

GLÖTZL Baumeßtechnik

MECHANICAL FISSUREMETER FOR REMOTE MONITORING IN ROCK

Typ: MFS 20/3

Art.-Nr: 64.50

The fissuremeter for remote monitoring, type MFS 20/3, is used for acquisition of rock movements in horizontal and vertical directions. The measuring device is operating according to the principle of a wire extensometer, whereby movements are mechanically transferred to a special dial gauge by a tight stainless steel rope and are there indicated.

The maximum length change of 20 mm is indicated at the dial gauge with a resolution of 0.1 mm. In case of movements exceeding the indication range, the measuring length can be shortened or elongated if required.

The development of the favourably priced measuring device has been done in common with the engineering firm

*Ingenieurbüro, geo-international,
Prof. Dr. E. Krauter & Dr. J. Feuerbach,
Beratende Ingenieurgeologen, Mainz,*

with the idea of an acquisition of movements at not easily accessible rock slopes, and at the same time to be able to take readings from a larger distance in a simple kind, e.g. by means of binoculars.



Assembly can very easily be done by means of dowels on the rock slope. The bars of the measuring device can be adapted and adjusted to the spacious conditions in all possible directions.

The dial gauge allows the recording of length change of the Z-axis, and the directional panel – dependent on adjustments – the influence of X- or Y-axis.

Technical data:

- Meas. length from 0.5 m up to max. 3 m
- Material aluminium and stainless steel
- Measuring range Z-axis 20 mm, maximal 30 mm
- Meas. range for X- or Y-axis $\pm 7^\circ$
- Diameter dial gauge 180 mm
- Resolution 0.1 mm
- Practical accuracy under site conditions ± 0.25 mm

The installation possibilities are shown in the figures opposite.

The measuring device can easily be assembled and needs no maintenance. The most appropriate way to collect the measured values is the use of binoculars, with which the dial gauge can be read off in a distance of approx. 50 m.

The influence of snow or ice in wintertime can only be avoided, if required, by a corresponding cover of the measuring device.



Subject to technical alterations