

SC 1000 T - Strain sensor



Fiber Bragg Grating based long gauge strain sensor with 1m measuring base (gauge length). Developed specifically for measurements of large structures.

Measures strain between its anchoring brackets and is therefore immune to local defects in the substrate.

- For embedding and surface mounting
- Double ended
- Intrinsically temperature compensated
- Adjustable pre-strain during installation
- Customizable gauge length.



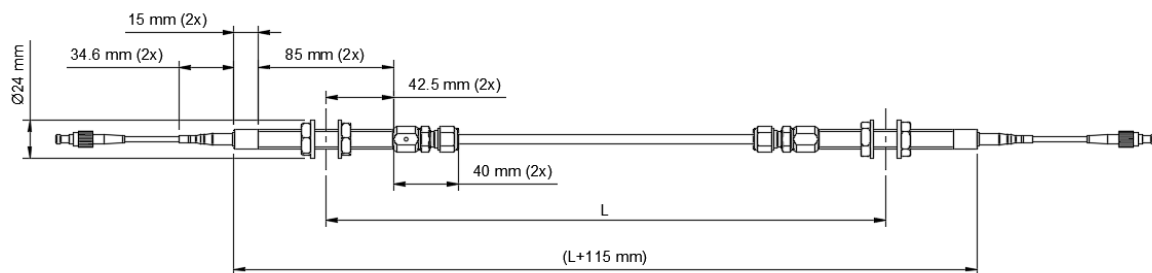
Example of SC 100 T sensor (short version)

Performance	Parameter
Sensitivity	1.4pm/ $\mu\epsilon$
Measurement range	$\pm 5000\mu\epsilon$
Accuracy	35 $\mu\text{m}/\text{meter}$ (<0.35% Full Scale)
Precision	15 $\mu\text{m}/\text{meter}$ (<0.15% Full Scale)
Temperature compensation	Integrated
Temperature accuracy	<1°C
Temperature precision	$\pm 0.3^\circ\text{C}$
Operational temperature range	-20 to +60 °C
Weight	455g
Material	SS 316L and Polyamide
Anchoring distance	± 1 meter
Protection	IP 67
FWHM	< 0.3 nm
Reflectivity	40 %
Insertion loss	< 0.1 dB
FBGs	2
Cable length ¹	1m
Connector options	FC/APC, LC/APC, open end

¹ Other cable length on request.

Mounting instructions

Sensor can be embedded in the substrate or anchoring brackets for surface mounting can be used. (standard anchoring brackets are available on request).



L=1000mm (other length on request).