Laser measurement system LN 10
www.feanor.com

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
- preheating time
- wavelength (vacuum)
- wavelength accuracy
- short time stability
- output power
- beam diameter
- distance between out- and ingoing beam
- laser head dimensions
- net weight
- safety class

Two mode HeNe laser with frequency stabilization
approx. 10 min
632.991354 nm
± 0.08 ppm
± 0.001 ppm (1 hour)
400 µW
8 mm
12.7 mm
240x30x30 mm
300 g
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 ø50x55 mm
- net weight 100 g

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

Measuring parameters

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<tr>
<th>Measurement</th>
<th>Range</th>
<th>Resolution</th>
<th>Accuracy</th>
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<tbody>
<tr>
<td>Distance</td>
<td>0 – 30 m</td>
<td>1 nm</td>
<td>1.5 µm/m</td>
</tr>
<tr>
<td>Velocity</td>
<td>0 – 1 m/s</td>
<td>0.25 µm/s</td>
<td>0.1 %</td>
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</tbody>
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