X250

Table model, one support column. Universal testing machine with full computer control and precision AC servo drive system. High speed operation for efficient material testing up to a capacity of 3kN.



	X250-1	S250-2.5	X250-3	
Force capacity kN	1	2,5	3	
Accuracy	Better than +/- 0.5% up to 1/1000 of loadcell capacity			
Crosshead stroke mm	630	990	990	
Vertical space mm	800	1160	1160	
Position control resolution mm	0,000001	0,000001	0,000001	
Overhang (axis given to the support column)	108	108	108	
Minimum speed mm/min	0,000001	0,000001	0,000001	
Maximum speed mm/min	2500	2500	2500	
Speed accuracy	+/- 0,1 % under stable conditions			



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Max. Force at maximum speed kN	1	2,5	3	
Max. Speed at full load mm/min	2500	2500	2500	
Data acquisition rate (PC)	500 Hz by default (1000 Hz optional)			
PC connection	Ethernet (or USB via adapter)			
Machine configuration	Single machine stand, tabletop model (optional pedestal housing available)			
Frame stiffness kN/mm	8	8	8	
Weight kg	58	65	65	
Operating temperature °C	-10 to +40			
Operating humidity	+10 to +90 % non-condensing			
Electronic power supply	230 V, 1 ph 50/60 Hz (115 V option available)			
Current kW	0,3	0,3	0,3	



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Customized

Complete digital test system with high precision control and accuracy. Includes automated computer control of test methods for ease of operation.

High resolution loadcells with accuracies better than +/- 0.5% down to 1/1000 of loadcell capacity.

Automatic loadcell and strain gauge recognition with instant calibration check.

800% loadcell overload capability without damage.

High efficiency, pre-installed, self-cleaning ball screw for fast, quiet testing. Features sealed, lifetime grease end bearings.

Crosshead control for precise alignment and smooth operation.

Traverse control via digital AC servo drive and brushless servo motor for maintenance-free operation and 23-bit position control.

High-speed data acquisition system for up to 4 synchronous channels. 6 I/O channels for additional devices such as strain gauges, micrometers, lifting clamps, beam scales, etc.

High frame rigidity with solid specialized steel crossheads and rigid extruded support columns with T-bolts for accessory mounting.

Overload, overstroke and impact protection. Retractable cover gives additional protection to ball screw against dust and debris.

Design with small footprint for economical seating and floor space. Extensive range of clamps and fixtures for tensile, compression, flexure, shear, peel, and product testing, etc.

Extensive range of contact and non-contact strain gauges available including laser and video models.



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1 Available at extra charge. Unit can alternatively be controlled with a standard PC or laptop (power not supplied).

2 Unit shown with AC pneumatic terminals (sold separately).



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Designed for precision

Force measurement

Universal calibrated, better than degree 0.5 EN 7500-1. DIN 51221 ASTM E-4, AFNOR A03-501. Range from 0.4% to 100% minimum. Automatic identification of the loadcell. Resolution 1 to part 500000. Electronic loadcell protection.

Extension measurement

Full frame length to maximum resolution of 0.000001 mm (selectable). Accuracy +/- 0.01 mm. Absolute, relative and auxiliary modes in mm, inches and percent.

Speed Control

Class-leading low-speed performance with speeds down to 0.00001 mm/min. Drive system temperature and current protection.

Load frame

Rigid frame, using crosshead control and rigid extruded support column. Frame rigidity 60 kN/mm plus built-in K-factor system. Ball screw with bellows. Electronic limit stops, full stroke stops and user programmable safety stops.

Electronic system

Electronic module system allows fast data transfer to PC (up to 1000 Hz) via highest speed Ethernet connection. Extensive input capabilities allow connection of a wide range of strain gauges and accessories via simple plug-in interface modules.

Safety features

Extensive safety features to ensure the highest level of operator safety. Includes e-stop, programmable extension limits and overload/impact detection. Fully compliant with global safety regulations: ~2006/42/EU Machinery Directive, 2014/5/EU Low Voltage Directive and 2015/30/EU Electromagnetic Compatibility Directive.



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Optional touch screen PC

The optional IPC3 industrial quality PC with touchscreen control turns the instrument into a robust stand-alone system without the need for an external PC or laptop.

Using the latest Windows 10 operating system and running the full version of Testometric's winTest software, the system provides complete control of the tester and offers storage and access to unlimited test methods and readings. The included mounting arm, which attaches to the T-slots on the support column, is fully adjustable for



height, reach and viewing angle, allowing users to find the most ergonomic working position for themselves.

Specification:

Display 15.6"1366x768 panel resistive touch screen with anti-reflective, dirt repellent screen protection, QM87 Chippest, 4xUSB3.0, 3xCOM ports [RS232], 2xGigaLAN, CPU-I5-4300M Intel Core i5 Processor, 2.6GHz, 4GB 1600MHz SODIMM DDR3 204-pin, 2.5" 250 GB, Solid State Disk (SSD), SATA III 6GB/s



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