

DATA SHEET

Automax PRO SMART Line, Fully Automatic Control Console



AUTOMAX PRO Smart-Line

General description

AUTOMAX PRO is CONTROLS' new top-of-the-range Smart-Line control consoles and is the first choice for automatic standard failure tests.

A major development are the new cutting-edge connective technologies.

LinkLAB Laboratory Connectivity Package allows AUTOMAX PRO to be a connected part of your laboratory infrastructure by taking inputs from any number of ancillary measuring systems and devices increasing efficiency, eliminating transposing errors.

Main features

Smart automatic and connected concrete Power and Control System for standard failure testing.

AUTOMAX PRO is CONTROLS' new top-of-the-range Compact-Line compression machine and is the first choice for automatic standard failure tests and advanced concrete mechanical properties assessment. The new cutting-edge connective technologies allowing you to manage all test data online, automatically with no risk of transposing errors is a major development. Boasting an all new specification, it is a step change from its predecessors.

- **Huge boost in efficiency and error elimination:** Link-LAB – Integrated testing station solution for seamless connection and data inputs from many ancillary devices for dimensional measurement, weight, bar code, etc.
- **Fully automatic – time saving:** Full test-cycle automation maximizes productivity and ensures tests are performed accurately according to pre-set methods, eliminating operator variables.
- **Highly accurate and energy saving:** Our DC motor technology quietly and efficiently delivers super accurate load control at both low-speed and low-loads.
- **Intuitive, quick and simple operation:** The integrated control system features an intuitive 7" color graphical display, which works like a tablet or smart-phone, and makes AUTOMAX PRO quick and simple to operate.
- **Standards compliant – peace of mind:** Hardware and firmware are in total compliance with all the main international concrete testing standards including ASTM C39 and EN 12390-3.
- **Multilingual functionality:** The system is available in multiple languages and is fully compatible with non-Latin characters for Chinese, Cyrillic (and more).

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Specifications

AUTOMAX PRO AUTOMATIC POWER AND CONTROL SYSTEM

Hydraulics

DC motor, 720W, 50-60Hz

Maximum working pressure 700 bar

Load/unload electrovalve for test execution via display/PC and automatic stop at specimen failure

Active control of up to 4 frames by selection via display/PC (third and fourth frame as option). See accessories.

ES Energy Saving technology to reduce the power consumption and enable silent operation

Hardware

524,000 points high-resolution/stability analog channels

4 channels for load sensors

Control frequency 250 Hz

Sampling frequency 250 Hz

7", 800 x 480 pixel, 16 M colors, icon-driven capacitive sensing touchscreen graphic display

Unlimited storage capacity for test data on internal 16 GB SD card

USB port for test data storage on external USB memory stick and for firmware upgrade

Ethernet port for PC / Internet /network communication

Optional integrated graphic printer including Load-Time plot

RS 232 port for data downloading in ASCII format

Firmware

Execution of compression, flexure, indirect tensile, ACV tests in automatic mode with load rate controlled by a closed-loop P.I.D. system

Execution of loading ramps with the possibility to manually increase or decrease the test speed during the test

Pause command to maintain steady load can be enabled at a pre-set value before the test or as required while testing

Simultaneous display of load, specific load, actual load rate, load/time graph

Saving of the specimen failure type (to EN or ASTM) in the test results

Download data to internal printer (optional) or to PC via RS 232 port or to USB memory stick

PC / network communication via Ethernet

Multi-coefficient linearization of the calibration curve for better accuracy at low loads thus avoiding the use of a second pressure transducer

Recording facility for up to 9 test profiles for each channel including: type of test (e.g. compression, flexural, indirect tensile), specimen size and shape, load rate, test standard and other general information. Each one of the recorded test profiles can be recalled automatically to save time

Improved PID algorithm and multi PID selection. Up to 3 different PID settings can be tuned for a variety of materials (e.g. cylinder with neoprene pads, low strength specimens) and test methods (e.g. ACV, flexure, indirect tensile).

Compatible with the newly released Datamanager software, tailored for construction material testing laboratories, for real-time data acquisition, display and management

Peripheral devices integration with Link-LAB

Automatic load measurement verification procedure, by connecting suitable load cells and our digital readout unit to PC

Language selection (including Cyrillic and Chinese)

Unit selection (kN, ton, lbf)

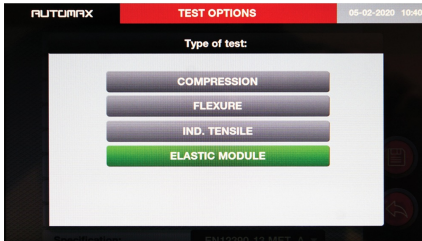
USB port for firmware upgrade and safe backup of the original configuration data (PID, calibration, etc.), in case of loss and/or data corruption. The restore of the machine to the factory settings is easy avoiding the need of any technical support.

PHISICAL SPECIFICATIONS

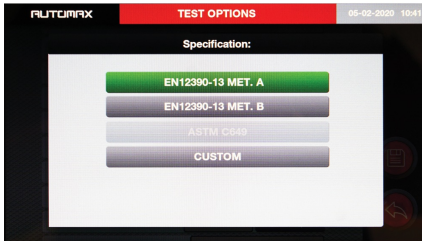
Overall dimensions: (hxlxd) 1292x350x450 mm

Weight approx .: 80 kg

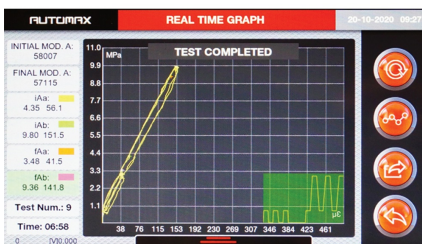
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Easy selection of test method

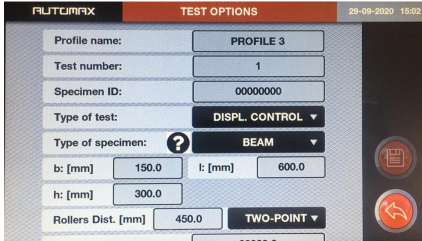


Easy selection of test procedure

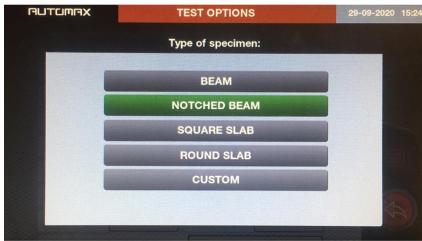


Elastic Modulus determination

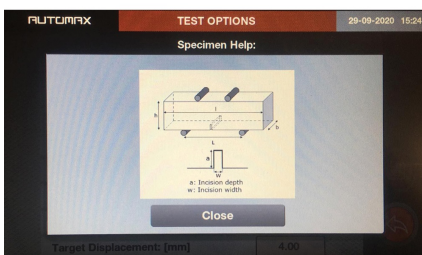
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Displacement-controlled tests settings



Easy selection of test specimen



Handy Specimen Help panel for guidance

Products

50-C10F02

AUTOMAX PRO SMART Line fully automatic console for compression and flexure frames including hydraulic power and control unit with touch screen display. - AUTOMAX PRO automatic control system - PID Closed loop control of the load rate - High control and data sampling frequency: 250 Hz- Variable speed permanent magnet DC motor for superior performances at low load rates and low load values - 7", 800 x 480 pixels, 16 M colors, icon-driven capacitive sensing touchscreen graphic display - RS232 serial port for data transmission (including load/time values for graph plot) in ASCII format - USB port for data storage, export to PC and firmware upgrade - Ethernet port for PC / Internet /network Communication - Wi-Fi or GSM module available as option - Integrated printer available on request - 8 GB

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Internal permanent memory on SD card - 524000 points high-resolution/stability channels- Active control of up to 4 frames by selection via display/PC (third and fourth frame as option). - Accuracy (when connected to suitable frames): Class 1 (EN), Class A (ASTM) starting from 10% of full scale, on request starting from 1% of f.s. (see code 50-C0050/CAL) 230V/50-60Hz/1Ph

50-C10F04

AUTOMAX PRO SMART Line fully automatic console for compression and flexure frames including hydraulic power and control unit with touch screen display. - AUTOMAX PRO automatic control system - PID Closed loop control of the load rate - High control and data sampling frequency: 250 Hz- Variable speed permanent magnet DC motor for superior performances at low load rates and low load values - 7", 800 x 480 pixels, 16 M colors, icon-driven capacitive sensing touchscreen graphic display - RS232 serial port for data transmission (including load/time values for graph plot) in ASCII format - USB port for data storage, export to PC and firmware upgrade - Ethernet port for PC / Internet /network Communication - Wi-Fi or GSM module available as option - Integrated printer available on request - 8 GB Internal permanent memory on SD card - 524000 points high-resolution/stability channels- Active control of up to 4 frames by selection via display/PC (third and fourth frame as option). - Accuracy (when connected to suitable frames): Class 1 (EN), Class A (ASTM) starting from 10% of full scale, on request starting from 1% of f.s. (see code 50-C0050/CAL) 110V/60Hz/1Ph

Accessories and consumables

50-SW/DM

DATAMANAGER PC software compatible with DIGIMAX, PILOT, AUTOMAX, PILOT PRO, AUTOMAX PRO and PRO-M. Suitable for remote control of the system (except DIGIMAX), data acquisition, processing and filing. LAN cable included.

65-L1400/X5

Hydraulic pressure regulator for 15kN frames (both single and double chamber models) connected to PILOT and AUTOMAX control unit.

50-Q60P/PRINT

Upgrading the AUTOMAX PRO and PILOT PRO series to incorporate a serial graphic printer in the rear panel allowing load/time plot (printing available for languages with latin characters only)

50-C10D/3F

Third frame facility for AUTOMAX series. Frame selection via display/PC.

50-C20E/4F

Fourth frame facility for AUTOMAX Multitest e and AUTOMAX PRO series. Frame selection via PC.

50-KLAB/E

LinK-LAB Enterprise laboratory connectivity package for machines controlled by PC via DATAMANAGER Software.

50-KLAB/L

LinK-LAB Local laboratory connectivity package for PILOT and AUTOMAX PRO, PRO-M machines. Note: caliper and barcode cannot be both connected on the compression machine.