



KES-FB3-A

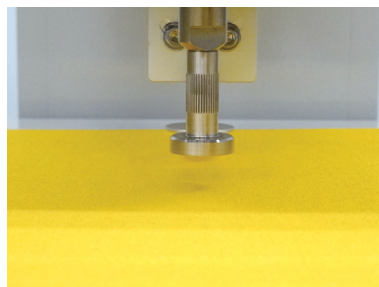
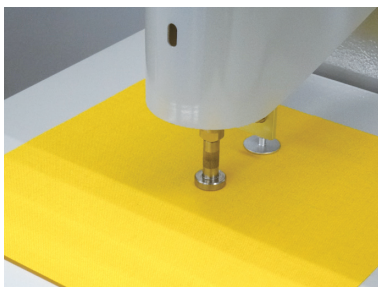
Compression Tester

The KES-FB3-A Compression Tester analyzes hand movements—particularly, pushing with a finger—performed by artisans and professionals when judging a fabric's texture. This device performs this movement mechanically, making it possible to obtain objective numerical data.

Obtainable data includes compression rigidity, compression energy, and recoverability for such targets as general fabric, cloth, paper, non-woven fabric, and film.

Compression characteristic data is useful for determining fullness and softness, smoothness, anti-drape stiffness.

Measurement General fabric, Fabric, Medicinal fabric, Car seats, Interior fabric,
Sample Example Non-woven fabric, Film-like samples



FEATURE

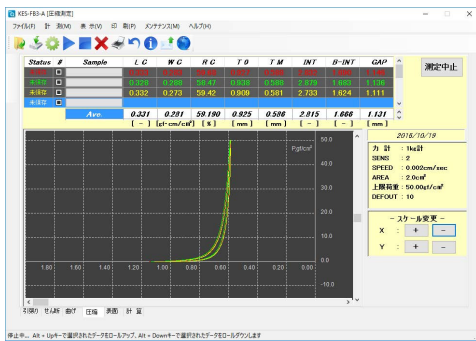
● Min. load detection: 10 gf/cm²

Measurement can be performed with a minimum load detection of 10 gf/cm² for extremely small objects to a maximum load of 1 kgf/cm².

SYSTEM CONFIGURATION DIAGRAM / MEASUREMENT DATA



Sample Measurement Software Screens



▲ Compression properties

Obtainable Data

| Item | Characteristic value | Description | Reading the data |
|------------------------|----------------------|------------------------------|--|
| Compression properties | LC | Compressional linearity | Values closer to 1 mean firmer compression |
| | WC | Compressional energy | Higher values mean higher compression susceptibility |
| | RC | Compressional recoverability | Values closer to 100 mean better recoverability |

KES-FB3-A Compression Tester

| | |
|---|---|
| Dimensions/Weight (approx.) | Measuring unit: W285 × D405 × H500 (mm) / 40 kg Amplifier: W230 × D450 × H500 (mm) / 20 kg |
| Power source | 100 VAC, power consumption: 40W 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 among 3 ranges (0.2 kgf, 0.5 kgf, 1 kgf) Accuracy: ±0.5% or less of full scale |
| Compressional deformation detection | Detector: Potentiometer Deformation amount (full scale): 10 mm Accuracy: ±1% or less of full scale |

| | |
|--|--|
| Compressional deformation rate | Standard measurement: 0.02 (mm/sec) <1 mm/50 sec> High-sensitivity measurement: 0.0067 (mm/sec) <1 mm/150 sec> Variable compression speed: 0.01 to 0.10 (mm/sec) |
| Compressional load measurement conditions | Standard measurement: 50 gf/cm ² High-sensitivity measurement: 10 gf/cm ² Variable compression measurement: 10 gf/cm ² (SENS: 2) to 500 gf/cm ² (SENS: 10) |
| Compression sensor surface area | 2 cm ² (circular) |
| Compression GAP setting | Automatic GAP configuration |
| Number of compression measurements | Three consecutive measurements |
| Sample size | Square with a side of 100 to 200 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.