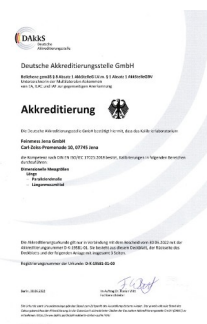
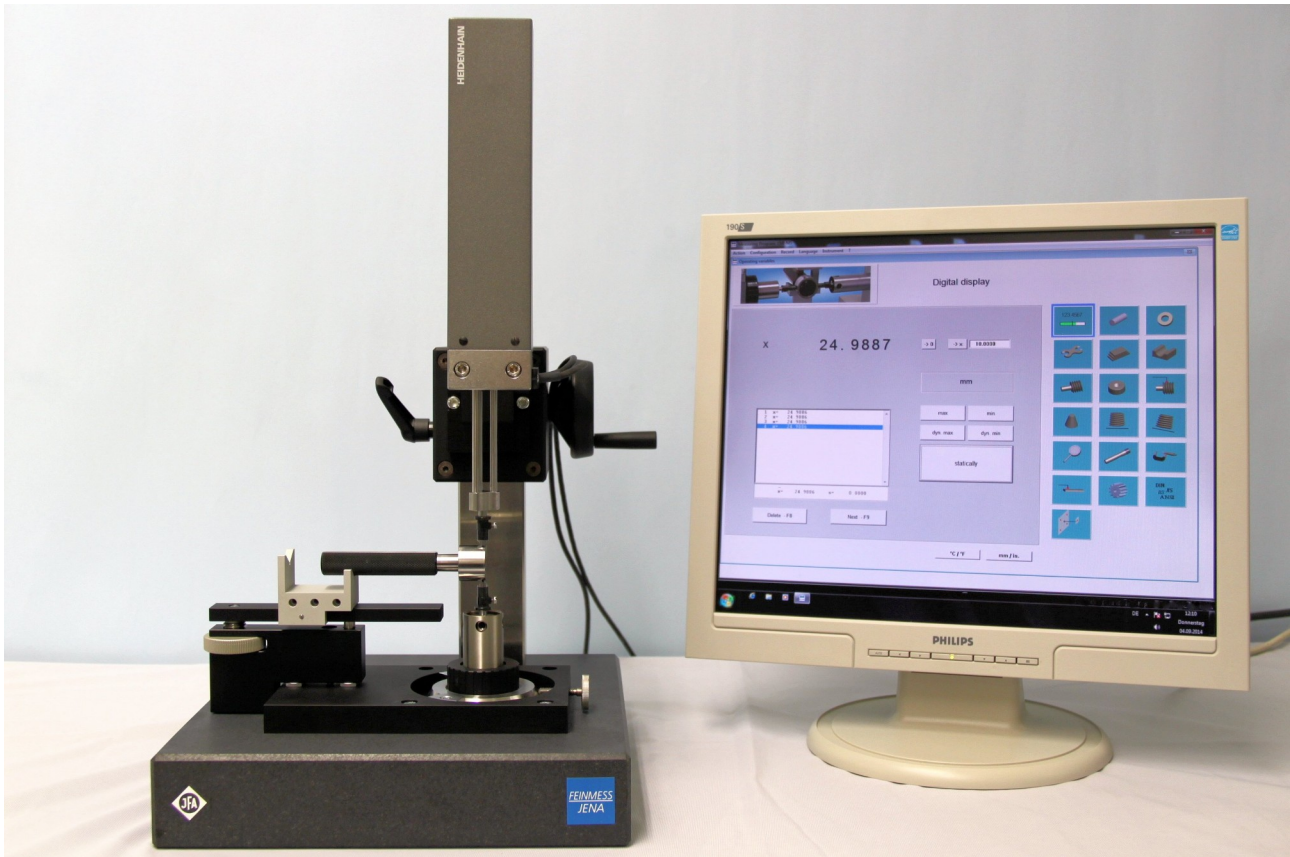


# ABBE

## Universal Comparator with 100 mm probe



- For external length measurement
- Easy to operate
- With buyer's choice of digital display, or direct PC link
- With special accessories and software modules for standard-conforming calibration of plain and thread plug gauges and measuring pins

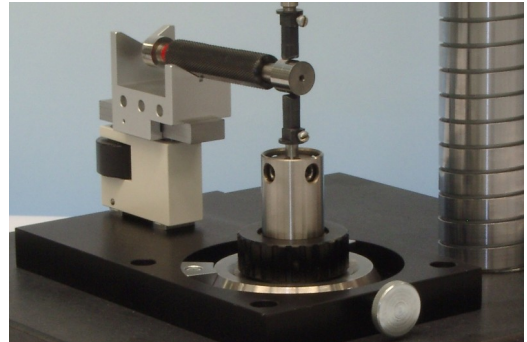


## General

## ABBE

- Configuration: - Vertical comparator  
Measuring System: - High-resolution probe 100 mm  
Drive: - Motorized drive of the measuring slide, with external control unit
- Salient features: - Strict adherence to Abbe's comparator principle  
- Various configurations:  
Basic version:  
Digital display by Heidenhain – optional PC link with V.24/RS232-C or USB  
Extended version:  
Direct PC link via Heidenhain IK220 with powerful software for measurement and inspection tool management:  
- Computer-aided correction of systematic instrument errors (CAA)  
- Computer-aided correction of temperature influences  
- Special software modules, e.g. for testing measuring pins, external threads and other objects

## Examples of applications



Testing a limit plug gauge



Testing a short measuring pin

## Measuring ranges

Direct measurement:	0 ... 100 mm
Comparative measurement:	0 ... 250 mm

## Dimensions, weight

Overall dimensions	
length x depth x height:	300 mm x 300 mm x 510 mm
Weight of instrument:	25 kg
Max. permissible weight of testpiece:	15 kg

## Performance data

Probing:	Mechanical, with carbide-tipped precision-ground styli, hardened steel balls Threads for crew in contact tip M2.5; Diameter for push-on contact tip 6 mm	
Measuring pressure:	0.7 N	
Configuration:	<u>Basic version</u> Digital display by Heidenhain	<u>Extended version</u> direct PC link via Heidenhain PCI-card IK220
Resolution:	1 µm / 0.1 µm	1 µm / 0.1 µm / 0.01 µm
Uncertainty of length measurement:	(0.5 + L/1000) µm	(0.25 + L/1000) µm with computer-aided correction systematic instrument errors (CAA)

## Power requirements

Line power:	110 V, 127 V, 220 V, 240 V (+10%; -15%)
Frequency:	50 ... 60 Hz

## Environmental requirements

Ambient temperature for operation:	+ 15°C ... + 25°C
Ambient temperature for ensuring the specified length measuring uncertainty:	20°C ± 1 K
Permissible temperature fluctuation:	0.3 K/hour



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