

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

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

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

<sup>3)</sup> 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)<sup>1)</sup> 40mm x 61mm x 9.5mm Weight (without cable) 64g Cable type, -20°C up to 60°C<sup>2)</sup> 3mm Dyneema tubing, Cable type, -70°C up to 150°C<sup>2)</sup> 900µm PTFE/PEEK tubing, 3mm Stainless Steel tubing Cable length<sup>3)</sup> 1mtr 30mm Cable Bend Radius (dynamic) Cable Bend Radius (static) 15mm Connector type<sup>4)</sup> FC/APC Mounting method Direct surface mounting

<sup>1)</sup> For further dimensions details see the product drawing

<sup>2)</sup> Cable type is application-dependent, other cable types available on request

<sup>3)</sup> Cable length is extendable on request

<sup>4)</sup> 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