

## STS-03 Surface temperature sensor

### Basic characteristic

- ▲ STS-03 is a surface temperature sensor.
- ▲ The design of STS-03 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 applicable in harsh environments.

### Applications

- ▲ Surface temperature measurement
- ▲ Temperature compensation

### Performance properties

Temperature range	-20°C up to +60°C
Temperature accuracy (guaranteed) <sup>1)</sup>	0,80% FS <sup>3)</sup>
Temperature accuracy (typical) <sup>1)</sup>	0,65% FS <sup>3)</sup>
Temperature precision (guaranteed) <sup>2)</sup>	±0,30% FS <sup>3)</sup>
Temperature precision (typical) <sup>2)</sup>	±0,20% FS <sup>3)</sup>
Temperature resolution	0,1°C
Temperature sensitivity	11 pm/°C
Ingress Protection rating	IP 66

<sup>1)</sup> Accuracy is established for each sensor under laboratory conditions and it includes hysteresis, non-linearity, and repeatability of the sensor.

<sup>2)</sup> Precision is established on a batch basis and it includes hysteresis, non-linearity, repeatability, and reproducibility of the sensor.

<sup>3)</sup> FS: full-scale range

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### Physical properties

Housing material	Stainless steel SS316L and CW004A Cu-ETP
Dimensions (without cable) <sup>1)</sup>	Ø34mm x 9.5mm
Weight (without cable)	45g
Cable type	3mm Dyneema tubing
Cable length <sup>2)</sup>	1mtr
Cable Bend Radius (dynamic)	30mm
Cable Bend Radius (static)	15mm
Connector type <sup>3)</sup>	FC/APC
Mounting method	Direct surface mounting

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

<sup>2)</sup> Cable length is extendable on request

<sup>3)</sup> Other connector types available on request

### Packaging

Cardboard box with dimensions: 370x290x45mm

### Quality statement

STS-03 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](mailto:sales@sylex.sk)**

\* Specifications are subject to change without notice