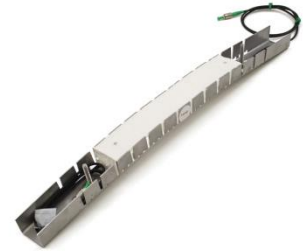


SDS-01 Sewer deformation sensor

Basic characteristic

- ▲ SDS-01 is a 500mm or 1000mm long sensor measuring strain changes in $\mu\epsilon$ with bendable body structure allowing simple installation onto circular objects
- ▲ Connections in series configuration are possible to form a full circumference monitoring system within one cable
- ▲ Integrated temperature compensation



Benefits

- ▲ One-body design for both strain and temperature measurement
- ▲ Surface-mountable – screw
- ▲ No need for adjusting pre-strain during installation

Applications

- ▲ Strain changes detection
- ▲ Steel / concrete deformations, etc...
- ▲ Can be mounted on differently shaped surfaces like walls, etc.

Performance properties

Measuring range	$\pm 2500\mu\epsilon$
Accuracy (guaranteed) ¹⁾	$< 0.7\% \text{ FS}^3$
Accuracy (typical) ¹⁾	$< 0.5\% \text{ FS}^3$
Precision (guaranteed) ²⁾	$< 0.4\% \text{ FS}^3$
Precision (typical) ²⁾	$< 0.2\% \text{ FS}^3$
Temperature compensation	Integrated
Temperature accuracy ¹⁾	$< 1^\circ\text{C}$
Temperature precision ²⁾	$< 0.5^\circ\text{C}$
Operating Temperature range	-20°C to $+60^\circ\text{C}$
Ingress Protection rating	IP 67

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

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

³⁾ FS: full scale range

SDS-01 Sewer deformation sensor

Physical properties

Housing material	SS304 – 1.4301
Anchoring distance	500mm or 1000mm (other on request)
Dimensions (without cable) ¹⁾	40 x 25 mm x 500/1000mm
Weight (without cable)	200-300g
Cable type	3mm Dyneema reinforced cable
Cable length ²⁾	1mtr
Cable Bend Radius (dynamic)	40mm
Cable Bend Radius (static)	30mm
Connector type ³⁾	FC/APC
Mounting method	Screws

¹⁾ For further dimensions details see the product drawing

²⁾ Cable length is extendable on request

³⁾ Other connector types available on request

Packaging

Cardboard box

Quality statement

SDS-01 is compliant with IEC 61757-1-1:2016/Ed1.0 and IEC 61757:2018
 All sensors are 100% tested and calibrated at SYLEX
 Sensor is manufactured in compliance with 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