

GLÖTZL Baumeßtechnik

INCLINATION MEASUREMENTS at BUILDINGS

For registration of inclination changes at buildings, high-precision inclinometer sensors are used with a restricted measuring range of $\pm 10^\circ$ and a resolution of measured values of 0.01 mm/m.

The inclination measuring equipment is either fitted with one sensor for the measuring axis X or with 2 sensors for the axes X and Y and furthermore with a temperature sensor.

The complete measuring equipment, consisting of probe and holder, is vertically fixed at the points to be measured. For an exact vertical alignment and for later controls of the stability of measured values, the probe tube is pivotally arranged in the holder for a rotation throughout 180 degrees for a turnover measurement. This function is especially important for long-term measurements to determine the drift of the sensors in definite time intervals and then to include this value in the evaluation.

The measuring probes are equipped with a controller, in which the calibration values are calculated and a linearization of the sensors of 3rd order is done. The measured values are transferred by means of RS485, protocol Glötzl MFA6. This method enables the interconnection of max. 4 lines with up to 128 probes each. The transmission length is 1,000 m without intermediate amplifier.

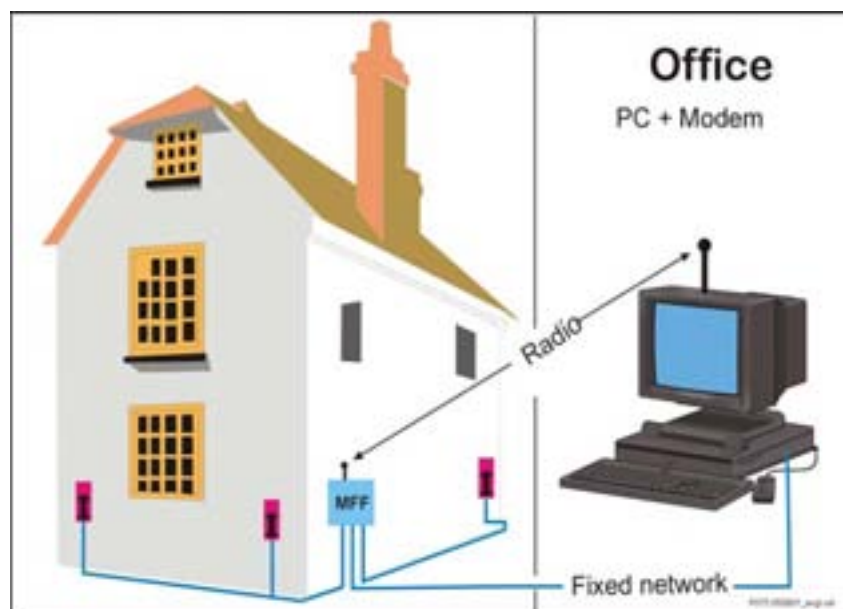
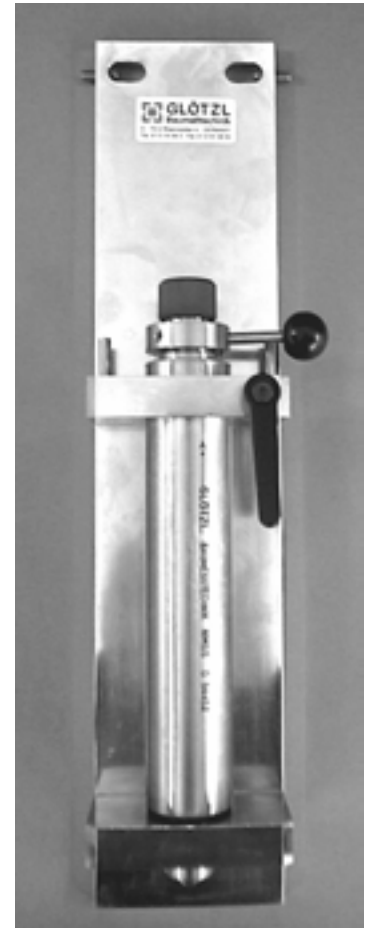
Recording of Measuring Data

For recording of measuring data the following instruments are available:

1. Manual recording with storing readout unit VMG 11-1, by switch-over manifolds or by direct connection. In this case, normally one turnover measurement is done at each measurement. For this, the probe is turned in the holding device by 180° .
2. Automatic recording with a measuring device which is continuously recording and storing the measuring values in a fixed time scanner. It is also possible to transfer the measured values directly online to a computer and to recall them in time intervals. The evaluation is done directly after data income by the evaluation program GLA 7.

For control of limit values, corresponding alarm threshold values can be set. Furthermore, also an event-controlled data logging is possible.

Type: NMGG D
Art. No.: 75.05



Technical Data:

Probe	NMGG D 5/1	NMGG D 5/2	NMGG D 10/1	NMGG D 10/2
Article No.:	75.05.01.01	75.05.02.01	75.05.11.01	75.05.12.01
Vertical, measuring axes:	X	X and Y	X	X and Y
Dimensions:	Probe tube, length 300 mm, diameter 45 mm			
Weight:	1.5 kg			
Measuring ranges:	+/-5°	+/-5°	+/-10° (14)	+/-10° (14)
Indicating ranges:	+/-87.15 mm/m		+/-173.65 mm/m	
Linearity:	+/-0.2 % f.s.			
Hysteresis:	+/-0.01 % f.s.			
Zero point drift:	0.009 mm/m/°C			
Range drift:	0.018 mm/m/°C			
Temperature operating range:	-20 °C up to +60 °C			

- Installed controller with 16-Bit-AD converter, installed data transfer via serial interfaces RS 485, protocol Glötzl-MFA6 for max. 250 instruments

Holder for Probe with Turnover Device

- for assembly at buildings on vertical areas
- with 2 holding devices for probe fixing, weight 2.5 kgs
- below holding device with ball bearing for turning of probe during measuring operation (turnover measurement)
- upper holding device with locking lever and distortion connection
- Dimensions: Height 465 x width 100 x depth 65 mm

