DESAX Engineering Textile Testing Instruments Textile Accessories

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Fabrics Elongation Tester DP – 5

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This Instrument is designed for fast and easy test of woven or knitted fabrics.

It is useful by manufacture and laboratories. Both have the same test result by using the same testing method.

Results about max. elongation or the remaining elongation as a quality term is required by jersey, knitted fabrics, sports- Leisurewear and bedclothes.

The simple handling, solid steel design and the low price make the instrument very successful in the market.

Free fabrics test length within the clamp	s 100mm
Wide of the test material	25mm
Test length max.	300%
Draw force standard	1000 g/cm
For light fabrics	500 g/cm
Pre tension standard fabrics	50 g
Pre tension light goods	25 g

Test procedure:

Woven fabrics have to be cut on the elastic site (200 x 30 mm) and frayed for exactly 25 mm wide.

Knitted fabrics have to be cut along the knitting line. 200 x 75 mm are necessary.

The sample have to be fix within the clamps on the exactly length of 100mm under given pre tension.

Add the stretching force to the fabrics.

The stretching speed is controlled by the hydro dampers.

Read the elongation in mm from the Instrument measuring scale.





ELONGATIONS – TESTER DP - 5, MANUAL

- 1. Delivery Control Our consignment encloses:
 - a. Basic instrument
 - b. Supplement weight for elongation up to 1 kg/cm
 - c. 2 Pretension weights 25 gr. and 50 gr.
 Pretension weight of 25 gr. is used for fabrics or knitted goods with a weight up to 100 gr/m2.
 Pretension weight of 50 gr. is used for fabrics or knitted goods with a weight of more than 100 gr/m1.
 - d. 1 Bottle hydraulic oil TELLURA 34.
- 2. Function Control
 - a. Control whether both needle covers are enclosed
 - b. The elongation tester is equipped with a stand for testing on the table. When you remove the plate, the elongation tester can be fixed to the wall, with 2 screws at a convenient high.
 - c. Check the carriage and lift it until it is fixed at the upper-position. Check also the movement up to 300%.
 - d. To fill in the hydraulic oil, remove the cover of the oil piston. Move the carriage 2-3 times until the oil piston shows no more air enclosed.
- 3. Tests
 - a. The fabrics which have to be tested should come from a climatisized room, treatment 12 hours.
 - b. Determine the weight of the fabric in gr/m2.
 - c. Select the pretension according to the gr/m2.
 - d. Weight on the lower clamp for fabrics and knitted goods up to 100 gr/m2
 1.25 kg = 0.5 kg/cm clamp. The additional weight is removed from the lower clamp.

Weight on the lower clamp for fabrics and knitted goods with more than 100 gr/m2 = 2.5 kg = 1 kg/cm2 clamp. The additional weight is fixed on the lower clamp.

- e. **Fabrics**: cut pieces 20 x 3 cm and take away the warp and weft to have exactly 20 x 2.5 cm. Fix the sample in the upper clamp and fix the pretension weight on the lower end of the fabric. Close the lower clamp and start the movement downwards. After 10 sec., or when the lower clamp has stopped, you can read the elongation in %.
- f. **Knitted goods**: Cut pieces of 20 x 7.5 cm. Remove the needle cowers. Fix the sample on the upper needle plate. Use a brush. Then fix the pretension weight and press the sample into the lower needle plate. Wait 10 sec. And read the elongation in %.