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

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### Specifications

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

### SFO-W Dimensions

![SFO-W Dimensions Diagram]

### Ordering Information

Please specify:
- Range
- Cable length (2 meters min.)
- Readout