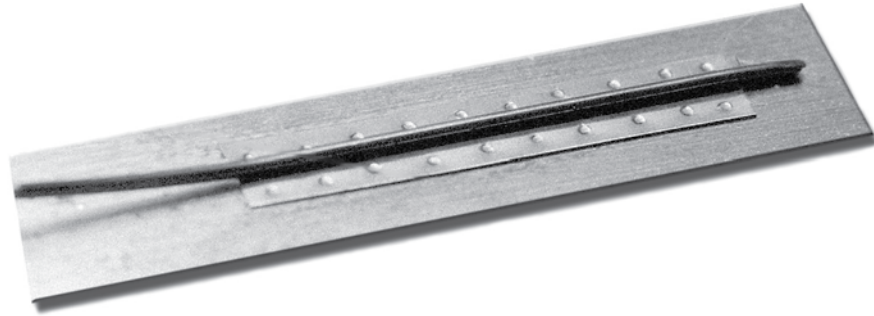

SPOT-WELDABLE STRAIN GAUGE

Model SFO-W



APPLICATIONS

- Steel structures
- Dams
- Nuclear power plants
- Structural members of buildings and bridges
- Tunnel supports
- Corrosive environments
- High EMI/RFI environments

DESCRIPTION

The spot-weldable SFO-W is a fiber optic strain gauge compatible with most of Roctest's fiber optic readout units and dataloggers.

The SFO-W consists of a small diameter stainless steel tube welded on a steel sheet. It is suitable for spot-welding on steel surfaces.

The sensor is based on a unique fiber optic strain gauge which constitutes a breakthrough in fiber optic sensing. The extrinsic Fabry-Perot strain gauge is bonded inside the steel tube, thereby following the tensile or compressive movements of the spot-welded gauge.

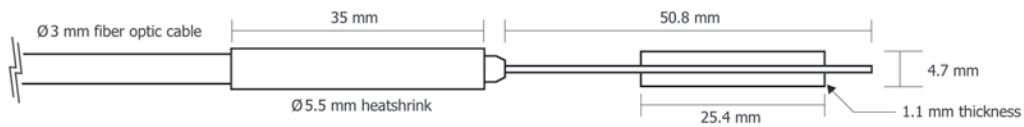
The SFO-W gauge is designed to be installed by a technician without the assistance of a skilled welder. The SFO-W gauge is intended for long-term, precise strain measurements on a variety of structures. It can be installed on flat or cylindrical surfaces.

FEATURES

- Immune to EMI/RFI/Lightning
- Intrinsically safe
- Static/dynamic response
- High sensitivity and resolution: 0.01% of full scale
- Low profile
- Signal transmitted over long distances
- No interference due to fiber bending
- Absolute measurements in engineering units
- Data acquisition compatible

SPECIFICATIONS

Transducer type	SFO-W spot-weldable strain gauge
Range	± 1000 to $\pm 1500 \mu \epsilon$
Resolution	0.01% of F.S.
Transverse sensitivity	<0.1% of F.S.
Operating temperature	-40 to +55°C
EMI/RFI susceptibility	Intrinsic immunity
Fiber optic cable	CFO-3STD
Gauge material	Stainless steel
Connector	ST
Gauge dimensions	50.8 × 1.1 × 4.7 mm (length × thickness × width)



SFO-W Dimensions

ORDERING INFORMATION

Please specify:

- Range
- Fiber optic cable length (2m min.)
- Fiber optic readout instruments