

# STS-04 Surface high-temperature sensor

#### **Basic characteristic**

- STS-04 is a high-temperature contact temperature sensor with a wide measuring range of up to 250°C.
- STS-04 features small dimensions and has optimized construction for mitigating ambient temperature transition to the sensing core.



### **Benefits**

- Contact temperature measurement with improved temperature isolation from the ambient environment.
- Direct surface mountable.
- Ruggedized housing deployable in harsh environment.

#### **Applications**

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

Performance properties	
Temperature range <sup>1)</sup>	-50°C up to +250°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>	±0,3 % FS <sup>4)</sup>
Temperature precision (typical) <sup>3)</sup>	±0,2% FS <sup>4)</sup>
Temperature resolution	0,1°C
Temperature sensitivity	11 pm/°C
Ingress Protection rating	IP 65

<sup>1)</sup> Survival temperature for up to 300°C. Calibration range to be agreed 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 <sup>1)</sup>	Stainless steel SS316L and CW004A Cu-ETP
Dimensions (without cable) <sup>2)</sup>	Ø34mm x 9.5mm
Weight (without cable)	45g
Cable type	3mm Stainless steel tubing / 3mm Dyneema tubing
Cable length <sup>3)</sup>	2mtr
Cable Bend Radius (dynamic)	30mm
Cable Bend Radius (static)	15mm
Connector type <sup>4)</sup>	FC/APC
Mounting method	Direct surface mounting

<sup>1)</sup> The surface-contact material can be modified on request

<sup>2)</sup> For further dimensions details see the product drawing

<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-04 sensor is compliant with IEC 61757:2018 All sensors are 100% tested and calibrated at SYLEX. 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 1mtr up to 20mtr.

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

\* Specifications are subject to change without notice