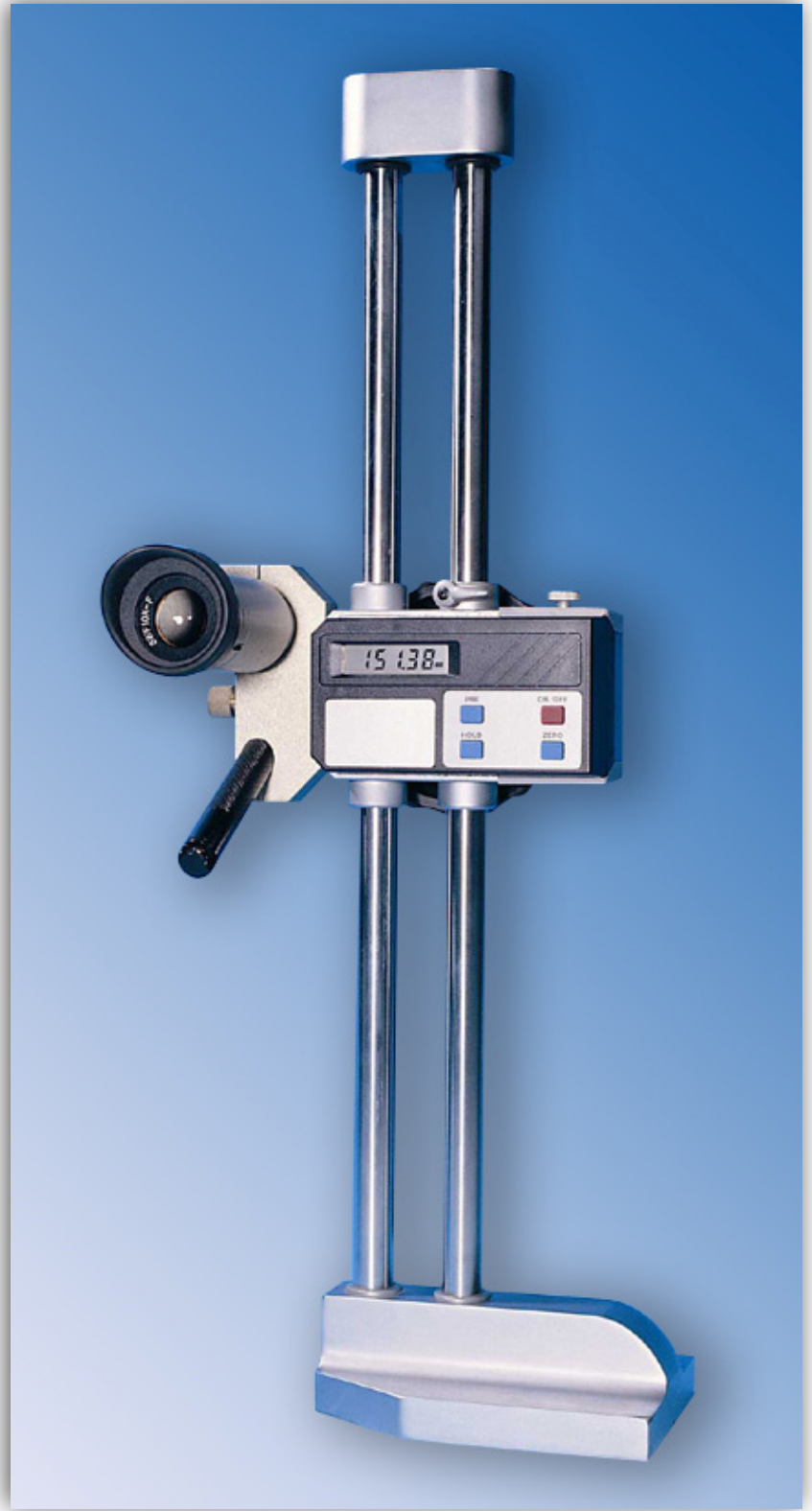


KMF 20 OP

Calibrator for the optical measurement
of the initial gauge length at feeler arm extensometers



P r e c i s i o n t e s t i n g o f l i n e a r s t r a i n

Area of application

For the exact measurement of the gauge length (L_0) at extensometers a bright image and high resolution microscope is used.

Design and function

The microscope for the measurement of gauge length consists of a 10 times enlarging eye piece with a reticule, prism systems for rotating the image and exchangeable objectives with an illumination device.

For the measurement of gauge length are objectives with 2 or 4 times enlargement recommended. If the microscope is to be used for other purposes as well a 6 x or 10 x objectives can also be supplied. Please note: with an increasing enlargement of the brightness decreases the field of depth and image field diameter.

Operation

Optical measurement of gauge length

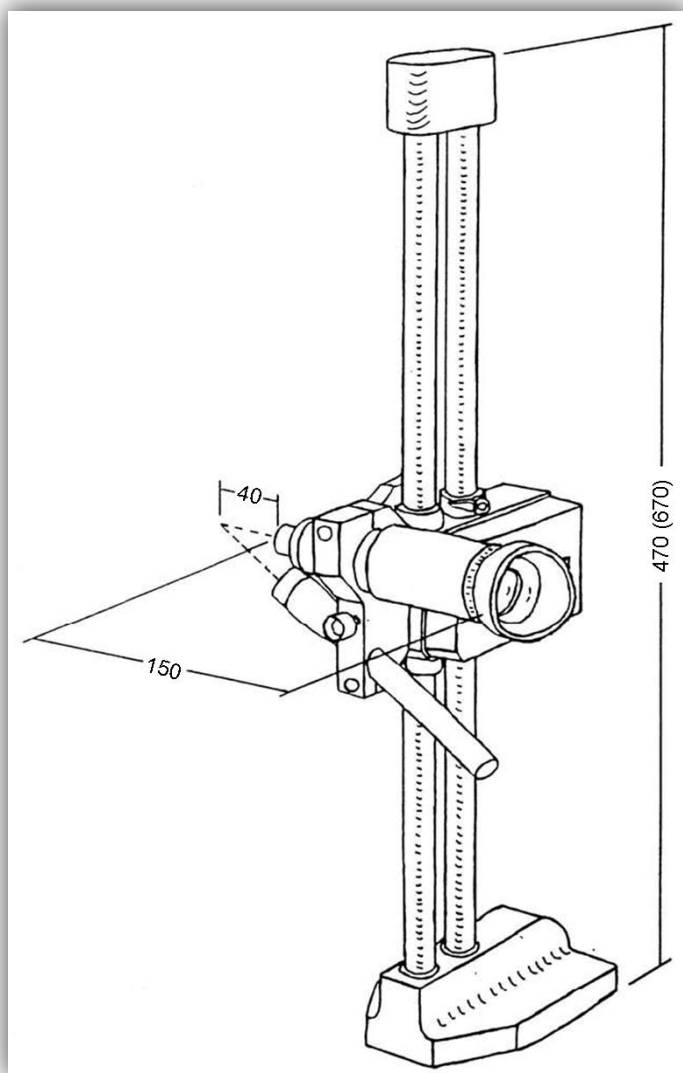
The light is switched on by turning the lamp head and therefore the object to measure is illuminated optimally. The best distance to the object to measure is approximately 40 mm. The reticule is focused by turning the black knurled ring of the eye piece and thus any vision defect is corrected. The chrome-plated knurled ring serves to adjust the reticule.

1. Bring the reticule in line with one knife edge of the instrument to be checked (by adjusting the hand wheel and shifting the base of the KMF 20).
2. Set the digital display to 0 (zero).
3. Move the reticule with the hand wheel to the other knife edge.
4. The distance between the two knife edges (L_0) can be read from the digital display.

Technical data

KMF 20 OP

Measuring distance	300 mm	600 mm
System accuracy	40 μ m	60 μ m
Display steps	10 μ m	10 μ m
Weight	4.5 kg	6.5 kg



Picture 1: KMF 20 OP - Dimensions

Delivery scope

Basic unit for optical measurement

- | | |
|---|---------------------------------------|
| 1 | Basic instrument with digital display |
| 1 | Microscope with holder and light |
| 1 | Objective 2 x magnification |
| 1 | Eyepiece 10 x with reticule |

Microscopes spare parts and accessories

	Magnification	Image field
Objective 2x	20x	7.2
Objective 4x	40x	3.6
Illumination device		