



## LM 20/50

*Product information*

Fiber-coupled, highly linear probe for high-precision tactile thickness measurement and calibration

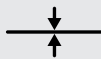
# Laser interferometric probes

## LM 20/50

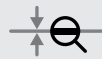
The LM series laser interferometric probes are precision linear encoders. With these probes, tactile measurements are possible over a measuring range of 20 or 50 mm with nanometer accuracies. The highly linear length gauges are compatible with conventional measuring systems due to their size and the clamping shaft diameter of  $\varnothing 8 \text{ mm h6}$ .

The integrated laser interferometer converts the measuring movement of the motor-driven measuring spindles into an interference signal. This optical measurement signal is transmitted by fiber optics to the optoelectronic supply and evaluation unit and output as a length value. The stylus quill and the integrated interferometer are adjusted to each other, taking into account the minimization of abbe and alignment errors.

The stable HeNe laser, whose light is fed to the laser interferometer via optical fibers, and the correction of environmental influences on the laser wavelength are the basis for the high measuring accuracy. Operation and display are either via a separate display or via a PC with suitable software.

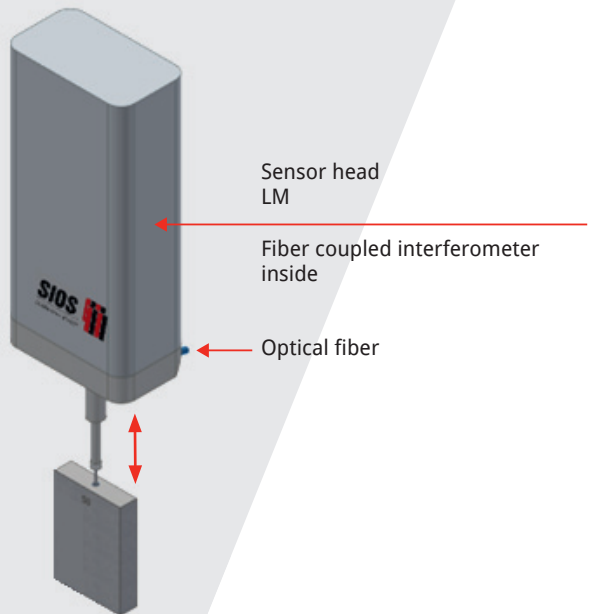


20 mm,  
50 mm



0.1 nm

## MEASURING PRINCIPLE



### Areas of application:

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- highly linear probe
- Abbe-error-free interferometric length measurement
- constant measuring force over the complete measuring range
- suitable as a built-in measuring system
- motorized drive unit
- suitable for thickness measurement of highest accuracy in the double probe version

### Ideal for

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- quality control
- development
- thickness measurement
- gauge block inspection

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**For customer-specific versions, OEM applications or integration in special measuring stations, please contact us.**

**We will be happy to personally assist you in finding solution to your measuring tasks.**

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