



ROSCTEST

SFO-W - Spot Weldable Strain Gauge



**HIGH RESOLUTION
FIBER OPTIC STRAIN GAUGE
INTRINSICALLY SAFE**

The **SFO-W** gauge is designed for long-term, precise strain measurements on a variety of structures. It can be installed on flat or cylindrical surfaces.

Description

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

The sensor is based on a unique fiber optic strain gauge. The 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.

Key Features

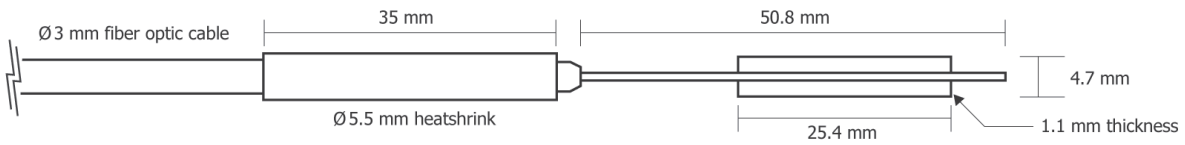
- Low profile
- Intrinsically safe
- Immune to EMI/RFI/Lightning
- Static/dynamic response
- High resolution: 0.01% of full scale
- Signal transmitted over long distances
- No interference due to fiber bending

Applications

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

Specifications

Transducer type	SFO-W spot-weldable strain gauge
Range	±1500
Resolution	0.01% of F.S.
Operating temperature	-40 to +55°C
EMI/RFI susceptibility	Intrinsic immunity
Fiber optic cable	CAF-UD3-1F
Connector	ST
Gauge dimensions	50.8 × 1.1 × 4.7 mm (length × thickness × width)



SFO-W Dimensions

Ordering Information

Please specify:

- Range
- Cable length (2 meters min.)
- Readout