Directive 2014/32/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of measuring instruments (recast) (Text with EEA relevance)

ANNEX XI

CHAPTER II

Length measuring instruments

Characteristics of the product to be measured

1. Textiles are characterised by the characteristic factor K. This factor takes the stretchability and force per unit area of the product measured into account and is defined by the following formula:

K	=	$\varepsilon \times (G_A + 2{,}2\ \mathrm{N/m^2})$, where ε is the relative elongation of a cloth specimen 1 m wide at a tensile force of 10 N, G_A is the weight force per unit area of a cloth specimen in N/m^2.

Operating conditions

2.1. *Range*

Dimensions and K-factor, where applicable, within the range specified by the manufacturer for the instrument. The ranges of K-factor are given in Table 1:

TABLE 1

Group	Range of K	Product
I	$0 < K < 2 \times 10^{-2}\ N/m^2$	low stretchability
II	$2 \times 10^{-2}\ N/m^2 < K < 8 \times 10^{-2}\ N/m^2$	medium stretchability
III	$8 \times 10^{-2}\ N/m^2 < K < 24 \times 10^{-2}\ N/m^2$	high stretchability
IV	$24 \times 10^{-2}\ N/m^2 < K$	very high stretchability

2.2. Where the measured object is not transported by the measuring instrument, its speed must be within the range specified by the manufacturer for the instrument.

2.3. If the measurement result depends on the thickness, the surface condition and the kind of delivery (e.g. from a big roll or from a pile), corresponding limitations are specified by the manufacturer.

MPEs

3. *Instrument*

TABLE 2

Accuracy class	**MPE**
I	0,125 %, but not less than 0,005 L_m
II	0,25 %, but not less than 0,01 L_m
III	0,5 %, but not less than 0,02 L_m

Where L_m is the minimum measurable length, that is to say the smallest length specified by the manufacturer for which the instrument is intended to be used.

The true length value of the different types of materials shall be measured using suitable instruments (e.g. tapes of length). Thereby, the material which is going to be measured shall be laid out on a suitable underlay (e.g. a suitable table) straight and unstretched.

Other requirements

4. The instruments must ensure that the product is measured unstretched according to the intended stretchability for which the instrument is designed.