



KES-G5

Compression Tester

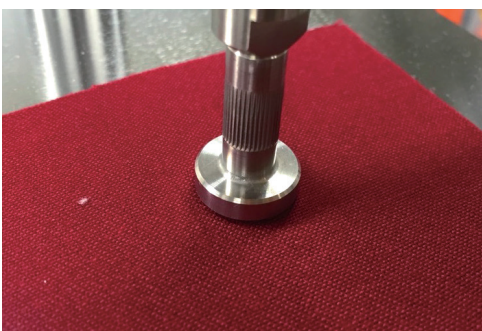
The KES-G5 Compression Tester analyzes hand movements—particularly, pushing by finger—performed by artisans and professionals when judging a object's texture. The device performs this movement mechanically, making it possible to obtain objective numerical data while offering more enhanced versatility over the KES-FB3-A Compression Tester.

Obtainable data includes compressional rigidity, compressional energy, and recoverability.

The device can be applied to a wide variety of fields and purposes, including determining the softness of disposable diapers and the hardness of mousse.

Measurement Example

- Car seat comfort
- Disposable diaper
- Towel softness
- Cosmetic puff softness
- Elasticity of foam and cosmetic cream
- Ease of pushing keyboard keys and buttons.



FEATURES

● High sensitivity measurement of a slight force

This device can even detect small stress at the initial stage of compression.

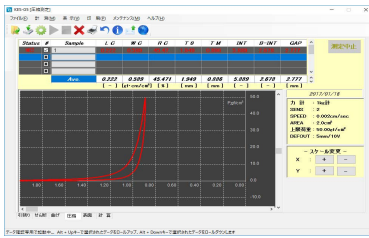
● Recoverability also available

This device can also observe the compressional recoverability, which is normally too small to be measured.

SYSTEM CONFIGURATION DIAGRAM / MEASUREMENT DATA



Sample Measurement Software Screens



◀ Compression properties

Obtainable Data

Item	Characteristic value	Description	Reading the data
Compression properties	LC	Linearity of Compression	Values closer to 1 mean firmer compression
	WC	Work of Compression	Higher values mean higher compression susceptibility
	RC	Recoverability of Compression	Values closer to 100 mean better recoverability

● Compression Sensor Lineup



Size: 2 cm²

Standard accessory



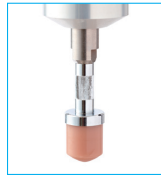
Size: 20 cm²

Softness evaluation for towels, etc.



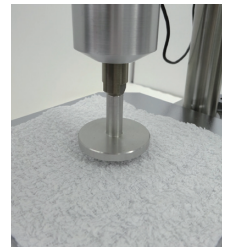
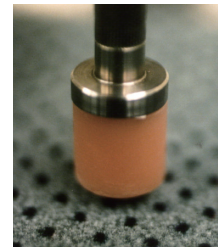
φ 10 mm (spherical)

Evaluation of car seats, instrument panels, center consoles, etc.



Silicon φ 16 mm

Choose from variously shaped compression sensors according to the test piece, such as silicon material, how easy buttons can be pushed, comfort of car seats, etc.



KES-G5 Compression Tester

Dimensions/Weight (approx.)	Measuring unit: W190 × D230 × H460 (mm) / 11 kg Amplifier: W180 × D400 × H400 (mm) / 13 kg
Power source	100 VAC, power consumption: 20W Max.
Measurement environment temperature and humidity	20 to 30°C / 50 to 70% RH. (No condensation.) Temperature and humidity should be kept constant during measurement. (Standard temperature and humidity conditions: 20°C / 65% RH) *The instrument should be located to minimize influence from wind or vibrations.
Detection of compressional force	Detector: Ring-type detector with differential transformer Load (full scale): Switchable between 4 ranges (100 gf, 200 gf, 500 gf, 1000 gf) Accuracy: ±0.5% or less of full scale

Displacement detection	Detector: Potentiometer Deformation amount: Max. 20 mm Accuracy: ±1% or less of full scale
Compression sensor surface area	2 cm ² circle (standard)
Displacement rate	Standard measurement: 0.02 mm/sec <1 mm/50 sec> High-sensitivity measurement: 0.0067 mm/sec <1 mm/150 sec> Other rates can be specified by settings.
Sample size	Square sample with a side of 20 to 100 mm (standard)

⚠ Precaution For safety use, please read the operation manual / the instruction carefully and thoroughly before using the tester.

Specification details recorded here are subject to change without notice. We appreciate your understanding.