

General Information:

- Force Tester for tension, compression, bend and breaking tests.
- Tester with motorized drive unit for constant test speed for precise and dependable measurements in production line testing, incoming inspection and laboratory tests.
- 3 factory-provided test speeds, selectable by customer between 5 and 600 mm/min (for testers up to 2000 N) respectively 5 to 300 mm/min (for 5 and 10 kN testers).
- Usable for tensile and compression tests on all types of materials.
- 8 types with different measuring ranges are available for selection of highest possible measuring accuracy for the respective application.
- Easy to operate and space-saving tester.
- Indication and operation of the measuring system via durable infrared sensor screen with dot matrix LCD-Display.
- High measuring accuracy and repeatability.
- 10000 Hz internal update rate for exact force readings.
- Peak Point Mode with indication of the highest measured force value.
- Tracking Mode with indication of current force values.
- Tare compensation.
- Set point capability.
- Measured value memory.
- Serial port for data output.
- Optical and acoustic overload indication.
- Set-up menu for internal parameter setting and adjustment.
- Mechanical overload protection of load cell up to 200 to 2000% of nominal load (according to range).
- Maintenance-free and durable all metal construction.
- Quick change tool mounting adapters for tool and test fixture assembly.

Model Overview FTM:

Type	Indication Range [N]	Resolution [N]
5	0- 50	0.01
10	0- 100	0.02
25	0- 250	0.05
50	0- 500	0.1
100	0- 1000	0.2
200	0- 2000	0.5
500	0- 5000	1
1000	0- 10000	2



FTM 500 with tools SG 90 and SHA-40/A



FTM 50 with tools UDT 100 and KSH-6/A

Clamping Tools and Test Fixtures:

Turntable	UDT 100, UDT 100-v
Clamping Crowns	SG 80, SG 90
Quick Action Grippers	KSH-6, KSP-8, SHA-12, SHA-20, SHA-40
Cable Clamps	MK-8, DKS-20, KSS 25, KSW 25
Plug-in Plate	SL-BAT for battery cable terminals
Comb Tools	KW 1, KW 2
Miniature Grips	FSEL
mm-Bore Gauge	ML1 for cable insulation pull-off testing
Tool Set	KBP for testing cable tie pistols
Step Cone	KBS for testing cable ties
Tool Set	KLH for insertion and extraction tests

Please see our catalogue for additional standard tools and tool specifications. Customer-specific special test fixtures and tools on request.



FTM 50 with SG 80 and MK-8/A

Technical Specifications:

Test Unit FTM:

Capacities:	0- 50/100/250/500/1000/2000 N
Dimensions:	ca. 116x520x124 mm (WxDxH).
Weight:	ca. 10 kg.
Capacities:	0- 5000/10000 N
Dimensions:	ca. 176x636x190 mm (WxDxH).
Weight:	ca. 40 kg.
Construction:	durable all metal construction.
Housing:	aluminium
Finish:	anodised oxide layer, titanium grey.
Drive:	DC motor with linear drive.
Linear stroke:	150 mm.
Speed:	testers 50 to 2000 N: standard speeds 50, 100 and 300 mm/min (customized speeds between 5 and 600 mm/min on request). testers 5000 and 10000 N: standard speeds: 50, 100 and 300 mm/min. (customized speeds between 5 and 300 mm/min on request).
Speed accuracy:	max. $\pm 3\%$ F.S.
Control unit:	keypad control unit with On/Off-switch and 6 keys for the drive control: each 3 keys per direction for test speed 50, 100 and 300 (500) mm/min
Operating mode:	manual, travel platform drives during drive key actuation, at release of drive key motor drive stops automatically.
Power supply:	24 (36) V DC, external mains adapter.

All testers are equipped with quick-change tool mounting adapters for tool and test fixture assembly.

Technical Specifications:

Model Designation: FTM

Indication Ranges:	0- 50/100/250/500/1000/2000 N 0- 5000/10000 N.
Resolution:	4000/5000 increments, see model overview
Rel. accuracy error:	$\leq \pm 0.25\% \pm \text{LSD}$ (within the measuring range)

Force Measuring System FMS:

Force Transducer:

DMS-load cells type MWM 80108V with integrated AD-converter and RS485 bus. Overload protection 200 to 2000% according to nominal load of load cell.
 Internal measuring rate: 10000 Hz;

Control Unit:

Dimensions:	ca. 125x105x70 mm (WxDxH);
Supply voltage:	12-24 V DC.

Display:

Dot matrix LCD display with LED background lighting, 128x64 pixel, 56.3x38.4 mm. LCD update rate: 5 Hz.

Operation:

Operation of all displayed keys via infrared sensor screen.

Evaluation:

Operating Modes: Tracking Mode and Peak Point Mode;
 Tare compensation; Setpoint capability;
 Measured value memory for 10000 measured values;
 Single and listing output via serial port;
 Real time clock for printout with date and time.
 Language for printout selectable: D, E.
 Overload indication;
 Setup Menu internal parameter selection and adjustment of measuring system.

Serial Port:

RS232C	selectable parameters: 300-76800 Baud, 7/8 data bits, 1/2 stop bits, parity: none/even/odd. connector: RJ45.
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Optional Accessories:

- Mini Table Printer
- Data Transmission Cable for printer connection
- Data Transmission Cable for PC connection
- Keystast Interface
- Please see our catalogue for additional accessories.