The RTF is a jointmeter used to measure the displacement of cracks in structures or rock masses. The RTF is available in uniaxial (RTF 1D) and triaxial (RTF 3D) versions.

Description

The RTF surface jointmeter (also crackmeter or fissurometer) is designed to monitor relative movements of adjacent surfaces across cracks or construction joints.

The RTF surface jointmeter consists of a vibrating wire transducer or a potentiometer, and a set of mounting brackets.

The RTF surface jointmeter is available in uniaxial (RTF 1D) or triaxial (RTF 3D) versions. The 3-D version allows simultaneous measurements in three orthogonal directions.

The sensor is housed in a rugged cylindrical enclosure which is end fitted with a spring-loaded rod. The bracket containing the transducer(s) is mounted on one side of the discontinuity and the bracket fitted with the reference surface(s) is mounted on the opposite side of the discontinuity. The spherical tip of the spring-loaded rod rests against the reference surface.

The RTF is easily bolted astride the joint or crack. On uneven surfaces, brackets welded to short lengths of rebar are used.

Key Features

- Rugged, waterproof, stainless steel sensor enclosure
- Easy installation
- Reusable
- Vibrating wire or potentiometer transducer
- Direct measurements not deducted in up to three directions
- Adaptable to uneven surfaces

Applications

- Measuring movements of joints in concrete
- Monitoring deformation cracks in concrete structure, masonry or rock

www.telemac.fr
RTF 1D / 3D - Surface Jointmeter
Displacement Sensor

Specifications

<table>
<thead>
<tr>
<th>TRANSUCER</th>
<th>VIBRATING WIRE</th>
<th>POTENTIOMETER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ranges(^1)</td>
<td>25(^2) – 50(^2) – 100(^2) – 150 – 200 mm</td>
<td>25 – 50 – 100 – 150 mm</td>
</tr>
<tr>
<td>Accuracy(^2)</td>
<td>±0.25% F.S. (±0.1% in option)</td>
<td>±0.5% F.S.</td>
</tr>
<tr>
<td>Resolution</td>
<td>0.02% F.S.</td>
<td>Depends on readout</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>−20 to +80°C</td>
<td>−20 to +80°C</td>
</tr>
<tr>
<td>Thermistor</td>
<td>3kΩ (see model TH-T)</td>
<td>—</td>
</tr>
<tr>
<td>Readout instruments</td>
<td>MB-3TL, SENSLOG</td>
<td>Contact Roctest</td>
</tr>
<tr>
<td>Cable</td>
<td>IRC-41A(P)</td>
<td>IRC-41A(P)</td>
</tr>
</tbody>
</table>

\(^1\) Other ranges and accuracies available upon request.
\(^2\) 3D available for these ranges only.

Ordering Information

Please specify:
- Transducer type and range
- 1D or 3D version
- Cable length

Optional Accessories

- Protective cover (for RTF 1D only)
- Installation template (for RTF 1D only)
- Readout instrument

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Telemac SAS reserves the right to make any changes in the specifications without prior notice