

TXL-KMS-009 / 27 October 2026 · One-year manufacturer warranty

Hydrostatic Water Resistance Tester

Fabric resistance to water penetration under hydrostatic pressure.



Model technical data

1	Pressure range: 0-1000 kPa.
2	Pressure resolution: 0.1 cmH ₂ O (approximately 0.01 kPa).
3	Standard test area: 100 cm ² .
4	Standard pressure-rise rates: 10 and 60 cmH ₂ O/min (0.981 and 5.884 kPa/min).
5	Adjustable rise rate: 10-600 cmH ₂ O/min (0.981-58.840 kPa/min).
6	Test modes: ramp and constant pressure.
7	7-inch touchscreen; two-hand-controlled pneumatic clamping.
8	Ethernet connection; pressure units kPa, cmH ₂ O, mbar and psi.
9	Power supply: 220-240 V AC, 50/60 Hz; compressed air: 4-6 bar.
10	HYDROLAB software provides live curves, specimen series, statistics and PDF/Excel/CSV reporting.

Physical specifications and utilities

Electrical supply	Power supply: 220-240 V AC, 50/60 Hz; compressed air: 4-6 bar.
Power / connected load	Approx. 100–400 W connected load for preliminary planning.
Overall instrument dimensions	Approx. 600 × 600 × 1500 mm (W × D × H).
Instrument weight	Approx. 60–100 kg net.
Gross / shipping weight	Approx. 91–150 kg gross; estimated packing allowance.
Compressed air	PW-K007 manufacturer brochure: 4–6 bar dry, oil-free compressed air for pneumatic specimen clamping.
Interfaces	Ethernet connection; pressure units kPa, cmH ₂ O, mbar and psi.
Lab requirements	Water supply and drain; hot water, water quality and plumbing capacity depend on order configuration.

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	Hydrostatic pressure at water penetration
Parameters selected for the method	Test area, pressure rise, water temperature and endpoint
Verification points	Pressure sensor, ramp rate and clamp sealing

Control and recording specification

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

- Method code and edition, specimen ID, operator and selected test parameters are linked to the record.
- Third penetration mark for ramp testing; target, duration and observed penetration are recorded separately for constant-pressure testing.
- 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 811 · AATCC 127

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.

AATCC 127 (earlier edition) / 6-7

1	Method: specimen at least 200 × 200 mm; water 21 ± 2 °C; rise 10 mm/s water head. Kept separate from ISO ramp recipes.
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TS 257 EN 20811:1996 / EN 20811:1992 / 4.1, 7-9

1	Method: test area 100 cm²; water 20 ± 2 °C or 27 ± 2 °C; pressure rise 10 ± 0.5 or 60 ± 3 cmH ₂ O/min. Report pressure at the third distinct penetration and the mean of at least five valid specimens.
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