasensing.com](http://www.datasensing.com)

The warranty period for this product is 36 months. See General Terms and Conditions of Sales for further details.



For information about the disposal of Waste Electrical and Electronic Equipment (WEEE), please refer to the website at [www.datasensing.com](http://www.datasensing.com).

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