GLÖTZL Baumeßtechnik

VECTOR PLUMB SYSTEM, biaxial

Model with permanent output of measured values **Art. No.: 82.50** **Type: CL50**

Model with additional data storage unit **Art. No.: 82.55** **Type: CLS50**

CL50/CLS50

- High measuring accuracy and long-term stability
- Resolution 0.01 mm
- No counter-effect to plumb wire
- No restriction of manual meas.
- Outputs:
  - RS485-bus
  - optional 4...20 mA or Vibrating wire compatible
  - Alarm outputs
- Integrated temperature meas.
- Illuminated local display

CLS50

- Operation mode programmable
- Storage for 4.000 measured values
- Time start program from 10 seconds on up to daily
- Internal XY adjusting to construction axis

Application

The optoelectronic vector plumb is used for automatic measurement of conventional (wire) pendulum- and floating plumb systems and furthermore for wire alignments which are normally measured manually (optically). A particular advantage is the use at difficultly accessible locations, e.g. at shafts. The system can be used as simple local measuring instrument with display on site or it can be connected to a central measuring station. The utilized output signals are allowing large line lengths without measuring errors. Optionally, it is suitable as mobile measuring device for temporary applications. The electronic unit can be fitted without any problem with a distance of up to 20 m from sensor head.

Description

The plumb measuring device is operating two-dimensionally contactfree and without counter-effect according to a vectorial measuring procedure on the base of optoelectronic sensors.

The plumb wire serves as measuring object. An additional measuring hull is not necessary. By the low overall height, the sensor head is not disturbing the manual measurement by means of coordimeter.

By means of a microcomputer, the measured values and state information are gained from the optical signals, and the exact x- and y-coordinates of the plumb wire are computated in the measuring level.

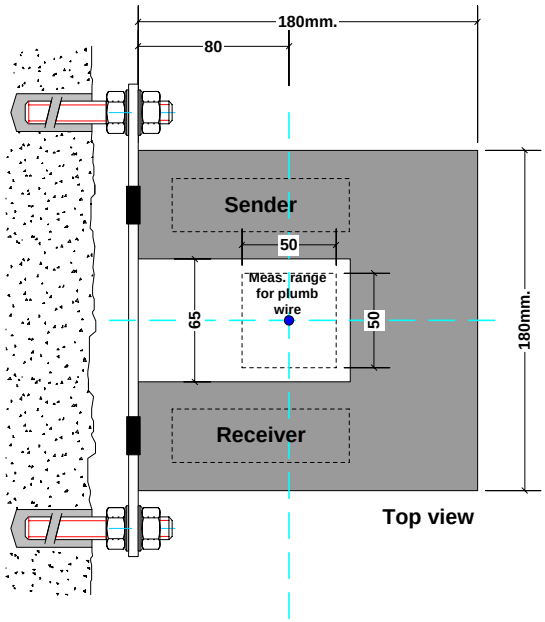
The indication of the coordinates is done on display on site. Following, the values are converted into a vibrating wire compatible frequency signal (or 4...20 mA signal) and can then be measured with a hand measuring device like a conventional vibrating wire transducer on site (or 4...20 mA sensor), or can be transmitted to a measuring station via cable connection. Additionally, a bus-compatible RS485 connection is existing. By this, it is possible to interlink the instruments.

The CLS50 is carrying out its measurements time-controlled and in an independent way. The measured values can be read out by bus (GMS7 – Glötzl-system), or Laptop/Palmtop, optionally by modem, and at any time also during running measurements.

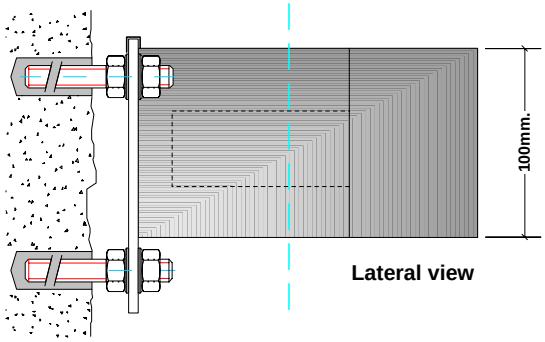
The current supply can be done either via mains (230 VAC) or by a collecting line (24 V).

Measuring head CL50 / CLS50

1-wire acquisition unit

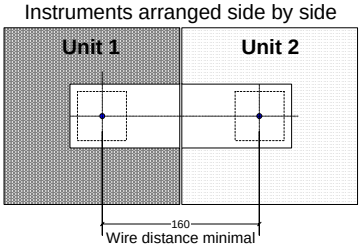


Console

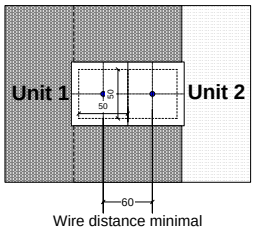


2-wire models

Instruments arranged side by side

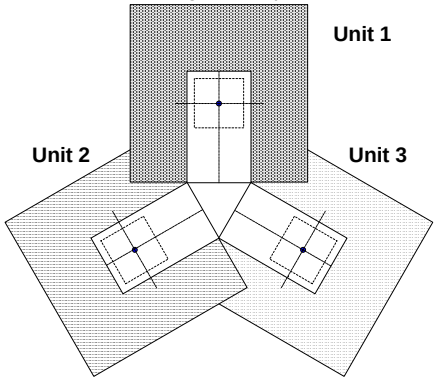


Instruments arranged on top of each other



3-wire model

Insruments arranged on top of each other



By the low overall height, also 2- and 3-wire acquisitions with small wire distance are possible without any problem.

Technical data type		CL50	I	CLS50
Measuring range		50x50 mm		
Resolution		0,01 mm		
Accuracy under reference conditions		± 0,05 mm		
Operating temperature range		5-35 °C		
Output		RS485, GMS7-sensor bus VW, 642...1.000 Hz vibrating wire compatible (option) 4-20 mA (option) Alarm: 2 potential free contacts All outputs installed galvanically separated		
Overvoltage protection		2,5 kA		
Maximum cable length		VW: max. 5.000 m	I	----------
		RS485: max. 1.200 m		
		4-20 mA: max. 2.000 m		
Storage for meas. values		----------	I	4.000 meas. values with date and time
		----------	I	Automatic time start program
Supply/current consumption		230 V_{AC}/80 mA, optional 24 V_{DC}/500 mA		
Weight:	Sensor unit	approx. 6,0 kgs		
	Electronic unit	approx. 1,2 kg		
Dimensions:	Sensor unit	approx. 180x180x100 mm		
	Electronic unit	approx. 250x220x120 mm		
Options		----------	I	with integrated temperature measurement

Subject to technical alterations

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