Series KXE

Portable electronic Tension Meter up to 50 daN with output signals - analog and digital output and digital display to measure tension of groups of yarns, e.g. for sizing and weaving

**Special features**
- Portable measuring head to measure yarn groups of 50 mm width
- The sensor can easily be engaged or disengaged while the machine is running
- Storage of Last, Average, MAX, MIN, PEAK<sub>max</sub>, PEAK<sub>min</sub> tension values during an operator set measuring period
- Outputs are available: Analog (0-2 V DC), Digital (RS232)
- Storage of 4000 readings, which can be downloaded to a PC
- Display unit is battery operated
- Rollers ball-bearing mounted
- Communication unit 80 Hz

**Operating features**
- Special designed yarn catching system
- For easy adjusting machines of the same construction to compare tension values
- Measurements can be made over the total width of the loom
- Width of outer roller 100 mm, measuring roller width 50 mm
- Communication with the display unit using standard programs, e.g. Terminal, Win Wedge, Dasy Lab, etc.

**Available Models**

<table>
<thead>
<tr>
<th>Type</th>
<th>Tension Ranges daN</th>
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<tbody>
<tr>
<td>KXE-20K</td>
<td>0.5 - 20 daN</td>
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<tr>
<td>KXE-50K</td>
<td>0.5 - 50 daN</td>
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**Technical Data**

- **Calibration:** According Schmidt factory procedure
- **Accuracy:** For 10% to 90% of range: ± 1% Full Scale and ± 1 digit
  for remainder of range: ± 3% Full Scale and ± 1 digit
- **Overrange (approx.):** 10 % Full Scale, without accuracy guarantee
- **Overload protection:** 150 % Full Scale
- **Sampling rate:** max. 5 kHz internal only
- **Damping:** adjustable electronic damping (Moving averaging)
- **Display:** 4 digit, 11 mm high
- **Display update time:** 2 times / sec.
- **Output signal:**
  - Analog: 0 - 2 V DC, linearized, conversion rate approx. 100 Hz
  - Digital: RS 232 (19200, 8, N, 1), data rate 80 readings/sec (Hz)
- **Memory:** Last, Average, MAX, MIN, Max<sub>Peak</sub>, Min<sub>Peak</sub>, max. 4000 values
- **Communications frequency:** 1 each 10 sec to max. 80 readings / sec
- **Connecting cable:** Sensor to display unit 1.5 m
- **Temperature range:** 10 – 45°C
- **Air humidity:** 85 % RH, max.
- **Power supply:** 9 V E block, e.g. long life 9 V lithium (approx. 50 hours of continuous use)
- **Housing material:** Display unit: Aluminium profile with plastic outer casing (PVC), Sensor: Aluminium
- **Housing dimensions:**
  - Display unit: 230 x 45 x 48 mm (LxWxH)
  - Sensor: 165 x 110 x 140 mm (LxWxH)
- **Weight, net (gross):**
  - Display: approx. 370 g (1050 g), Sensor: 1050 g (1500 g)