**Basic Information:**

- Digital testing device for tensile and compressive force measurements.
- Tester with motorized drive unit for precise and dependable measurements in test laboratories, production lines and quality assurance inspections.
- Suitable for testing ready-made supply cables, plugs, components and ceramic work-pieces and also for tensile and compressive force tests in the field of material testing.
- Easy to use, space-saving testing device.
- Readout and operation via resistant touchscreen with dot matrix-LCD-Display.
- Linear guidance protected against dust.
- High internal measurement frequency and high resolution, ensuring the optimal measurement.
- Tare-compensation.
- Set point specification.
- 2 Operating modes:
  - Peak-mode, displaying the highest measured force value of the entire measurement procedure.
  - Tracking-mode, displaying the current force value.
- Memory space for measured values.
- Setup menu for parameter setting and adjustment.
- Serial interface for data output.
- Overload indicator.
- Overload protection of load cells: 200% to 2000% of nominal load, depending on section.
- Thermal overload protection.
- Shielding of force transducer and AD-converter against electromagnetic radiation (mobile phone interference etc.).
- Tough drive unit.
- FTM Tester with 3 constant testing speeds:
  - between 5 and 600 mm/min up to 2.000 N nominal load;
  - between 5 and 300 mm/min up to 5000/10.000 N nominal load
- Durable and maintenance free metal construction
- Universal quick action clamps for tool fixture
- Interface for PC-Software mavSTATLight and mavDataEX.

**Model Overview FTM:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Indication Range [N]</th>
<th>Resolution [N]</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
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<td>0.01</td>
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<tr>
<td>10</td>
<td>0-100</td>
<td>0.02</td>
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<td>0-250</td>
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</tr>
<tr>
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<td>0-5000</td>
<td>1</td>
</tr>
<tr>
<td>1000</td>
<td>0-10000</td>
<td>2</td>
</tr>
</tbody>
</table>

**Clamping Tools & Holding Fixtures:**

- Clamping cone: SG 40, SG 80, SG 90, SG 90-v
- Turntable: DT 88K, UNI-DT-2K
- Cable tensioner: MK-8, DKS-20
- Quick action clamps: KSH-6, KSP-8, SHA-12, DES-10, SHA-20, SHA-40, SHA-40-v
- mm-plug gauge: ML1 for cable isolation pull-off testing
- Comb tools: KW 1, KW 2
- Miniature grips: FSEL, KSEL
- Power strip: SL-BAT for battery cable terminals

For other tools, please see the catalogue.

Customized tools upon request.
### Motorized Digital Tester Model FTM

#### Technical Data

**Model designation:** FTM  
**Indication ranges:** 0-50/100/250/500/1000 N  
0-2000/5000/10000 N  
**Measurement resolution:** 4000/5000, for exact steps see delivery overview  
**Relative derivation in measuring area:** ≤ 0.25 % of value ± 1 digit.

**Test Unit FTM** (up to 2000N nominal load):  
**Capacity:** 0-50/100/250/500/1000 N/2000 N.  
**Dimensions:** W×D×H ca. 116×520×124 mm.  
**Weight:** ca. 12 kg.

**Test Unit FTM** (5000N-10000N nominal load):  
**Capacity:** 0-5000/10000 N.  
**Dimensions:** W×D×H ca. 176×636×190 mm.  
**Weight:** ca. 40 kg.

**Construction:** Maintenance free metal construction.  
**Color:** Blue and black, anodized.

**Linear stroke:** 150 mm.  
**Speed:** 50, 100, 600 (300) mm/min. (max. tolerance: ± 3 %).  
**Customized speeds upon request.**

**Controls:** Keypad control unit with on/off switch and 6 keys for drive control, each 3 keys per direction for test speeds according to force range.  
**Operating mode:** Manually; load slide drives while the drive key is actuated and stops automatically at release of the key.

**Drive:** Step motor with linear drive.

**Force Measuring System AMS:**  
**Force Transducer:** Strain gauge- load cells type MWM 80108V with integrated 16 bit AD-converter and RS485 Bus. Overload protection up to 200%.

**Force measuring device:** Dimension: W×D×H ca. 125×105×70 mm;

**Analysis:**  
**Operating modes:** Tracking-mode and peak-mode;  
**Internal measurement frequency:** 10000 Hz;  
**Zero point correction, Tare-compensation;**  
**Optical and acoustical overload indicator;**  
**Set point value with optical and acoustical alarm;**  
**Setup menu for parameter setting and adjustment;**  
**Memory space for 10000 measured values;**  
**Single- and list output via serial interface;**  
**Real-time clock for printouts with date and time;**  
**Language for data output selectable:** English, French, German.

**Display:**  
Backlit LCD-dot matrix-display 128×64p, 56.3×38.4 mm.  
LCD update rate: 5 Hz.  
**Input/Handling:** All inputs and actuations made via infrared-touchscreen.  
**Interface:** RS232C adjustable 1200-38400 Baud, 7/8 data bits, 1/2 Stop bits, parity: none/even/odd. Connector: RJ45 socket (8-pin).

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