Type: BMS-VK45/4

Art. No.: 78.01.04.02

GLÖTZL Baumeßtechnik

Borehole Modular Probe – Calibre Modulus

Connection for guide part Type: BMS-FZ.. or BMS-FT..



Connection for guide part Type: BMS-FZ..

- Large standard meas. ranges from 80 mm up to 150 mm
- Simultaneous measurement at 4 points at borehole wall
- High accuracy
- Simultaneous measurement of inclination- and calibre values, video inspection resp. compass measurement

Application:

The borehole calibre probe is used for recording of the borehole calibre in horizontal and vertical borings.

The housing of the calibre probe is made of stainless steel and aluminium. By application of up-to-date materials, a total weight of less than 3 kgs can be achieved.

By the three-point roller guidance with forced centering, the complete measuring unit is always guided in the centre of the boring.

Function:

The calibre probe has four measuring arms, displaced by 90° to each other

The measuring arms are separately movable and continuously scanning the borehole wall partition during a measurement. The movements of the measuring arms are recorded by 4 separate lineary displacement transducers and directly digitalized in the calibre probe. While doing this, the calibration coefficients - necessary for computation - are stored in a permanent memory in the calibre probe. By the internal front-end computer (microcontroller AT 90S8515), the data are transferred by the RS485-measuring bus, if required.

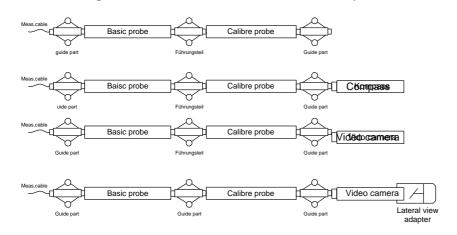
The measuring arms of the calibre probe can be limited multistage at a maximum borehole diameter. By this, a hacking into cavities in the borehole wall can be avoided.

Measuring procedure:

The calibre probe is mounted as precursor before the Glötzl basic probe.

Additionally, the measuring equipment can be provided with a compass module or a video module. By this, it is possible to carry out simultaneously in one measuring procedure a position measurement of the boring, the determination of the borehole calibre and also a video inspection.

Possible configurations of meas. modules with calibre probe:



The following figures are showing possible combinations of the single probe modules.





Transport case consisting of:

- Calibre probe
- Calibration adapter
- Video probe
- Lateral view adapter

Calibration adapter for calibre probe

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Technical data calibre probe:

Outer diameter : Ø 45 mm Overall length : 880 mm

Length to centre of the

guide elements : 1000 mm Weight : 2.8 kgs

Meas. range (calibre) : Standard: Ø 80 mm up to Ø 150 mm

Further measuring ranges on request

Linearity : < +/-0.4 mm,

< +/-0.2 mm (typical)

The accuracy of measuring arms can be tested with the calibration adapter and eventually be corrected.

Further diameters are available on request.