TXL-KMS-017 / 27 October 2026 · One-year manufacturer warranty

Digital Fabric Thickness Gauge (Benchtop)

Thickness gauge for textile, felt, leather and paper.

Model technical data

1	Thickness Measurement accuracy is 0,01 mm.
2	Thickness Measurement 0.01 to 50 mm.
3	Pressure feet of 5 cm², 10 cm² and 20 cm² can be supplied as an optionally.
4	Device has a presser foot 50.5 mm.
5	It has a touchscreen controller.
6	All controls on the device can be done via the touch screen without PC.
7	Device has USB port as standart for computer communication.
8	Computer, printer and PC Software can be supplied as an optionally.

Physical specifications and utilities

Electrical supply	Approx. battery / rechargeable battery; voltage and charger depend on build.
Power / connected load	Approx. 1–5 W connected load for preliminary planning.
Overall instrument dimensions	Approx. 350 × 300 × 400 mm (W × D × H).
Instrument weight	Approx. 8–20 kg net.
Gross / shipping weight	Approx. 18.8–35 kg gross; estimated packing allowance.
Interfaces	Device has USB port as standart for computer communication.
Lab requirements	Level, stable working surface; specimen conditioning follows the selected method.

Dimension order and approximate values are stated in each row. Packaging data are separate from instrument dimensions and net mass. Approx. rows are preliminary engineering estimates based on comparable equipment and function/capacity; they are not verified manufacturing measurements or standard requirements. Installation and shipment are finalised against the approved drawing and nameplate. Estimate scope: base product / one unit; external computer, bench and auxiliary plant excluded.

Specifications, dimensions, and power requirements are approximate and subject to change without prior notice for continuous design improvements.

Product technical specifications and images may vary according to manufacturing conditions and applicable standards.

Test and configuration

Measured output / function	Thickness under specified pressure (mm)
Parameters selected for the method	Presser-foot area, pressure and dwell time
Verification points	Gauge blocks, zero and contact force

Control and recording specification

Method-specific software and recording requirements follow. Delivered software modules are defined by the order scope.

• The need for integrated software depends on the method and selected hardware; manual instruments use an external test record.

• Method code and edition, specimen ID, operator and selected test parameters are linked to the record.

• The calculation and endpoint are defined by the selected method edition; instrument signals and operator assessments are kept distinct.

• Raw measurements, units, valid/invalid test flags and the reported result remain traceable.

• Calculations are checked against known inputs and an independent calculation; sensor channels are checked against calibration values.

Related test methods

ISO 5084 · ASTM D1777

Listed methods are application references. Suitability is established by assessing hardware, method edition and calibration together.

Test parameters for the reviewed method

The values below were reviewed in selected clauses of the stated source edition. They are not a declaration of equivalence to a later edition or independent instrument verification.

ISO 5084:1996 / 5.1.1 / 5.1.3 / 8.3

1	Recommended presser foot: 2000 ± 2 mm² (approximately 50.5 ± 0.2 mm diameter).
2	Pressure-setting capability: 1 ± 0.01 kPa and 0.1 ± 0.001 kPa; test pressure is selected for the material.
3	Dwell before thickness reading: 30 ± 5 s.

ASTM D1777-96 (2002) / Table 1, Option 1

1	Table, woven-fabric option: foot diameter 28.7 ± 0.02 mm; pressure 4.14 ± 0.21 kPa; readability 0.02 mm. Other materials require their own foot/pressure option; this is distinct from the ISO 5084 recipe.