

RTF 1D / 3D - Surface Jointmeter

Displacement Sensor



RUGGED & WATERPROOF EASY INSTALLATION & REUSABLE UNIAXIAL & TRIAXIAL AVAILABLE

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





RTF 1D / 3D - Surface Jointmeter

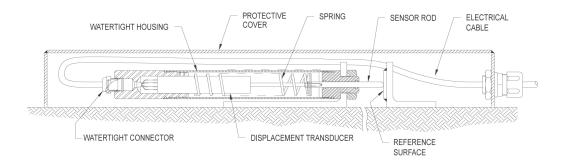
Displacement Sensor

Specifications

TRANSDUCER:	VIBRATING WIRE	POTENTIOMETER
Ranges ¹ :	$25^2 - 50^2 - 100^2 - 150 - 200 \text{ mm}$	25 – 50 – 100 – 150 mm
Accuracy ¹ :	±0.25% F.S. (±0.1% in option)	±0.5% F.S
Resolution :	0.02% F.S.	Depends on readout
Operating temperature :	−20 to +80°C	−20 to +80°C
Thermistor :	3kΩ (see model TH-T)	-
Readout instruments :	MB-3TL, SENSLOG	Contact Roctest
Cable :	IRC-41A(P)	IRC-41A(P)

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

Roctest Ltd, 680 Birch Street St-Lambert, Quebec Canada J4P 2N3 DOC: E50051-160319

Phone +1 450 465 1113 Fax. +1 450 465 1938 Email info@roctest.com Web www.roctest.com

