

Universal Micrometer

for paper, tissue, board or leather

Code: E.203.xxx

Usage

To measure the thickness of paper, tissue, board or leather.

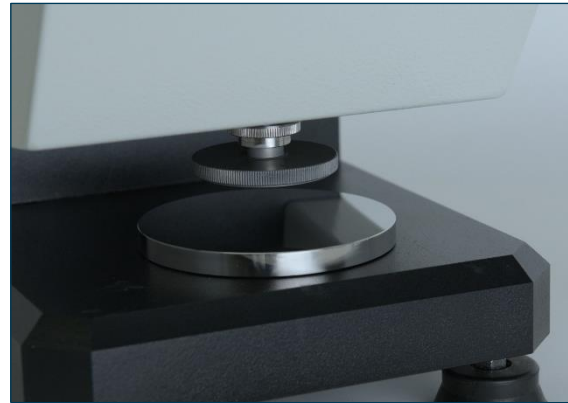
Applicable standards

- ISO 534
- ISO 12625-3
- TAPPI T411
- SCAN P7
- EN 20534
- DIN 53105





User-friendly operation via touchdisplay



Measuring area

Device description

The universal micrometer consists of a sturdy frame that ensures an exact positioning of the measurement pin on the sample. It is easily operated via the integrated touchscreen. The lifting and lowering of the pin are motor driven. There are various pins available to fulfill the different standards for paper, board and tissue as well as leather.

Process description

The sample is placed underneath the measuring pin. The measurement is started by pushing the start button on the touch screen. The pin lowers onto the sample and the thickness is measured after the pin has settled. The thickness of the sample is shown on the touch screen with a resolution of 1µm. The device can be set to single or multiple testing, which lowers the pin onto the sample several times. Between the test cycles the sample can be moved. The device calculates all the statistics (mean, min, max, standard deviation, etc.) and displays them on the screen.

Specifications

- top-quality materials and manufacturing
- intuitive and easy operation via touchscreen
- motor driven measuring pin
- lowering speed adjustable 1 - 11 min/sec
- various pins and weights for tissue, board, paper and leather
- adjustable testing speed
- statistics for multi measurements
- resolution: 1 µm
- adjustable dwelling time: 0 - 999.9 sec
- measuring range 0 - 25 mm
- two operating modes
- manual mode for single measurements or automatic mode for continued test cycles

Delivery content

- instrument with standard pin & weight (paper - 2 cm² pin, 2 kg weight)
- connection cable
- operating manual

Connections

- Electricity: 110V – 230V, 50/60 Hz AC

Parameters

	Dimensions	Weight
Net	225 x 285 x 420 mm	35 kg
Gross	400 x 500 x 500 mm	45 kg



Measuring weight A



Measuring weight F

Models

Code	Material to test	Test plate area	Measure range	Resolution
E.203.25P	paper	Ø107 mm	25 mm	1 µm
E.203.25PT	paper acc. TAPPI T411	Ø107 mm	25 mm	1 µm
E.203.25C	cardboard	Ø107 mm	25 mm	1 µm
E.203.25T	tissue	Ø107 mm	25 mm	1 µm
E.203.20NV	nonwoven	Ø107 mm	20 mm	1 µm
E.203.10PFL	plastic film flat	Ø107 mm	10 mm	0,1 µm
E.203.10PFR	plastic film rounded	Ø107 mm	10 mm	0,1 µm

Additional pin & weight kits

Code	Kit for	According to	Pin	Weight
E.203.P.KIT	paper	ISO 534 Measuring head: Ø16,0 ± 0,5 mm (2 ± 0,02 cm ²) Pressure over the sample: 100 ± 10 kPa	1	A
E.203.PT.KIT	paper acc. TAPPI T411	TAPPI T411 Measuring head: Ø16,0 ± 0,15 mm (2 cm ²) Pressure over the sample: 50 ± 2 kPa	1	C
E.203.C.KIT	corrugated board	ISO 3034 Measuring head: Ø35,7 mm (10 ± 0,2 cm ²) Pressure over the sample: 20 ± 0,5 kPa	2	A
E.203.T.KIT	tissue	ISO 12625-3 Measuring head: Ø35,7 ± 0,1 mm (10 cm ²) Pressure over the sample: 2 ± 0,1 kPa	2	B
E.203.NV.KIT	nonwoven	WSP120.6.R4 (12) AP.7.2 & ISO 9073-2 Measuring head: approx. area: 2500 mm ² (approx. Ø 56,4 mm) Pressure over the sample: 0,5 kPa/0,1 kPa (without weigh for this range)	5	F
E.203.PFL.KIT	plastic film flat	ISO 4593 / DIN 53370 - flat Measuring head: Ø10 mm Pressure over the sample: 0,5 N – 1 N	4	E
E.203.PFR.KIT	plastic film radius	ISO 4593 / DIN 53370 - radius Measuring head: R = 30 mm Pressure over the sample: 0,1 N – 0,5 N	4 - R	-