

SP 39 T - Strain sensor

Fiber Bragg Grating based short gauge spot-weldable strain sensor. A very robust sensor, which can measure very small strains and displacements with high accuracy.

Integrated temperature compensation, and can be connected in series with more strain sensors or other sensors.



- For surface mounting by using mounting screws, spot-welding, or gluing to the surface
- Double ended
- Intrinsically temperature compensated
- Adjustable pre-strain during installation

Performance	Parameter
Sensitivity	1.2pm/ $\mu\epsilon$
Measurement range	$\pm 2000\mu\epsilon$
Accuracy	<0.5% Full Scale
Precision	<0.25% 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	100g
Material	SS 316L
Anchoring distance	39 \pm 2 mm
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 is always surface mounted. This can be done by bolts, spot-welding or with an adhesive. The sensor can be pre-strained with a special pre-straining tool for accurate pre-straining of the sensor.



Pre-straining tool on SP 39 T

