

Electromechanical Torsion Testing Machines Series LFM – T 20 – 200 Nm

The Series LFM - T electromechanical table top torsion testing machines providing maximum versatility and capability.

Torsional Tests can be carried out on most materials to determine mechanical properties such as modulus of elasticity in shear, yield strength, ultimate shear strength, modulus of rupture in shear, and ductility. Also full-size parts as shafts, twist drills, and fasteners or components are subjected to torsional forces during their use that should be simulated in real-life service conditions.

The frame of the LFM-T Series of Torsion Testing Machines features high torsional stiffness with low axial friction through rigid construction combined with extra wide ball rail system. The high precision torque load cell is mounted on the movable crosshead that slides on the guide rail during the test. The grip that is mounted on the load cell can be turned free $\pm 270^\circ$ by activating an electromechanical unclamping system to provide easy and torque free test set-up. The machine is driven by a high responsive servomotor combined with a low backlash servo gear for excellent testing in both directions of rotation or intermittent torque loading. The servomotor is controlled through the digital controller that allows close loop control of either angle or torque or can be turned by the digital hand wheel that is part of the controller. The test space is covered by a protection device with electric switch for operators safety. Suitable grip systems can be fitted onto the LFM-T series suitable to your testing requirements. Also available is a axial pre-loading system by a pulley arrangement and weights. No system would be complete without control- and data acquisition software. **DION^{PRO}** Application Software Package provides fully free user programmable testing, free controlling of testing machine and data acquisition of static, quasi-static, or cyclic applications. This package allows the simply programming of complex test sequences by structured Windows operation on a graphic user interface.

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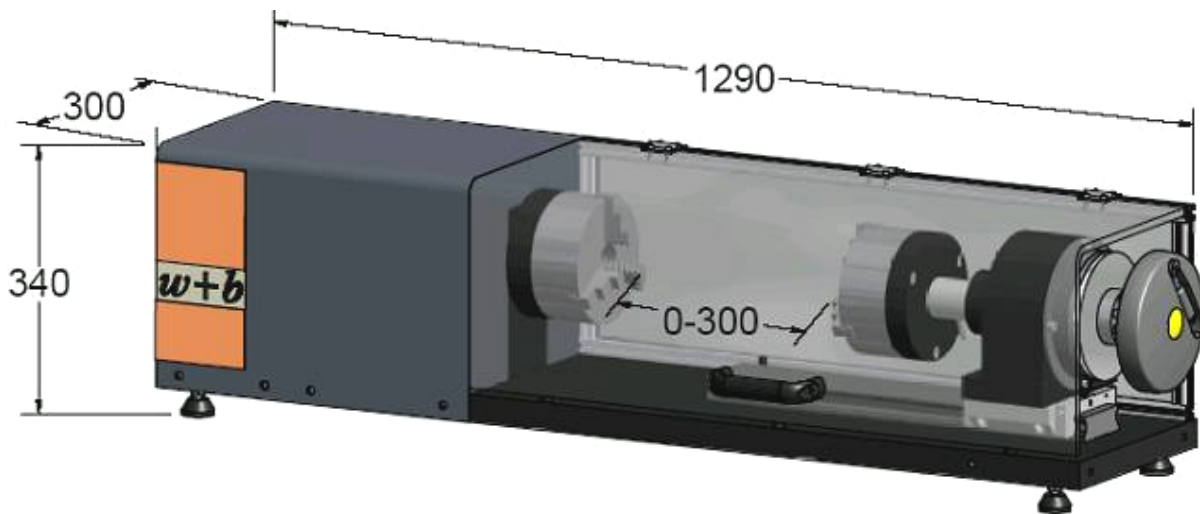
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Technical Data Series LFM - T 20 – 200 Nm

General Specification:

Accuracy:	Torque accuracy Class 1
Control:	Angle or torque closed loop.
Design:	Table Top
Operating Temperature:	10 to 45°C
Power Requirements:	240 V-50 Hz, on request 110 V-60 Hz
Available Grips:	3 or 4 jaws Chucks, Key Type Chuck, Keyless Type Chucks, Collet Grips, T-slot round platen, custom grips and fixtures
Other Options:	Pre-loading system by a pulley arrangement and weights Chambers or Furnaces

Type	LFM - T	20	50	100	200
max. Torque Capacity	Nm	20	50	100	200
Test Speed:	RPM	200	100	50	25
Rotations:	CW/CCW	120 times (43200°) (more Rotations on request)			
Grip Separation:	mm	0 to 300 mm with 3 or 4 jaws Chucks (extended distance available on request)			
Dimensions W x T x H:	mm	1290 x 300 x 340			
Weight:	kg	150 kg			



3- or 4-Jaws Chucks



Key & Keyless Type Chuck



Collet Grip

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