

KES-G5

Compression Tester

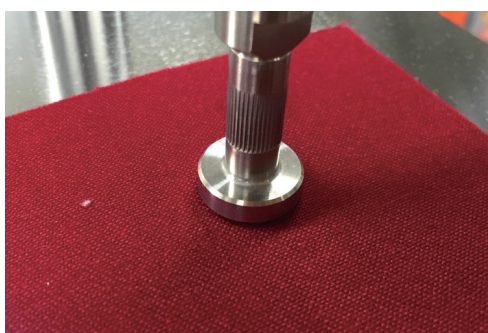
The KES-G5 Compression Tester analyzes hand movements—particularly, pushing by finger—performed by artisans and professionals when judging a object's texture. The device performs this movement mechanically, making it possible to obtain objective numerical data while offering more enhanced versatility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

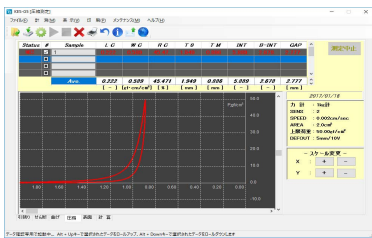
● Recoverability also available

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



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 properties

Compression Sensor Lineup



Size: 2 cm²

Standard accessory



Size: 20 cm²

Softness evaluation for towels, etc.



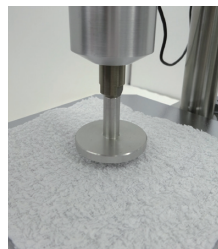
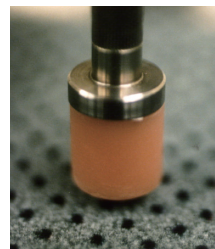
φ 10 mm (spherical)

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: ±0.5% 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.

KatōTech

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