

TXL-KMS-021 / 27 October 2026 · One-year manufacturer warranty

Button & Snap Pull-Off Tester

Determines the holding strength between a button or snap and the fabric or garment; the result is read directly on the gauge in kg or N. Measures the pull-off and breaking strength of buttons, snaps, zips and metal accessories on garments. Interchangeable grips adapt it to different accessories.



Model technical data

1	Ergonomic construction, user-friendly; interchangeable grips and clamps for different accessories.
2	The result is read directly on the gauge in kg or N.
3	Two models: 200 N analogue manual and 300 N automatic with touch panel.
4	The 200 N model has an analogue dynamometer indicator; units in N or kg.
5	The 300 N model has a 3.5" colour touch screen; units in cN, grF, N and kgF.
6	The 300 N model offers programmable test parameters and precise digital measurement.
7	Travel excluding jaws: 180 mm.
8	In the automatic model, the pull-off test is motor driven and the specimen is secured in suitable grips.
9	Measures the pull-off and breaking strength of buttons, snaps, zips and metal accessories.

Physical specifications and utilities

Electrical supply	Manual / passive base apparatus; no mains supply assumed.
Power / connected load	Approx. 0 W connected load for preliminary planning.
Overall instrument dimensions	Approx. 400 × 300 × 800 mm (W × D × H).
Instrument weight	Approx. 15–30 kg net.
Gross / shipping weight	Approx. 26.5–47.5 kg gross; estimated packing allowance.
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	Button/snap attachment or breaking force (N)
Parameters selected for the method	Gripping fixture, preload, pull and dwell procedure
Verification points	Force indication and fixture slip

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.
- 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 8124 · M&S P115 · 16 CFR 1500 · EN 71-1

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.

16 CFR 1500.51(f), 1500.52(f) / eCFR 2026 / 1500.51(f), 1500.52(f)

1	For toy tension submethods select the age group: 10 ± 0.5 lbf for 18 months or less; 15 ± 0.5 lbf for over 18 through 36 months. Apply load within 5 s and hold 10 s; axial and 90° pull clamps are required. These are not general acceptance limits for all garment buttons.
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ISO 8124-1:2009 / 5.24.6.1

1	Toy-component tension test: force indication accuracy ± 2 N; apply 70 ± 2 N parallel and perpendicular to the component axis. Build force over 5 s and hold 10 s. Only this tension clause of part 1 has been reviewed.
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EN 71-1:2011+A3:2014 / 8.4.1-8.4.2.1

1	Toy components require at least 90 N capacity and 2 N accuracy. General tension: 50 ± 2 N for accessible size ≤ 6 mm, 90 ± 2 N for > 6 mm; entirely paperboard parts 25 ± 2 N. Approximately 5 s loading and 10 s hold; only the tension clause was assessed.
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