### Controls

**Output LED**
The red LED indicates the output status.

**Stability LED** (S3-x-A2.5/B2/C10/C50/D12/E1/F5)
The green LED ON indicates that the received signal has a safety margin greater than 30% compared to the output switching value.

**Trimmer** (S3-x-A2.5/B2/C10/C50/D12/E1/F5/T0.8)
The trimmer can be used to adjust sensitivity, the operating distance increases turning the trimmer clockwise.

**WARNING:** The trimmer rotation is limited to 270° by a mechanical stop. Do not apply excessive torque when adjusting (max 40 Nm).

**Power ON LED** (S3-x-G5)
The red LED indicates that the sensor is operating.

**Lock Screw** (S3-x-E1)
The screw is used to correctly lock the fibres. Unscrew before inserting, then screw for final locking.

### Connections

**Cable versions**

- S3-5-A/B/C/D/E/T
- S3-5-G5
- S3T-x-E1
- S3-R-E1
- S3T - M8 connector
- S3-S-E1

**Dimensions**

- S3-S-A2.5/B2/C10/C50/D12/F5/G5/T0.8
- S3-R-A2.5/B2/C10/C50/D12/F5/G5/T0.8

### Technical Data

- **Power supply:** 10 ... 30 Vdc limit values
- **Nipple:** 2 Vpp max.
- **Current Consumption** (output current excluded): NPN/PNP, 30 Vcc max. vers. S3 / PNP, 30 Vcc max. vers. S3T (short-circuit protection)
- **Output current:** 100 mA max
- **Output saturation voltage:** 1.5 V max.
- **Response time:** 1 ms max. / 2.5 Hz max. mod. F5/G5
- **Switching frequency:** 500 Hz max. / 250 Hz max. mod. F5/G5
- **Indicators:** OUTPUT LED (RED) / STABILITY LED (GREEN) / POWER ON LED (RED) mod. G5
- **Setting:** sensitivity trimmer mod. A2.5/B2/E1/F5/G5/T0.8
- **Operating temperature:** -25 ... 65 °C
- **Storage temperature:** -25 ... 70 °C
- **Electric shock protection:** 11 ms (30 G) 6 shock for every axis (EN60068-2-27)
- **Operating distance (minimum):** T0.8: 0.2 ... 0.8 m on R2 / A2.5: 0.1 ... 2.5 m on R2 / B2: 0.1 ... 2 m on R2
  - C10: 0 ... 10 cm / C50: 0 ... 50 cm / D12: 10 ... 15 mm
- **Emission type:** INFRARED (880 nm) / RED (660 nm) mod. B2/D2/E1/F5/T0.8
- **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 shocks for every axis (EN60068-2-27)
- **Light/Dark selection:** cable or connector
- **Housing:** ABS UL 94V-O
- **Lenses:** PMMA plastic
- **Protection class:** IP68
- **Connections:** 2 m cable Ø 5 mm vers. S3 / M8 4-pole connector vers. S3T
- **Weight:** 90 g. max. cable versions / 20 g. max. connector versions

### Test Function (S3/S3T-x-G5)

The TEST+ and TEST- inputs can be used to inhibit the emitter and verify that the system is correctly operating. The receiver output should switch when the test is activated while the beam is unimpaired.

### Alarm Function (S3/S3T-5-F5)

The alarm output switches ON whenever the received signal remains without a safety margin (greater than 30% compared to the output switching level) for longer than 3 seconds.

### Declaration of Conformity

We, DATASENSOR S.p.A. declare under our sole responsibility that these products are conform to the 2004/108/CE, 2006/95/CE Directives and successive amendments.

### Warranty

DATASENSOR S.p.A. warrants its products to be free from defects. DATASENSOR S.p.A. will repair or replace, free of charge, any product found to be defective during the warranty period of 36 months from the manufacturing date. This warranty does not cover damage or liability deriving from the improper application of DATASENSOR products.

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DATASENSOR S.p.A. reserves the right to make modifications and improvements without prior notification.

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