Laser measurement system LN 10

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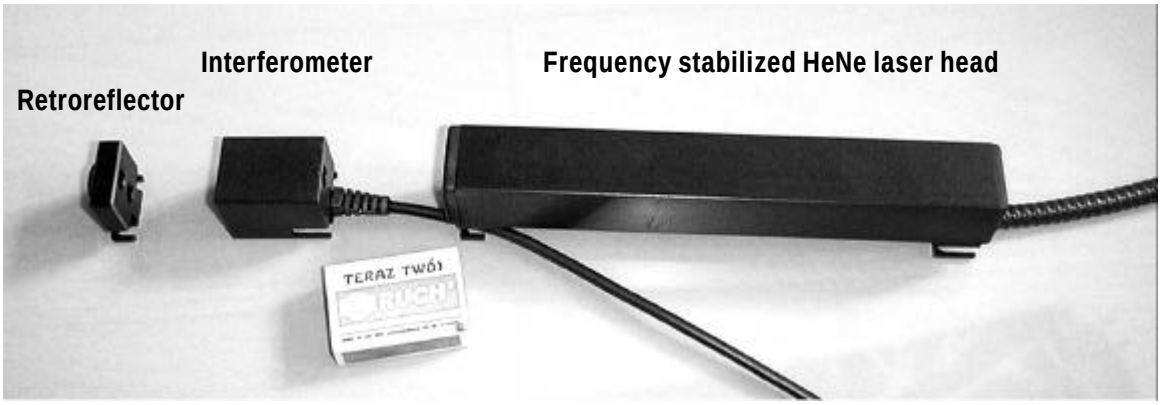

Features

- small size and low weight
- easy transportable
- simple operation, easy beam alignment
- high resolution
- high precision
- very low price

Applications

- positioning of CNC and CMM
- machine geometry inspection
- refitting of measurements devices
- positioning of stages
- ball screw inspection
- servicing application

Laser measurement system LN 10
The most compact laser liner on the market.

TECHNICAL DATA

Laser head

- laser type	Two mode HeNe laser with frequency stabilization
- preheating time	approx. 10 min
- wavelength (vacuum)	632,991354 nm
- wavelength accuracy	± 0,08 ppm
- short time stability	± 0,001 ppm (1 hour)
- output power	400 µW
- beam diameter	8 mm
- distance between out- and ingoing beam	12,7 mm
- laser head dimensions	240x30x30 mm
- net weight	300 g
- safety class	Class 2 Laser product according to PN-91/T-06700

System work conditions

- temperature range	10 – 35 °C
- humidity range	10 – 90 %

Power supply

- voltage	230 VAC, 50 Hz 35 W (during preheating) 10 W (work)

PC interface

- type	RS 232C, USB (on demand)
- data rate	9600 bps (RS 232)

Environment compensation

Wavelength compensation

- manual	Environments parameters entered from keyboard
- automatic	With the use of the environment station.

Parameters of the environment compensation

- air temperature	Range 0 – 40 °C, accuracy 0,1 °C
- pressure	Range 940 – 1060 hPa, accuracy 1 hPa
- humidity	Range 10 – 90 %, accuracy 5 %
- time constants	Temperature 3 s, pressure 2s, humidity 5 s
- dimension	ϕ50x55 mm
- net weight	100 g

Material temperature compensation

- manual	Temperature of material entered from keyboard
- automatic	3 temperature sensorsors, calibrated Pt-1000 klass 1/3 B, in oil resistant casing.
- time constant	6 s
- net weight	50 g

Measuring parameters

Measurement	Range	Resolution	Accuracy
Distance	0 – 30 m	1 nm	1,5 μm/m
Velocity	0 –1m/s	0.25 μm/s	0,1 %