

Data Sheet

Motorized Force Test Stand ESM

32-1049 REV 3

The ESM is a versatile and economical motorized test stand for most compression and tensile testing applications up to 200 lbf (1 kN). It can accept a wide variety of sample shapes and sizes and can be configured in many positions due to modular design. Speed is adjustable and remote control operation provides added safety during testing. Other features include a manual fine adjustment knob and a stepper motor that prevents speed variation with load, making testing more precise and repeatable. Use any Mark-10 force gauge and force gripping fixtures to create a complete testing solution.

Specifications

Load capacity:	200 lbf [1,000 N]
Maximum travel:	≈13 in [330 mm], depending on gauge, gripping fixtures, and sample size
Speed range:	0.5 - 13 in/min [13 - 300 mm/min]
Speed setting accuracy:	±5%, ±0% variation with load
Weight (w/o optional equipment):	Test stand: 20.0 lb [9.1 kg] Control unit: 2.7 lb [1.2 kg]
Power:	Universal input 80-240 VAC, 50/60 Hz
Included accessories:	Extension rod, small hook, medium hook, #10-32 coupler, compression plate, force gauge mounting hardware, tool kit
Warranty:	3 years (see individual statement for details)

Optional Equipment

Digital travel display ESM001	6" [150 mm] and 12" [300 mm] travel models available, 0.0005" [0.01 mm] resolution, 0.001" [0.03 mm] accuracy, SPC output for automated data collection.
Limit switch kit ESM002	Set of adjustable upper and lower solid state limit switches
Overload / set point cable 09-1180	Stops test stand travel at programmable high and low set points for tension and compression forces. Also protects the force gauge against accidental overloads during motorized tests. Compatible with Series 7, 5 and 4 force gauges. Can be used simultaneously with the USB data output cable supplied with the gauge.
Column extensions	Available in 6 in (150 mm), 12 in (300 mm), 24 in (610 mm), and custom lengths



The ESM is shown in a typical tensile testing application, with Series 5 digital force gauge, digital travel display, limit switch kit, and wedge grips

Ordering Information

Model No.	Description
ESM	Motorized force measurement test stand, 200 lbf 110V
ESME	Motorized force measurement test stand, 200 lbf 110V, Euro Plug
ESMU	Motorized force measurement test stand, 200 lbf 110V, UK Plug
ESMA	Motorized force measurement test stand, 200 lbf 110V, Australian Plug
ESM001	Digital travel display
ESM002	Limit Switch kit for ESM
ESM003-1	Column extension for ESM/ES30, 6"
ESM003-2	Column extension for ESM/ES30, 12"
ESM003-3	Column extension for ESM/ES30, 24"
09-1180	Overload protection / set point cable, Series 7/5/4 gauge to ESM

» Limit switch kit

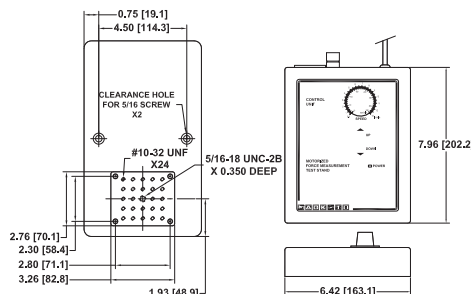
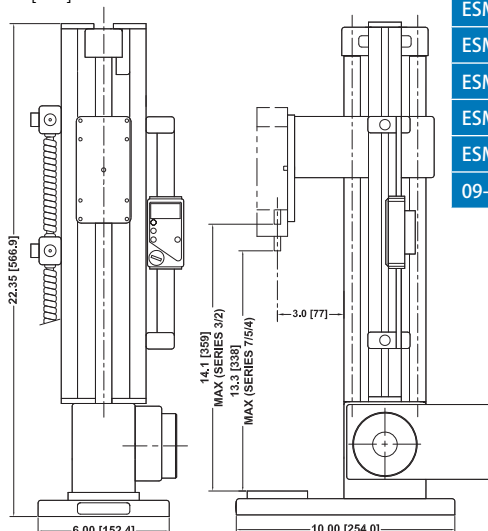


» Digital travel display



Dimensions

in [mm]



BASE PLATE

CONTROL UNIT

ELECTROMATIC Equip't Co., Inc., 600 Oakland Ave, Cedarhurst, New York 11516 - USA

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