

## 211 | Strograph AE Film Model AE2-F



*Specimen tray*



*Extensometer*

### ■ APPLICATION

Strograph AE2-F, a fully automatic tensile tester, is designed to perform tensile tests on film samples and comprises sample storing unit, and thickness measuring unit, sample feeding and measuring unit, non-contact extensor meter, sample removing and data processing units. By setting samples on the tray and mounting the tray on the sample storing unit, the designated processes are automatically continuously implemented, and tensile tests are performed according to the set testing conditions. The test results are transferred to the PC, allowing the user to save or print it out.

### ■ FEATURES

- (1) Easy test preparation ensured by setting samples in the pullout tray designed for films in the storing unit, regardless of sample materials or properties such as flexible, easy-to-curl, and no-body;
- (2) Short testing time brought about by the high-speed return function of the cross head upon test completion;
- (3) Compact and small-footprint design;
- (4) Capable of measuring the degree of elasticity; and,
- (5) Available of optional tray capable of mounting 50 shelves (up to 250pcs of samples), and sample holder preventing samples from getting stuck to linear gauge's indenter.

## **■ SPECIFICATIONS**

| <b>Main unit</b>                     |   |
|--------------------------------------|---|
| Maximum capacity                     | Below 500N  |
| Tensile speed                        | 0.5 to 500mm/min. (19 steps)  |
| Return speed                         | Max. 1500mm/min.  |
| Speed accuracy                       | ±0.5%   |
| Effective stroke                     | Approx. 850mm (650mm optional)  |
| Stroke display                       | 0.00-9999mm   |
| Stroke limiter                       | Upper and lower limiter (the combination of electric and mechanical limiter)  |
| Lead screw                           | Ball screw, mono career   |
| Motor                                | Servo motor   |
| <b>Measurement unit</b>              |   |
| Load cell                            | Max. 500N (tensile only)  |
| Load range                           | Range-less (Equivalent with x1 to x100)   |
| Load display                         | Digital   |
| Resolution                           | 1/200,000 or 1/250,000 of the load cell capacity  |
| Accuracy                             | ±1.0% (within the range 1/1 to 1/500 of load cell capacity)   |
| Zeroing                              | Automatic   |
| Sag correction                       | Automatic   |
| <b>Pneumatic chuck</b>               |   |
| Face size                            | W30 x H12mm   |
| Capacity                             | 500N  |
| Air supply                           | 0.5MPa  |
| <b>Thickness measurement section</b> |   |
| Thickness measurement                | Digital gauge   |
| Resolution                           | 1/1000mm  |
| Accuracy                             | ±3/1000mm   |
| Measurement points                   | 3 points, within the gauge length   |
| Measurement anvil                    | Ø5mm  |
| <b>Extensometer</b>                  |   |
| Method                               | Contact type  |
| Gauge length                         | 50mm  |
| Tracking speed                       | Max. 500mm/min  |
| Effective stroke                     | Approx. 500mm   |
| <b>Specimen tray</b>                 |   |
| Tray                                 | Max. 100 specimens (n=5 x 20 trays)   |
|                                      | Optional 250 pcs (n=5 x 50 trays)   |
| Specimen                             | <ul style="list-style-type: none"> <li>● JIS Z 1702:1994 standard drawing1</li> <li>● ISO 527-3:-1995 specimen type 2, type 1B</li> </ul>                 |
| <b>Data processing unit</b>          |   |
| Configuration                        | Personal computer, LCD monitor, Ink-jet printer, PC rack, Data processing software  |
| Setting parameters                   | Date, Operator's name, Temperature, Humidity, Test conditions, Lot, Grade   |
| Data processing parameters           | Max stress, Max elongation, Yield stress, Yield elongation, Tensile modulus, Max value, Minimum value, Average and Standard variation                     |
| <b>Utilities</b>                     |   |
| Power supply                         | Single-phase, AC100V, 50/60Hz, app.15A  |
| Compressed air supply                | 0.5MPa, Approx. flow rate: app.40L/min (clean air)  |
| Dimensions                           | Main unit: Approx. W800 x D760 x H2640mm    Net weight: app.200Kg<br>PC rack H: Approx. W650 x D610 x H1350mm<br>PC rack L: Approx. W600 x D600 x H1265mm |
| Related standards                    | ISO 527-3, JIS Z 1702   |

## ■ OPTIONS

| Name  | Model  | Description   |
|---|--------|---|
| Non-contact (CCD) extensometer                    | AE-CCD | 1. Tracking method: CCD tracking<br>2. Resolution: 0.1mm<br>3. Accuracy :0.2mm or 1%, either larger<br>4. Power source: AC100V 50/60Hz 2A     |
| 50 shelves tray                                   | AE-50  | Tray to set 300 pcs of samples at one time  |
| Thickness measurement section<br>specimen support | SP     | Measuring mechanism with samples held on the sample tray to prevent the samples on the linear gauge from contacting on the measurement anvil. |

*Specifications are subject to change without notice.*

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