

GLÖTZL Baumeßtechnik

ELECTRONIC PLUMB MEASURING SYSTEM

two axes



Type: LL02-25
Art. No: 82.60.01

- High measuring accuracy and long-term stability
- Resolution 0.01 mm
- Automatic tangential correction
- No restriction of manual measurement
- Outputs:
 - Vibrating wire compatible
 - RS485-Bus
 - 4...20 mA (optional)
- For cable lengths up to:
 - 2 km (vibrating wire comp.)
 - 1.2 km (RS485)
- Illuminated local display



Application

The electronic plumb measuring system is used for automatic measurement of conventional (wire) pendulum and floating plumb systems which are otherwise measured manually (optically). Of special advantage is the application at not easily accessible locations, e.g. shafts. Several measuring levels at one plumb wire can be realized. The system can be used as simple local measuring system with on site display or can be connected to a central measuring station. The used output signals are allowing large tubing lengths without measuring errors.

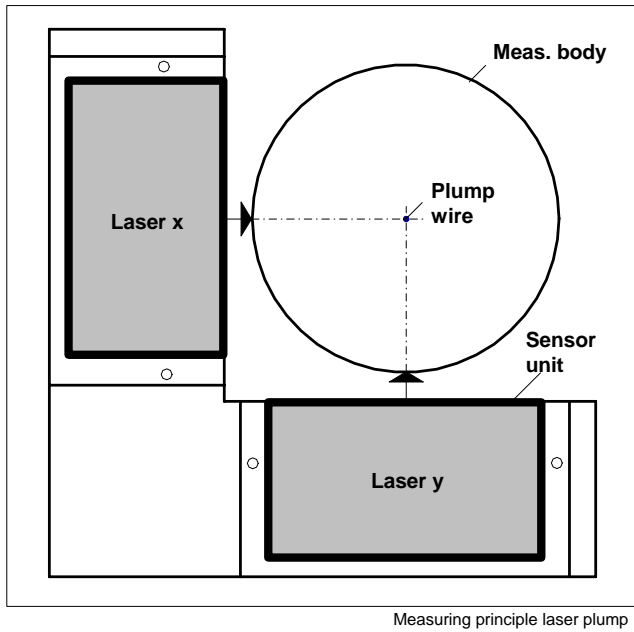
Description

The plumb meas. system is operating acc. to the triangulation procedure by means of laser. A measuring body (\varnothing 100 ... 200 mm) which has to be clamped to the plumb wire is rectangularly scanned by two sensors and the distance is measured. The meas. body is constructed in such a way that it does not disturb an add. optical control by coordimeters.

By a micro-computer the diameter and angle portions are eliminated from the raw values and the exact x and y coordinates of the plumb wire are obtained in the measuring level. The indication of the coordinates is done on a display on site. Then the values are converted into a frequency signal which is vibrating wire compatible (or into a 4...20 mA signal) and can then be

measured like a conventional vibrating wire transducer (or 4...20 mA sensor) by a manual measuring instrument on site or can be transferred to a measuring station by means of a sensor cable. Additionally, a bus-capable RS485 connection is existing. Thus, the instruments can be used cross-linked. The power supply can either be done by mains (230 VAC) or by collecting line (24 V).

Measuring Principle Laser Plumb

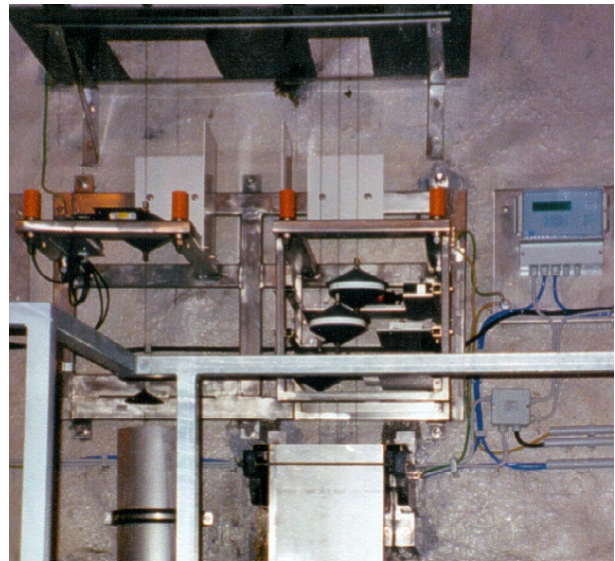


Technical Data Type LL02-25

Measuring range	20 x 20 mm (opt. 40 x 20 mm)
Resolution	0.01 mm
Accuracy	0.1 mm, opt. 0.05 mm
Operating temperature range	0 ... 60 °C
Output	- VW, 642...1000 Hz vibrating wire compatible - RS485, bus capable - 4 ... 20 mA (option) all outputs galvanically separated
Overvoltage protection	built-in, 2.5 kA
Maximum cable length	VW: 2000 ... 5000 m RS485: max. 1200 m
Supply/current consumption	230 V / 40 mA, optional 24 V DC / 250 mA
Weight:	
Sensor unit	3.0 kgs
Electronic unit	1.2 kgs
Dimensions:	
Sensor unit	approx. 255 x 255 x 80 mm
Thickness of basic plate:	15 mm
Thickness of laser sensor:	30 mm
Electronic unit	approx. 250 x 220 x 120 mm



Pendulum plumb measuring point with electronic pump measuring system



Combined floating and pendulum plumb measuring point with electronic pump measuring system type LL02-25