

STS-11 Surface temperature sensor

Basic characteristic

- STS-11 is a surface temperature contact sensor with a wide measuring range from -70°C to 150°C.
- STS-11 features small dimensions and has optimized construction for mitigating and absorbing shock and tension



The sensor comes with different cable types based on the desired application temperature range, see the *Physical properties* table on the next page, section *Cable type*

Benefits

- Contact temperature measurement with improved temperature resolution and transition.
- Direct surface mountable.
- The ruggedized housing is deployable in harsh environments.

Applications

- Surface temperature measurement.
- ▲ Chemical and oil & gas applications.

| Performance properties | |
|--|-------------------------|
| Temperature range ¹⁾ | -70°C up to +150°C |
| Temperature accuracy (guaranteed) ²⁾ | 1% FS ⁴⁾ |
| Temperature accuracy (typical) ²⁾ | 0,8% FS ⁴⁾ |
| Temperature precision (guaranteed) ³⁾ | ±0,5 % FS ⁴⁾ |
| Temperature precision (typical) ³⁾ | ±0,3% FS ⁴⁾ |
| Temperature resolution | 0,03°C |
| Temperature sensitivity | 38 pm/°C |
| Ingress Protection rating | IP 66 |

¹⁾ Survival temperature for up to 300°C. The calibration range is to be agreed upon with the client based on the project requirements.

²⁾ Accuracy is established for each sensor under laboratory conditions and it includes hysteresis, non-linearity, and repeatability of the sensor.

³⁾ Precision is established on a batch basis and it includes hysteresis, non-linearity, repeatability, and reproducibility of the sensor.

4) FS: full-scale range

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Physical properties Housing material Aluminium 7075-T6 Dimensions (without cable)¹⁾ 40mm x 61mm x 9.5mm Weight (without cable) 64g Cable type, -20°C up to 60°C²⁾ 3mm Dyneema tubing, Cable type, -70°C up to 150°C²⁾ 900µm PTFE/PEEK tubing, 3mm Stainless Steel tubing Cable length³⁾ 1mtr 30mm Cable Bend Radius (dynamic) Cable Bend Radius (static) 15mm Connector type⁴⁾ FC/APC Mounting method Direct surface mounting

¹⁾ For further dimensions details see the product drawing

²⁾ Cable type is application-dependent, other cable types available on request

³⁾ Cable length is extendable on request

⁴⁾ Other connector types available on request

| Packaging |
|--|
| Cardboard box with dimensions: 370x290x45mm |
| Quality statement |
| STS-11 sensor is compliant with IEC 61757:2018 |
| All sensors are 100% tested and calibrated at SYLEX. |
| The senser is manufactured according to ISO 0001,2000 and ISO 14001,2004 |

The sensor is manufactured according to ISO 9001:2008 and ISO 14001:2004.

Optional accessories

- WCP-01 Watertight connector protection used for FC/APC connector protection during the installation against dust and water – IP67 rated.
- LCP-03 Longer cable pigtails used to extend the cable lengths from 1 mtr up to 20 mtr.

For more information contact our sales team at sales@sylex.sk

* Specifications are subject to change without notice