

# GKTE 16

Plastic rod extensometer



The plastic rod extensometer GKTE 16 as compact measuring unit is a modified further development of the wellknown GLÖTZL standard glass fibre rod extensometer, type GKSE 16. This extensometer has especially been developed for a quick installation in tunnel and cavern constructions. Different models are available according to field of application.

The extensometer is used for measurement of relative movements between anchor point and measuring head. Different types with pipe diameter from 70, 90 and 114 mm are available. The measuring heads can be equipped from one up to six measuring points and with cementation.

Measurement of extensometer can be done manually with a gauge or a digital measuring instrument. A remote measurement is possible with electric displacement transducers. The extensometer is used for the measurement of settlements, dislocations and deformations in tunnel, cavern and mining constructions, slope stabilization, dam construction, survey of subsurface and building monitoring.

## Technical Data

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| Extensometer rods glass fibre core with plastic covering of polyamid: | Ø 11 mm  |
| Thermal coefficient of expansion:                                     | $6.7 \times 10^{-6} / K$   |
| Casing tube PE:   | Ø 16 x 2 mm  |
| Measuring lengths:  | 0,5 to 100 m   |
| Measuring range:  | $\pm 30 / \pm 50$ and $\pm 125$ mm (central base setting)              |
| Adjusting range standard:   | $\pm 70$ mm  |
| Transfer accuracy:  | 0.5 to 20 m ca. 0.02 mm<br>to 50 m ca. 0.10 mm<br>to 100 m ca. 0.30 mm |
| Weight of rods with casing tube:                                      | 0.3 kg/ m  |
| Available diameters of measuring head:                                | Ø 70/ 90/ 114 mm   |

## Benefits

- Compact model with different measuring heads
- Measuring rods of glass fibre with PE casing tube
- Supply of totally assembled model
- Short installation time, by this only small construction impediment
- Corrosion-resistant with high measuring accuracy
- Measuring head immersed in borehole and integrated displ. transducer
- Can be equipped/ upgraded from manual measurement to remote control
- Proved and successfully used system