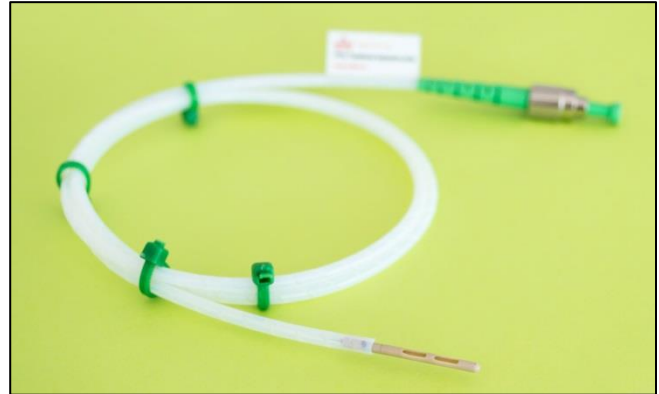


## DTP-01 Dielectric temperature probe sensor

### Basic characteristic

- ▲ DTP-01 is a dielectric high-range temperature probe designed for measuring the temperature of transformers' windings.
- ▲ DTP-01 offers measuring of temperatures up to 180°C.
- ▲ DTP-01 has a small dimension and flexible design.



### Benefits

- ▲ High-temperature monitoring.
- ▲ Direct mountable or insertable into the monitored area.
- ▲ Flexible cable and chemically resistant materials.

### Applications

- ▲ Temperature measurement in fields where dielectric materials are mandatory.
- ▲ Transformer windings.
- ▲ Chemical processes.

### Performance properties

Temperature range	-30°C – 180°C
Accuracy (guaranteed) <sup>1)</sup>	1% FS <sup>3)</sup>
Accuracy (typical) <sup>1)</sup>	0,65% FS <sup>3)</sup>
Precision (guaranteed) <sup>2)</sup>	0,5% FS <sup>3)</sup>
Precision (typical) <sup>2)</sup>	0,3% FS <sup>3)</sup>
Temperature resolution	0,1°C
Temperature sensitivity	~11pm/°C
Ingress Protection rating	Open design

<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

## DTP-01 Dielectric temperature probe sensor

### Physical properties

Housing material	PEEK
Dimensions (without cable) <sup>1)</sup>	Ø2 mm x 26 mm
Weight (without cable)	0,1 g
Cable length <sup>2)</sup>	1mtr
Cable type	900µm PTFE or PEEK
Cable Bend Radius (dynamic)	30mm
Cable Bend Radius (static)	15mm
Connector type <sup>3)</sup>	FC/APC

<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

### Dielectric properties

PEEK, Dielectric Strength	> 19000 V/mm
PEEK, Dielectric Constant	> 3,3 @ 1MHz (ASTM D150)
Optical fiber, Dielectric Strength	> 15000 V/mm
Optical fiber, Dielectric Constant	> 3,5 @ 1MHz (ASTM D150)
PTFE, Dielectric Strength	> 18000 V/mm
PTFE, Dielectric Constant	> 2,1 @ 1MHz (ASTM D150)
High-performance epoxy, Dielectric Strength	> 19500 V/mm
High-performance epoxy, Dielectric Constant	> 2,83 @ 1KHz

### Packaging

Cardboard box with dimensions: 370x290x45mm

### Quality statement

DTP-01 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

- ▲ Depends on the application requirements

For more information contact our sales team at [sales@sylex.sk](mailto:sales@sylex.sk)

\* Specifications are subject to change without notice